

Programmer Manual



VM Series Video Measurement System 071-2104-00

This document applies to Option SD/HD software version 3.X and above.

This document applies to Option VGA software version 1.X and above.

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Table of Contents

Remote Commands

Syntax	1-1
Remote Startup and Exit of the Instrument	1-4
Compatibility of the VM Series Option HD with the VM5000D	1-5

Option SD/HD Remote Commands

Command Groups	2-1
Commands	2-17
AppStatus?	2-17
AutoScale <setting>	2-18
AutoScaleInit <setting>	2-19
ChannelDelayAll?	2-20
ChannelDelayAverage <samples>	2-21
ChannelDelayCh1Ch2?	2-22
ChannelDelayCh1Ch3?	2-23
ChannelDelayCh2Ch3?	2-24
ChannelDelayLine <line number>	2-25
ChannelDelayMultiLineEnd<line number>	2-26
ChannelDelayMultiLineStart<line number>	2-27
ChannelDelayPassAll?	2-28
ChannelDelayPassCh1Ch2?	2-29
ChannelDelayPassCh1Ch3?	2-30
ChannelDelayPassCh2Ch3?	2-31
ChannelDelayRelAll?	2-32
ChannelDelayRelCh1Ch2?	2-33
ChannelDelayRelCh1Ch3?	2-34
ChannelDelayRelCh2Ch3?	2-35
ChannelDelaySet <setting>	2-36
ChannelDelayStatus?	2-37
ColorBarsAverage <samples>	2-38
ColorBarsLine <line number>	2-39
ColorBarsMultiLineEnd<line number>	2-40
ColorBarsMultiLineStart<line number>	2-41
ColorBarsmVCh[1..3]?	2-42
ColorBarsmVCh[1..3]Val[1..8]?	2-43
ColorBarsPassCh[1..3]?	2-44
ColorBarsPassCh[1..3]Val[1..8]?	2-45
ColorBarsRelmVCh[1..3]?	2-46
ColorBarsRelmVCh[1..3]Val[1..8]?	2-47
ColorBarsRelPctmVCh[1..3]?	2-48
ColorBarsRelPctmVCh[1..3]Val[1..8]?	2-49
ColorBarsSet <setting>	2-50
ColorBarsStatus?	2-51
ColorSpace <colorspace>	2-52
DefaultSettings<setting>	2-53
DetectedFormat?	2-54

Display <None Picture Vectorscope NoiseSpectrum Minimized>	2-55
Error <setting>	2-56
Execute <setting>	2-57
FieldSelect <setting>	2-58
Format <setting>	2-59
FrequencyResponseAverage<samples>	2-61
FrequencyResponseCh[1..3]?	2-62
FrequencyResponseCh[1..3]Val[1..5]?	2-63
FrequencyResponseFilterBW <bandwidth>	2-64
FrequencyResponseFreq<frequency>	2-65
FrequencyResponseLine<line number>	2-66
FrequencyResponseMeasLocation [Freq444 Freq422 Time]	2-67
FrequencyResponseMultiLineEnd<line number>	2-68
FrequencyResponseMultiLineStart<line number>	2-69
FrequencyResponsePassCh[1..3]?	2-70
FrequencyResponsePassCh[1..3]Val[1..5]?	2-71
FrequencyResponseRelCh[1..3]?	2-72
FrequencyResponseRelCh[1..3]Val[1..5]?	2-73
FrequencyResponseSet<setting>	2-74
FrequencyResponseStatus?	2-75
FrequencyResponseTime<time>	2-76
HSyncJitterAll?	2-77
HSyncJitterAccumulatedTime?	2-78
HSyncJitterAverage <samples>	2-79
HSyncJitterDemarcFreq<setting>	2-80
HSyncJitterInputSetup<setting>	2-81
HSyncJitterMaxFreqDriftRate?	2-82
HSyncJitterMaxFreqOffset?	2-83
HSyncJitterMinFreqDriftRate?	2-84
HSyncJitterMinFreqOffset?	2-85
HSyncJitterNegPeak?	2-86
HSyncJitterNegPeakProbability?	2-87
HSyncJitterNumLines<number of lines>	2-88
HSyncJitterPassAll?	2-89
HSyncJitterPassAccumulatedTime?	2-90
HSyncJitterPassMaxFreqDriftRate?	2-91
HSyncJitterPassMaxFreqOffset?	2-92
HSyncJitterPassMinFreqDriftRate?	2-93
HSyncJitterPassMinFreqOffset?	2-94
HSyncJitterPassNegPeak?	2-95
HSyncJitterPassNegPeakProbability?	2-96
HSyncJitterPassPosPeak?	2-97
HSyncJitterPassPosPeakProbability?	2-98
HSyncJitterPassRMSJitter?	2-99
HSyncJitterPosPeak?	2-100
HSyncJitterPosPeakProbability?	2-101
HSyncJitterRelAccumulatedTime?	2-102
HSyncJitterRelMaxFreqDriftRate?	2-103
HSyncJitterRelMaxFreqOffset?	2-104
HSyncJitterRelMinFreqDriftRate?	2-105
HSyncJitterRelMinFreqOffset?	2-106
HSyncJitterRelNegPeak?	2-107
HSyncJitterRelNegPeakProbability?	2-108

HSyncJitterRelPosPeak?	2-109
HSyncJitterRelPosPeakProbability?	2-110
HSyncJitterRelRMSJitter?	2-111
HSyncJitterRMSJitter?	2-112
HSyncJitterSet<setting>	2-113
HSyncJitterStatus?	2-114
HSyncJitterWanderDemarcFreq<Setting>	2-115
ID?	2-116
LevelsAverage<samples>	2-117
LevelsConfig[1..8]<setting>	2-118
LevelsConfigRef<setting>	2-119
LevelsLine <line number>	2-120
LevelsMultiLineEnd <line number>	2-121
LevelsMultiLineStart <line number>	2-122
LevelsPassCh[1..3]?	2-123
LevelsPassCh[1..3]Val[1..8]?	2-124
LevelsRelCh[1..3]?	2-125
LevelsRelCh[1..3]Val[1..8]?	2-126
LevelsCh[1..3]?	2-127
LevelsCh[1..3]Val[1..8]?	2-128
LevelsSet<setting>	2-129
LevelsStatus?	2-130
LimitFileLoad <pathstring>	2-131
LimitSet<setting>	2-132
LineSelectSet<setting>	2-133
LogErrors<setting>	2-134
MultiburstAmpdBCh[1..3]?	2-135
MultiburstAmpdBCh[1..3]Val[1..6]?	2-136
MultiburstAverage <samples>	2-137
MultiburstFlagmVCh[1..3]?	2-138
MultiburstFreqCh[1..3]?	2-139
MultiburstFreqCh[1..3]Val[1..6]?	2-140
MultiburstLine <line number>	2-141
MultiburstMultiLineEnd<line number>	2-142
MultiburstMultiLineStart<line number>	2-143
MultiburstPassAmpdBCh[1..3]?	2-144
MultiburstPassAmpdBCh[1..3]Val[1..6]?	2-145
MultiburstPassFlagmVCh[1..3]?	2-146
MultiburstPassFreqCh[1..3]?	2-147
MultiburstPassFreqCh[1..3]Val[1..6]?	2-148
MultiburstRelAmpdBCh[1..3]?	2-149
MultiburstRelAmpdBCh[1..3]Val[1..6]?	2-150
MultiburstRelFlagmVCh[1..3]?	2-151
MultiburstRelFreqCh[1..3]?	2-152
MultiburstRelFreqCh[1..3]Val[1..6]?	2-153
MultiburstSet <setting>	2-154
MultiburstStatus?	2-155
NoiseAmpdBCh[1..3]?	2-156
NoiseAmpmVCh[1..3]?	2-157
NoiseAverage <samples>	2-158
NoiseBW <bandwidth>	2-159
NoiseCursorPos<frequency>	2-160
NoiseFreqResolution?	2-161

NoiseMultiLineEnd <line number>	2-162
NoiseMultiLineStart <line number>	2-163
NoiseTimeWindowCursors<time>	2-164
NoiseFilter <noisefilter>	2-165
NoiseLine <line number>	2-166
NoisePassdBCh[1..3]?	2-167
NoisePassmVCh[1..3]?	2-168
NoiseRelAmpdBCh[1..3]?	2-169
NoiseRelAmpmVCh[1..3]?	2-170
NoiseSet <setting>	2-171
NoiseStatus?	2-172
NonLinearityAverage <samples>	2-173
NonLinearityLine <line number>	2-174
NonLinearityMultiLineEnd <line number>	2-175
NonLinearityMultiLineStart <line number>	2-176
NonLinearityPassCh[1..3]?	2-177
NonLinearityPassCh[1..3]Max?	2-178
NonLinearityPassCh[1..3]Val[1..5]?	2-179
NonLinearityPctCh[1..3]?	2-180
NonLinearityPctCh[1..3]Max?	2-181
NonLinearityPctCh[1..3]Val[1..5]?	2-182
NonLinearityRelPctCh[1..3]?	2-183
NonLinearityRelPctCh[1..3]Max?	2-184
NonLinearityRelPctCh[1..3]Val[1..5]?	2-185
NonLinearitySet <setting>	2-186
NonLinearityStatus?	2-187
OPComplete <setting>	2-188
PassFailStatus?	2-190
PixAspectRatio <Auto 4x3 16x9>	2-191
PixLine <line number>	2-192
PopupWarnings <setting>	2-193
RecallSettings <pathstring>	2-194
ReferenceFileLoad <pathstring>	2-195
ReferenceFileSave <pathstring>	2-196
ReferenceSet<setting>	2-197
ReportGenerate <pathstring>	2-198
ReportMeasurements <setting>	2-199
ReportString <string>	2-200
RunMode <runmode>	2-201
SaveSettings <pathstring>	2-202
SetupAndOrRun <setuprunmode>	2-203
ShortTimeDistortionAverage<samples>	2-204
ShortTimeDistortionCh[1..3]?	2-205
ShortTimeDistortionCh[1..3]Val[1..6]?	2-206
ShortTimeDistortionK2T?	2-207
ShortTimeDistortionLine <line number>	2-208
ShortTimeDistortionMultiLineEnd <line number>	2-209
ShortTimeDistortionMultiLineStart <line number>	2-210
ShortTimeDistortionPassCh[1..3]?	2-211
ShortTimeDistortionPassCh[1..3]Val[1..6]?	2-212
ShortTimeDistortionPassK2T?	2-213
ShortTimeDistortionRelCh[1..3]?	2-214
ShortTimeDistortionRelCh[1..3]Val[1..6]?	2-215

ShortTimeDistortionRelK2T?	2-216
ShortTimeDistortionSet<setting>	2-217
ShortTimeDistortionStatus?	2-218
SpatialDistortionAll?	2-219
SpatialDistortionAverage <samples>	2-220
SpatialDistortionBMPRefFile<pathstring>	2-221
SpatialDistortionBottomCrop?	2-222
SpatialDistortionFirstActiveLine?	2-223
SpatialDistortionHEnd?	2-224
SpatialDistortionHOffset?	2-225
SpatialDistortionHScaling?	2-226
SpatialDistortionHStart?	2-227
SpatialDistortionLastActiveLine?	2-228
SpatialDistortionLeftCrop?	2-229
SpatialDistortionPassAll?	2-230
SpatialDistortionPassBottomCrop?	2-231
SpatialDistortionPassFirstActiveLine?	2-232
SpatialDistortionPassHEnd?	2-233
SpatialDistortionPassHOffset?	2-234
SpatialDistortionPassHScaling?	2-235
SpatialDistortionPassHStart?	2-236
SpatialDistortionPassLastActiveLine?	2-237
SpatialDistortionPassLeftCrop?	2-238
SpatialDistortionPassRightCrop?	2-239
SpatialDistortionPassTopCrop?	2-240
SpatialDistortionPassVOffset?	2-241
SpatialDistortionPassVScaling?	2-242
SpatialDistortionRelAll?	2-243
SpatialDistortionRelBottomCrop?	2-244
SpatialDistortionRelFirstActiveLine?	2-245
SpatialDistortionRelHEnd?	2-246
SpatialDistortionRelHOffset?	2-247
SpatialDistortionRelHScaling?	2-248
SpatialDistortionRelHStart?	2-249
SpatialDistortionRelLastActiveLine?	2-250
SpatialDistortionRelLeftCrop?	2-251
SpatialDistortionRelRightCrop?	2-252
SpatialDistortionRelTopCrop?	2-253
SpatialDistortionRelVScaling?	2-254
SpatialDistortionRelVOffset?	2-255
SpatialDistortionRightCrop?	2-256
SpatialDistortionSet<setting>	2-257
SpatialDistortionStatus?	2-258
SpatialDistortionTopCrop?	2-259
SpatialDistortionVOffset?	2-260
SpatialDistortionVScaling?	2-261
StopOnError <setting>	2-262
SyncAverage <samples>	2-263
SyncLevelsmV?	2-264
SyncLevelsmVVal[1..3]?	2-265
SyncLine <line number>	2-266
SyncMeasuredOnCh1Set<setting>	2-267
SyncMultiLineEnd <line number>	2-268

SyncMultiLineStart <line number>	2-269
SyncPassLevelsMV?	2-270
SyncPassLevelsMVVal[1..3]?	2-271
SyncPassTimes?	2-272
SyncPassTimesVal[1..10]?	2-273
SyncRelLevelsMV?	2-274
SyncRelLevelsMVVal[1..3]?	2-275
SyncRelTimes?	2-276
SyncRelTimesVal[1..10]?	2-277
SyncSet <setting>	2-278
SyncStatus?	2-279
SyncTimes?	2-280
SyncTimesVal[1..10]?	2-281
Trigger <trigger>	2-282
UserFormatDelete <user format name>	2-283
UserFormatDisplay?	2-284
UserFormatListAll	2-285
UserFormatSave <user format name>	2-286
UserFormatSet <user format name>	2-288
VectorscopeGrat <setting>	2-289
VectorscopeLine <line number>	2-290
VectorscopeScale <setting>	2-291
VSyncAll?	2-292
VSyncAverage<samples>	2-294
VSyncBroadPulseEnd?	2-295
VSyncBroadPulseStart?	2-296
VSyncEqPulseWidth?	2-297
VSyncPassAll?	2-298
VSyncPassBroadPulseEnd?	2-300
VSyncPassBroadPulseStart?	2-301
VSyncPassEqPulseWidth?	2-302
VSyncPassPeriod?	2-303
VSyncPassPreEqDuration?	2-304
VSyncPassSerrPulseWidth?	2-305
VSyncPassVBlankDuration?	2-306
VSyncPassVBlankPreEq?	2-307
VSyncPassVSyncDuration?	2-308
VSyncPeriod?	2-309
VSyncPreEqDuration?	2-310
VSyncRelAll?	2-311
VSyncRelBroadPulseEnd?	2-313
VSyncRelBroadPulseStart?	2-314
VSyncRelEqPulseWidth?	2-315
VSyncRelFieldPeriod?	2-316
VSyncRelPreEqDuration?	2-317
VSyncRelSerrPulseWidth?	2-318
VSyncRelVBlankDuration?	2-319
VSyncRelVBlankPreEq?	2-320
VSyncRelVSyncDuration?	2-321
VSyncSerrPulseWidth?	2-322
VSyncSet <setting>	2-323
VSyncStatus?	2-324
VSyncVBlankDuration?	2-325

VSyncVBlankPreEq?	2-326
VSyncVSyncDuration?	2-327
Warning <string>	2-328
WarningReportingMeasure <setting>	2-329
WarningReportingResults <setting>	2-330
WarningReportingSignal <setting>	2-331

Option VGA Remote Commands

Command Groups	3-1
Commands	3-36
AppStatus?	3-36
AutoScale <setting>	3-37
AutoScaleInit <setting>	3-38
ChChMismatchAll?	3-39
ChChMismatchAverage <samples>	3-40
ChChMismatchCh1Ch2?	3-41
ChChMismatchCh1Ch3?	3-42
ChChMismatchCh2Ch3?	3-43
ChChMismatchLine<line number>	3-44
ChChMismatchMaxAll?	3-45
ChChMismatchMaxCh1Ch2?	3-46
ChChMismatchMaxCh1Ch3?	3-47
ChChMismatchMaxCh2Ch3?	3-48
ChChMismatchMaxPeakToPeakCh1Ch2?	3-49
ChChMismatchMaxPeakToPeakCh1Ch3?	3-50
ChChMismatchMaxPeakToPeakCh2Ch3?	3-51
ChChMismatchMinAll?	3-52
ChChMismatchMinCh1Ch2?	3-53
ChChMismatchMinCh1Ch3?	3-54
ChChMismatchMinCh2Ch3?	3-55
ChChMismatchMinPeakToPeakCh1Ch2?	3-56
ChChMismatchMinPeakToPeakCh1Ch3?	3-57
ChChMismatchMinPeakToPeakCh2Ch3?	3-58
ChChMismatchPassAll?	3-61
ChChMismatchPassCh1Ch2?	3-62
ChChMismatchPassCh1Ch3?	3-63
ChChMismatchPassCh2Ch3?	3-64
ChChMismatchPassPeakToPeakCh1Ch2?	3-65
ChChMismatchPassPeakToPeakCh1Ch3?	3-66
ChChMismatchPassPeakToPeakCh2Ch3?	3-67
ChChMismatchPeakToPeakCh1Ch2?	3-68
ChChMismatchPeakToPeakCh1Ch3?	3-69
ChChMismatchPeakToPeakCh2Ch3?	3-70
ChChMismatchRefAll?	3-71
ChChMismatchRefCh1Ch2?	3-72
ChChMismatchRefCh1Ch3?	3-73
ChChMismatchRefCh2Ch3?	3-74
ChChMismatchRefPeakToPeakCh1Ch2?	3-75
ChChMismatchRefPeakToPeakCh1Ch3?	3-76
ChChMismatchRefPeakToPeakCh2Ch3?	3-77
ChChMismatchRelAll?	3-78
ChChMismatchRelCh1Ch2?	3-79

ChChMismatchRelCh1Ch3?	3-80
ChChMismatchRelCh2Ch3?	3-81
ChChMismatchRelPeakToPeakCh1Ch2?	3-82
ChChMismatchRelPeakToPeakCh1Ch3?	3-83
ChChMismatchRelPeakToPeakCh2Ch3?	3-84
ChChMismatchStatus?	3-86
ChChSkewAll?	3-87
ChChSkewCh1Ch2?	3-89
ChChSkewCh1Ch3?	3-90
ChChSkewCh2Ch3?	3-91
ChChSkewLine	3-92
ChChSkewPixelClockCh1Ch2?	3-93
ChChSkewPixelClockCh1Ch3?	3-94
ChChSkewPixelClockCh2Ch3?	3-95
ChChSkewMaxAll?	3-96
ChChSkewMaxCh1Ch2?	3-97
ChChSkewMaxCh1Ch3?	3-98
ChChSkewMaxCh2Ch3?	3-99
ChChSkewMaxPixelClockCh1Ch2?	3-100
ChChSkewMaxPixelClockCh1Ch3?	3-101
ChChSkewMaxPixelClockCh2Ch3?	3-102
ChChSkewMinAll?	3-103
ChChSkewMinCh1Ch2?	3-104
ChChSkewMinCh1Ch3?	3-105
ChChSkewMinCh2Ch3?	3-106
ChChSkewMinPixelClockCh1Ch2?	3-107
ChChSkewMinPixelClockCh1Ch3?	3-108
ChChSkewMinPixelClockCh2Ch3?	3-109
ChChSkewMultiLineEnd	3-110
ChChSkewMultiLineStart	3-111
ChChSkewPassAll?	3-112
ChChSkewPassCh1Ch2?	3-113
ChChSkewPassCh1Ch3?	3-114
ChChSkewPassCh2Ch3?	3-115
ChChSkewPassPixelClockCh1Ch2?	3-116
ChChSkewPassPixelClockCh1Ch3?	3-117
ChChSkewPassPixelClockCh2Ch3?	3-118
ChChSkewRefAll?	3-119
ChChSkewRefCh1Ch2?	3-120
ChChSkewRefCh1Ch3?	3-121
ChChSkewRefCh2Ch3?	3-122
ChChSkewRefPixelClockCh1Ch2?	3-123
ChChSkewRefPixelClockCh1Ch3?	3-124
ChChSkewRefPixelClockCh2Ch3?	3-125
ChChSkewRelAll?	3-126
ChChSkewRelCh1Ch2?	3-127
ChChSkewRelCh1Ch3?	3-128
ChChSkewRelCh2Ch3?	3-129
ChChSkewRelPixelClockCh1Ch2?	3-130
ChChSkewRelPixelClockCh1Ch3?	3-131
ChChSkewRelPixelClockCh2Ch3?	3-132
ChChSkewSet <setting>	3-133
ChChSkewStatus?	3-134

ColorBarsAverage <samples>	3-135
ColorBarsCh[1..3]?	3-136
ColorBarsCh[1..3]Val1?	3-137
ColorBarsCh[1..3]Val2?	3-138
ColorBarsCh[1..3]Val3?	3-139
ColorBarsCh[1..3]Val4?	3-140
ColorBarsCh[1..3]Val5?	3-141
ColorBarsCh[1..3]Val6?	3-142
ColorBarsCh[1..3]Val7?	3-143
ColorBarsCh[1..3]Val8?	3-144
ColorBarsLine <line number>	3-145
ColorBarsMaxCh[1..3]?	3-146
ColorBarsMaxCh[1..3]Val1?	3-147
ColorBarsMaxCh[1..3]Val2?	3-148
ColorBarsMaxCh[1..3]Val3?	3-149
ColorBarsMaxCh[1..3]Val4?	3-150
ColorBarsMaxCh[1..3]Val5?	3-151
ColorBarsMaxCh[1..3]Val6?	3-152
ColorBarsMaxCh[1..3]Val7?	3-153
ColorBarsMaxCh[1..3]Val8?	3-154
ColorBarsMinCh[1..3]?	3-155
ColorBarsMinCh[1..3]Val1?	3-156
ColorBarsMinCh[1..3]Val2?	3-157
ColorBarsMinCh[1..3]Val3?	3-158
ColorBarsMinCh[1..3]Val4?	3-159
ColorBarsMinCh[1..3]Val5?	3-160
ColorBarsMinCh[1..3]Val6?	3-161
ColorBarsMinCh[1..3]Val7?	3-162
ColorBarsMinCh[1..3]Val8?	3-163
ColorBarsMultiLineEnd	3-164
ColorBarsMultiLineStart	3-165
ColorBarsPassAll?	3-166
ColorBarsPassCh[1..3]?	3-167
ColorBarsPassCh[1..3]Val1?	3-168
ColorBarsPassCh[1..3]Val2?	3-169
ColorBarsPassCh[1..3]Val3?	3-170
ColorBarsPassCh[1..3]Val4?	3-171
ColorBarsPassCh[1..3]Val5?	3-172
ColorBarsPassCh[1..3]Val6?	3-173
ColorBarsPassCh[1..3]Val7?	3-174
ColorBarsPassCh[1..3]Val8?	3-175
ColorBarsRefCh[1..3]?	3-176
ColorBarsRefCh[1..3]Val1?	3-177
ColorBarsRefCh[1..3]Val2?	3-178
ColorBarsRefCh[1..3]Val3?	3-179
ColorBarsRefCh[1..3]Val4?	3-180
ColorBarsRefCh[1..3]Val5?	3-181
ColorBarsRefCh[1..3]Val6?	3-182
ColorBarsRefCh[1..3]Val7?	3-183
ColorBarsRefCh[1..3]Val8?	3-184
ColorBarsRelCh[1..3]?	3-185
ColorBarsRelCh[1..3]Val1?	3-186
ColorBarsRelCh[1..3]Val2?	3-187

ColorBarsRelCh[1..3]Val3?	3-188
ColorBarsRelCh[1..3]Val4?	3-189
ColorBarsRelCh[1..3]Val5?	3-190
ColorBarsRelCh[1..3]Val6?	3-191
ColorBarsRelCh[1..3]Val7?	3-192
ColorBarsRelCh[1..3]Val8?	3-193
ColorBarsRelPctCh[1..3]?	3-194
ColorBarsRelPctCh[1..3]Val1?	3-195
ColorBarsRelPctCh[1..3]Val2?	3-196
ColorBarsRelPctCh[1..3]Val3?	3-197
ColorBarsRelPctCh[1..3]Val4?	3-198
ColorBarsRelPctCh[1..3]Val5?	3-199
ColorBarsRelPctCh[1..3]Val6?	3-200
ColorBarsRelPctCh[1..3]Val7?	3-201
ColorBarsRelPctCh[1..3]Val8?	3-202
ColorBarsSet <setting>	3-203
ColorBarsStatus?	3-204
DefaultSettings<setting>	3-205
Display <None Picture>	3-206
EmbedScreenCaptureSet	3-207
Execute <setting>	3-208
Format <format>	3-209
HSyncAll?	3-212
HSyncFallTime?	3-214
HSyncFrequency?	3-215
HSyncJitterAll?	3-216
HSyncJitterLine<line number>	3-217
HSyncJitterMaxAll?	3-218
HSyncJitterMaxPixelClock?	3-219
HSyncJitterMaxTime?	3-220
HSyncJitterMinAll?	3-221
HSyncJitterMinPixelClock?	3-222
HSyncJitterMinTime?	3-223
HSyncJitterPassAll?	3-224
HSyncJitterPassPixelClock?	3-225
HSyncJitterPassTime?	3-226
HSyncJitterPixelClock?	3-227
HSyncJitterRefAll?	3-228
HSyncJitterRefPixelClock?	3-229
HSyncJitterRefTime?	3-230
HSyncJitterRelAll?	3-231
HSyncJitterRelPixelClock?	3-232
HSyncJitterRelTime?	3-233
HSyncJitterSet <setting>	3-234
HSyncJitterStatus?	3-235
HSyncJitterTime?	3-236
HSyncLine	3-237
HSyncLogicLevel0Value1?	3-238
HSyncLogicLevel0Value2?	3-239
HSyncLogicLevel1Value1?	3-240
HSyncLogicLevel1Value2?	3-241
HSyncMaxAll?	3-242
HSyncMaxFallTime?	3-243

HSyncMaxFrequency?	3-244
HSyncMaxLogicLevel0Value1?	3-245
HSyncMaxLogicLevel0Value2?	3-246
HSyncMaxLogicLevel1Value1?	3-247
HSyncMaxLogicLevel1Value2?	3-248
HSyncMaxMonotonicFall?	3-249
HSyncMaxMonotonicRise?	3-250
HSyncMaxOvershoot?	3-251
HSyncMaxOvershootSettlingTime?	3-252
HSyncMaxPolarity?	3-253
HSyncMaxPulseWidth?	3-254
HSyncMaxRiseTime?	3-255
HSyncMaxSyncPeriod?	3-256
HSyncMaxUndershoot?	3-257
HSyncMaxUndershootSettlingTime?	3-258
HSyncMinAll?	3-259
HSyncMinFallTime?	3-260
HSyncMinFrequency?	3-261
HSyncMinLogicLevel0Value1?	3-262
HSyncMinLogicLevel0Value2?	3-263
HSyncMinLogicLevel1Value1?	3-264
HSyncMinLogicLevel1Value2?	3-265
HSyncMinMonotonicFall?	3-266
HSyncMinMonotonicRise?	3-267
HSyncMinOvershoot?	3-268
HSyncMinOvershootSettlingTime?	3-269
HSyncMinPolarity?	3-270
HSyncMinPulseWidth?	3-271
HSyncMinRiseTime?	3-272
HSyncMinSyncPeriod?	3-273
HSyncMinUndershoot?	3-274
HSyncMinUndershootSettlingTime?	3-275
HSyncMonotonicFall?	3-276
HSyncMonotonicRise?	3-277
HSyncMultiLineEnd <line number>	3-278
HSyncMultiLineStart <line number>	3-279
HSyncOvershoot?	3-280
HSyncOvershootSettlingTime?	3-281
HSyncPassAll?	3-282
HSyncPassFallTime?	3-283
HSyncPassFrequency?	3-284
HSyncPassLogicLevel0Value1?	3-285
HSyncPassLogicLevel0Value2?	3-286
HSyncPassLogicLevel1Value1?	3-287
HSyncPassLogicLevel1Value2?	3-288
HSyncPassMonotonicFall?	3-289
HSyncPassMonotonicRise?	3-290
HSyncPassOvershoot?	3-291
HSyncPassOvershootSettlingTime?	3-292
HSyncPassPolarity?	3-293
HSyncPassPulseWidth?	3-294
HSyncPassRiseTime?	3-295
HSyncPassSyncPeriod?	3-296

HSyncPassUndershoot?	3-297
HSyncPassUndershootSettlingTime?	3-298
HSyncPolarity?	3-299
HSyncPulseWidth?	3-300
HSyncRefAll?	3-301
HSyncRefFallTime?	3-302
HSyncRefFrequency?	3-303
HSyncRefLogicLevel0Value1?	3-304
HSyncRefLogicLevel0Value2?	3-305
HSyncRefLogicLevel1Value1?	3-306
HSyncRefLogicLevel1Value2?	3-307
HSyncRefMonotonicFall?	3-308
HSyncRefMonotonicRise?	3-309
HSyncRefOvershoot?	3-310
HSyncRefOvershootSettlingTime?	3-311
HSyncRefPolarity?	3-312
HSyncRefPulseWidth?	3-313
HSyncRefSyncPeriod?	3-314
HSyncRefRiseTime?	3-315
HSyncRefUndershoot?	3-316
HSyncRefUndershootSettlingTime?	3-317
HSyncRelAll?	3-318
HSyncRelFallTime?	3-319
HSyncRelFrequency?	3-320
HSyncRelLogicLevel0Value1?	3-321
HSyncRelLogicLevel0Value2?	3-322
HSyncRelLogicLevel1Value1?	3-323
HSyncRelLogicLevel1Value2?	3-324
HSyncRelMonotonicFall?	3-325
HSyncRelMonotonicRise?	3-326
HSyncRelOvershoot?	3-327
HSyncRelOvershootSettlingTime?	3-328
HSyncRelPolarity?	3-329
HSyncRelPulseWidth?	3-330
HSyncRelRiseTime?	3-331
HSyncRelSyncPeriod?	3-332
HSyncRelUndershoot?	3-333
HSyncRelUndershootSettlingTime?	3-334
HSyncRiseTime?	3-335
HSyncSet <setting>	3-336
HSyncStatus?	3-337
HSyncSyncPeriod?	3-338
HSyncUndershoot?	3-339
HSyncUndershootSettlingTime?	3-340
HTimingAll?	3-341
HTimingAddressableVideoCh[1..3]?	3-342
HTimingBackPorchCh[1..3]?	3-344
HTimingFrontPorchCh[1..3]?	3-345
HTimingLeftBorderCh[1..3]?	3-346
HTimingLine<line number>	3-347
HTimingMaxAll?	3-348
HTimingMaxAddressableVideoCh[1..3]?	3-349
HTimingMaxBackPorchCh[1..3]?	3-350

HTimingMaxFrontPorchCh[1..3]?	3-351
HTimingMaxLeftBorderCh[1..3]?	3-352
HTimingMaxPixelClock?	3-353
HTimingMaxRightBorderCh[1..3]?	3-354
HTimingMaxSyncPulseWidth?	3-355
HTimingMinAll?	3-356
HTimingMinAddressableVideoCh[1..3]?	3-357
HTimingMinBackPorchCh[1..3]?	3-358
HTimingMinFrontPorchCh[1..3]?	3-359
HTimingMinLeftBorderCh[1..3]?	3-360
HTimingMinPixelClock?	3-361
HTimingMinRightBorderCh[1..3]?	3-362
HTimingMinSyncPulseWidth?	3-363
HTimingMultiLineEnd <line number>	3-364
HTimingMultiLineStart <line number>	3-365
HTimingPassAll?	3-366
HTimingPassAddressableVideoCh[1..3]?	3-367
HTimingPassBackPorchCh[1..3]?	3-368
HTimingPassFrontPorchCh[1..3]?	3-369
HTimingPassLeftBorderCh[1..3]?	3-370
HTimingPassPixelClock?	3-371
HTimingPassRightBorderCh[1..3]?	3-372
HTimingPassSyncPulseWidth?	3-373
HTimingPixelClock?	3-374
HTimingRefAll?	3-375
HTimingRefAddressableVideoCh[1..3]?	3-376
HTimingRefBackPorchCh[1..3]?	3-377
HTimingRefFrontPorchCh[1..3]?	3-378
HTimingRefLeftBorderCh[1..3]?	3-379
HTimingRefPixelClock?	3-380
HTimingRefRightBorderCh[1..3]?	3-381
HTimingRefSyncPulseWidth?	3-382
HTimingRelAll?	3-383
HTimingRelAddressableVideoCh[1..3]?	3-384
HTimingRelBackPorchCh[1..3]?	3-385
HTimingRelFrontPorchCh[1..3]?	3-386
HTimingRelLeftBorderCh[1..3]?	3-387
HTimingRelPixelClock?	3-388
HTimingRelRightBorderCh[1..3]?	3-389
HTimingRelSyncPulseWidth?	3-390
HTimingRightBorderCh[1..3]?	3-391
HTimingSet <setting>	3-392
HTimingStatus?	3-393
HTimingSyncPulseWidth?	3-394
ID?	3-395
LimitFileLoad <pathstring>	3-396
LimitSet	3-397
LinearityMaxDNLAtStepNumberCh[1..3]?	3-399
LinearityMaxDNLCh[1..3]?	3-400
LinearityMaxINLAtStepNumberCh[1..3]?	3-401
LinearityMaxINLCh[1..3]?	3-402
LinearityLine<line number>	3-403
LinearityMaxMaxDNLCh[1..3]?	3-404

LinearityMaxMaxINLCh[1..3]?	3-405
LinearityMaxMonotonicCh[1..3]?	3-406
LinearityMaxResolutionCh[1..3]?	3-407
LinearityMinMaxDNLCh[1..3]?	3-408
LinearityMinMaxINLCh[1..3]?	3-409
LinearityMinMonotonicCh[1..3]?	3-410
LinearityMinResolutionCh[1..3]?	3-411
LinearityMonotonicAtStepNumberCh[1..3]?	3-412
LinearityMonotonicCh[1..3]?	3-413
LinearityMultiLineEnd <line number>	3-414
LinearityMultiLineStart <line number>	3-415
LinearityPassAll?	3-416
LinearityPassMaxDNLCh[1..3]?	3-417
LinearityPassMaxINLCh[1..3]?	3-418
LinearityPassMonotonicCh[1..3]?	3-419
LinearityPassResolutionCh[1..3]?	3-420
LinearityRefMaxDNLCh[1..3]?	3-421
LinearityRefMaxINLCh[1..3]?	3-422
LinearityRefMonotonicCh[1..3]?	3-423
LinearityRefResolutionCh[1..3]?	3-424
LinearityRelMaxDNLCh[1..3]?	3-425
LinearityRelMaxINLCh[1..3]?	3-426
LinearityRelMonotonicCh[1..3]?	3-427
LinearityRelResolutionCh[1..3]?	3-428
LinearityResolutionCh[1..3]?	3-429
LinearitySet <setting>	3-430
LinearityStatus?	3-431
LogErrors	3-432
LumaLevelsAll?	3-434
LumaLevelsAmpMaxCh[1..3]?	3-435
LumaLevelsAmpMinCh[1..3]?	3-436
LumaLevelsLine<line number>	3-437
LumaLevelsMaxAll?	3-438
LumaLevelsMaxAmpMaxCh[1..3]?	3-439
LumaLevelsMaxAmpMinCh[1..3]?	3-440
LumaLevelsMinAll?	3-441
LumaLevelsMinAmpMaxCh[1..3]?	3-442
LumaLevelsMinAmpMinCh[1..3]?	3-443
LumaLevelsMultiLineEnd <line number>	3-444
LumaLevelsMultiLineStart <line number>	3-445
LumaLevelsPassAll?	3-446
LumaLevelsPassAmpMaxCh[1..3]?	3-447
LumaLevelsPassAmpMinCh[1..3]?	3-448
LumaLevelsRefAll?	3-449
LumaLevelsRefAmpMaxCh[1..3]?	3-450
LumaLevelsRefAmpMinCh[1..3]?	3-451
LumaLevelsRelAll?	3-452
LumaLevelsRelAmpMaxCh[1..3]?	3-453
LumaLevelsRelAmpMinCh[1..3]?	3-454
LumaLevelsRelPctAll?	3-455
LumaLevelsRelPctAmpMaxCh[1..3]?	3-456
LumaLevelsRelPctAmpMinCh[1..3]?	3-457
LumaLevelsSet <setting>	3-458

LumaLevelsStatus?	3-459
Noise500MHzFilterSet <setting>	3-460
NoiseAll?	3-461
NoisedBCh[1..3]?	3-463
NoiseIrCh[1..3]?	3-464
NoiseLine<line number>	3-465
NoiseMaxAll?	3-466
NoiseMaxdBCh[1..3]?	3-467
NoiseMaxIrCh[1..3]?	3-468
NoiseMaxmVCh[1..3]?	3-469
NoiseMinAll?	3-470
NoiseMindBCh[1..3]?	3-471
NoiseMinIrCh[1..3]?	3-472
NoiseMinmVCh[1..3]?	3-473
NoisemVCh[1..3]?	3-474
NoisePassAll?	3-475
NoisePassdBCh[1..3]?	3-476
NoisePassIrCh[1..3]?	3-477
NoisePassmVCh[1..3]?	3-478
NoiseRefAll?	3-479
NoiseRefdBCh[1..3]?	3-480
NoiseRefIrCh[1..3]?	3-481
NoiseRefmVCh[1..3]?	3-482
NoiseRelAll?	3-483
NoiseReldbCh[1..3]?	3-484
NoiseRelIrCh[1..3]?	3-485
NoiseRelmVCh[1..3]?	3-486
NoiseSet <setting>	3-487
NoiseStatus?	3-488
OPComplete <setting>	3-489
PopupWarnings	3-490
RecallSettings <pathstring>	3-491
ReferenceFileLoad <pathstring>	3-492
ReferenceFileSave <filepath>	3-493
ReferenceSet	3-494
ReportFormatType <setting>	3-495
ReportGenerate <pathstring>	3-496
ReportMeasurements <setting>	3-497
ReportString <string>	3-498
RunMode <runmode>	3-499
SaveSettings <pathstring>	3-500
SelectLine <linemode>	3-501
SetupAndOrRun <setuprunmode>	3-502
StopOnError <setting>	3-503
SyncPolarityDetectSet	3-504
TimingStandardType	3-505
UseMIUSet <setting>	3-506
UserFormatDelete <user-format-name>	3-507
UserFormatDisplay?	3-508
UserFormatListAll	3-509
UserFormatSave <user-format-name>	3-510
UserFormatSet <user-format-name>	3-512
VideoTransientLine <line number>	3-514

VideoTransientMaxOvershootCh[1..3]?	3-515
VideoTransientMaxOvershootSettlingTimeCh[1..3]?	3-516
VideoTransientMaxUndershootCh[1..3]?	3-517
VideoTransientMaxUndershootSettlingTimeCh[1..3]?	3-518
VideoTransientMaxVideoFallTimeCh[1..3]?	3-519
VideoTransientMaxVideoFallTimePercentageCh[1..3]?	3-520
VideoTransientMaxVideoRiseTimeCh[1..3]?	3-521
VideoTransientMaxVideoRiseTimePercentageCh[1..3]?	3-522
VideoTransientMinOvershootCh[1..3]?	3-523
VideoTransientMinOvershootSettlingTimeCh[1..3]?	3-524
VideoTransientMinUndershootCh[1..3]?	3-525
VideoTransientMinUndershootSettlingTimeCh[1..3]?	3-526
VideoTransientMinVideoFallTimeCh[1..3]?	3-527
VideoTransientMinVideoFallTimePercentageCh[1..3]?	3-528
VideoTransientMinVideoRiseTimeCh[1..3]?	3-529
VideoTransientMinVideoRiseTimePercentageCh[1..3]?	3-530
VideoTransientMultiLineEnd <line number>	3-531
VideoTransientMultiLineStart <line number>	3-532
VideoTransientOvershootCh[1..3]?	3-533
VideoTransientOvershootSettlingTimeCh[1..3]?	3-534
VideoTransientPassAll?	3-535
VideoTransientPassOvershootCh[1..3]?	3-536
VideoTransientPassOvershootSettlingTimeCh[1..3]?	3-537
VideoTransientPassUndershootCh[1..3]?	3-538
VideoTransientPassUndershootSettlingTimeCh[1..3]?	3-539
VideoTransientPassVideoFallTimeCh[1..3]?	3-540
VideoTransientPassVideoFallTimePercentageCh[1..3]?	3-541
VideoTransientPassVideoRiseTimeCh[1..3]?	3-542
VideoTransientPassVideoRiseTimePercentageCh[1..3]?	3-543
VideoTransientRefOvershootCh[1..3]?	3-544
VideoTransientRefOvershootSettlingTimeCh[1..3]?	3-545
VideoTransientRefUndershootCh[1..3]?	3-546
VideoTransientRefUndershootSettlingTimeCh[1..3]?	3-547
VideoTransientRefVideoFallTimeCh[1..3]?	3-548
VideoTransientRefVideoFallTimePercentageCh[1..3]?	3-549
VideoTransientRefVideoRiseTimeCh[1..3]?	3-550
VideoTransientRefVideoRiseTimePercentageCh[1..3]?	3-551
VideoTransientRelOvershootCh[1..3]?	3-552
VideoTransientRelOvershootSettlingTimeCh[1..3]?	3-553
VideoTransientRelUndershootCh[1..3]?	3-554
VideoTransientRelUndershootSettlingTimeCh[1..3]?	3-555
VideoTransientRelVideoFallTimeCh[1..3]?	3-556
VideoTransientRelVideoFallTimePercentageCh[1..3]?	3-557
VideoTransientRelVideoRiseTimeCh[1..3]?	3-558
VideoTransientRelVideoRiseTimePercentageCh[1..3]?	3-559
VideoTransientSet <setting>	3-560
VideoTransientStatus?	3-561
VideoTransientUndershootCh[1..3]?	3-562
VideoTransientUndershootSettlingTimeCh[1..3]?	3-563
VideoTransientVideoFallTimeCh[1..3]?	3-564
VideoTransientVideoFallTimePercentageCh[1..3]?	3-565
VideoTransientVideoRiseTimeCh[1..3]?	3-566
VideoTransientVideoRiseTimePercentageCh[1..3]?	3-567

VSyncAll?	3-568
VSyncFallTime?	3-570
VSyncFrequency?	3-571
VSyncLogicLevel0Value1?	3-572
VSyncLogicLevel0Value2?	3-573
VSyncLogicLevel1Value1?	3-574
VSyncLogicLevel1Value2?	3-575
VSyncMaxAll?	3-576
VSyncMaxFallTime?	3-577
VSyncMaxFrequency?	3-578
VSyncMaxLogicLevel0Value1?	3-579
VSyncMaxLogicLevel0Value2?	3-580
VSyncMaxLogicLevel1Value1?	3-581
VSyncMaxLogicLevel1Value2?	3-582
VSyncMaxMonotonicFall?	3-583
VSyncMaxMonotonicRise?	3-584
VSyncMaxOvershoot?	3-585
VSyncMaxOvershootSettlingTime?	3-586
VSyncMaxPolarity?	3-587
VSyncMaxPulseWidth?	3-588
VSyncMaxRiseTime?	3-589
VSyncMaxSyncPeriod?	3-590
VSyncMaxUndershoot?	3-591
VSyncMaxUndershootSettlingTime?	3-592
VSyncMinAll?	3-593
VSyncMinFallTime?	3-594
VSyncMinFrequency?	3-595
VSyncMinLogicLevel0Value1?	3-596
VSyncMinLogicLevel0Value2?	3-597
VSyncMinLogicLevel1Value1?	3-598
VSyncMinLogicLevel1Value2?	3-599
VSyncMinMonotonicFall?	3-600
VSyncMinMonotonicRise?	3-601
VSyncMinOvershoot?	3-602
VSyncMinOvershootSettlingTime?	3-603
VSyncMinPolarity?	3-604
VSyncMinPulseWidth?	3-605
VSyncMinRiseTime?	3-606
VSyncMinSyncPeriod?	3-607
VSyncMinUndershoot?	3-608
VSyncMinUndershootSettlingTime?	3-609
VSyncMonotonicFall?	3-610
VSyncMonotonicRise?	3-611
VSyncOvershoot?	3-612
VSyncOvershootSettlingTime?	3-613
VSyncPassAll?	3-614
VSyncPassFallTime?	3-615
VSyncPassFrequency?	3-616
VSyncPassLogicLevel0Value1?	3-617
VSyncPassLogicLevel0Value2?	3-618
VSyncPassLogicLevel1Value1?	3-619
VSyncPassLogicLevel1Value2?	3-620
VSyncPassMonotonicFall?	3-621

VSyncPassMonotonicRise?	3-622
VSyncPassOvershoot?	3-623
VSyncPassOvershootSettlingTime?	3-624
VSyncPassPolarity?	3-625
VSyncPassPulseWidth?	3-626
VSyncPassRiseTime?	3-627
VSyncPassSyncPeriod?	3-628
VSyncPassUndershoot?	3-629
VSyncPassUndershootSettlingTime?	3-630
VSyncPolarity?	3-631
VSyncPulseWidth?	3-632
VSyncRefAll?	3-633
VSyncRefFallTime?	3-634
VSyncRefFrequency?	3-635
VSyncRefLogicLevel0Value1?	3-636
VSyncRefLogicLevel0Value2?	3-637
VSyncRefLogicLevel1Value1?	3-638
VSyncRefLogicLevel1Value2?	3-639
VSyncRefMonotonicFall?	3-640
VSyncRefMonotonicRise?	3-641
VSyncRefOvershoot?	3-642
VSyncRefOvershootSettlingTime?	3-643
VSyncRefPolarity?	3-644
VSyncRefPulseWidth?	3-645
VSyncRefRiseTime?	3-646
VSyncRefSyncPeriod?	3-647
VSyncRefUndershoot?	3-648
VSyncRefUndershootSettlingTime?	3-649
VSyncRelAll?	3-650
VSyncRelFallTime?	3-651
VSyncRelFrequency?	3-652
VSyncRelLogicLevel0Value1?	3-653
VSyncRelLogicLevel0Value2?	3-654
VSyncRelLogicLevel1Value1?	3-655
VSyncRelLogicLevel1Value2?	3-656
VSyncRelMonotonicFall?	3-657
VSyncRelMonotonicRise?	3-658
VSyncRelOvershoot?	3-659
VSyncRelOvershootSettlingTime?	3-660
VSyncRelPolarity?	3-661
VSyncRelPulseWidth?	3-662
VSyncRelRiseTime?	3-663
VSyncRelSyncPeriod?	3-664
VSyncRelUndershoot?	3-665
VSyncRelUndershootSettlingTime?	3-666
VSyncRiseTime?	3-667
VSyncSet <setting>	3-668
VSyncStatus?	3-669
VSyncSyncPeriod?	3-670
VSyncUndershoot?	3-671
VSyncUndershootSettlingTime?	3-672
VTimingAddressableLinesCh[1..3]?	3-673
VTimingAll?	3-674

VTimingBackPorchCh[1..3]?	3-676
VTimingBottomBorderCh[1..3]?	3-677
VTimingFrontPorchCh[1..3]?	3-678
VTimingMaxAddressableLinesCh[1..3]?	3-679
VTimingMaxAll?	3-680
VTimingMaxBackPorchCh[1..3]?	3-681
VTimingMaxBottomBorderCh[1..3]?	3-682
VTimingMaxFrontPorchCh[1..3]?	3-683
VTimingMaxSyncPulseWidth?	3-684
VTimingMaxTopBorderCh[1..3]?	3-685
VTimingMinAddressableLinesCh[1..3]?	3-686
VTimingMinAll?	3-687
VTimingMinBackPorchCh[1..3]?	3-688
VTimingMinBottomBorderCh[1..3]?	3-689
VTimingMinFrontPorchCh[1..3]?	3-690
VTimingMinSyncPulseWidth?	3-691
VTimingMinTopBorderCh[1..3]?	3-692
VTimingPassAddressableLinesCh[1..3]?	3-693
VTimingPassAll?	3-694
VTimingPassBackPorchCh[1..3]?	3-695
VTimingPassBottomBorderCh[1..3]?	3-696
VTimingPassFrontPorchCh[1..3]?	3-697
VTimingPassSyncPulseWidth?	3-698
VTimingPassTopBorderCh[1..3]?	3-699
VTimingRefAddressableLinesCh[1..3]?	3-700
VTimingRefAll?	3-701
VTimingRefBackPorchCh[1..3]?	3-702
VTimingRefBottomBorderCh[1..3]?	3-703
VTimingRefFrontPorchCh[1..3]?	3-704
VTimingRefSyncPulseWidth?	3-705
VTimingRefTopBorderCh[1..3]?	3-706
VTimingRelAddressableLinesCh[1..3]?	3-707
VTimingRelAll?	3-708
VTimingRelBackPorchCh[1..3]?	3-709
VTimingRelBottomBorderCh[1..3]?	3-710
VTimingRelFrontPorchCh[1..3]?	3-711
VTimingRelSyncPulseWidth?	3-712
VTimingRelTopBorderCh[1..3]?	3-713
VTimingSet <setting>	3-714
VTimingStatus?	3-715
VTimingSyncPulseWidth?	3-716
VTimingTopBorderCh[1..3]?	3-717
WarningReportingMeasure <setting>	3-718
WarningReportingResults <setting>	3-719
WarningReportingSignal <setting>	3-720

Appendix

Appendix A: Programming the VM Series System	A-1
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Index

List of Tables

Table 1-1: Compatibility of the VM Series System Option HD and SD with the VM5000HD	1-5
Table 2-1: Configuration commands (Option SD/HD)	2-1
Table 2-2: Miscellaneous commands (Option SD/HD)	2-2
Table 2-3: Reports commands (Option SD/HD)	2-3
Table 2-4: Measurement Setup commands (Option SD/HD)	2-3
Table 2-5: Results commands (Option SD/HD)	2-5
Table 2-6: Run commands (Option SD/HD)	2-15
Table 2-7: Settings commands (Option SD/HD)	2-15
Table 2-8: Status commands (Option SD/HD)	2-15
Table 2-9: Reference and Limit Testing commands (Option SD/HD)	2-16
Table 3-1: Measurement Setup commands (Option VGA)	3-1
Table 3-2: Configuration Commands (Option VGA)	3-3
Table 3-3: Global commands (Option VGA)	3-4
Table 3-4: Operations commands (Option VGA)	3-5
Table 3-5: Reference / Limits commands (Option VGA)	3-5
Table 3-6: Reporting commands (Option VGA)	3-5
Table 3-7: Pass/Fail Status Query commands (Option VGA)	3-6
Table 3-8: Results Summary Query Commands (Option VGA) ...	3-11
Table 3-9: Measured Results Query Commands (Option VGA) ...	3-11
Table 3-10: Relative Results Query Commands (Option VGA) ...	3-16
Table 3-11: Reference Values Query Commands (Option VGA) ..	3-21
Table 3-12: Maximum Limits Query Commands (Option VGA) ..	3-26
Table 3-13: Minimum Limits Query Commands (Option VGA) ..	3-31
Table 3-14: Video Format, Refresh Rate, and Timing Standard ..	3-210



Remote Commands

Remote Commands

You can control the VM Series System through the GPIB interface using commands and queries. The remote commands have the same functionalities as the menus and buttons in the user interface. You can see the effect of the commands on the interface as they are received.

NOTE. All oscilloscope platform GPIB commands are supported on the VM6000 instrument. For documentation on these commands, please refer to the DPO7000, DSA70000 and DPO70000 Programmer Online Guide. It is located on the DPO7000, DSA70000 and DPO70000 Product Software CD 020-2693-XX. For documentation on these commands for other supported oscilloscope platforms, refer to the Programmer Manual for your instrument.

This section covers the following information:

- *Syntax*, page 1-1
- *Remote Startup and Exit of the Instrument*, page 1-4
- *Compatibility of VM Series System Option HD with the VM5000HD*, page 1-5

The Option SD/HD section covers the following information:

- *Option SD/HD Command Groups*, page 2-1
- *Option SD/HD Commands*, page 2-17

The Option VGA section covers the following information:

- *Option VGA Command Groups*, page 3-1
- *Option VGA Commands*, page 3-36

Syntax

Commands consist of set commands and query commands (usually called commands and queries). Commands modify the VM Series System settings or tell the instrument to perform a specific action. Queries cause the VM Series System to return data and information about its status.

Most commands have both a set and a query form, although some commands only have a query form.

Command Structure

VM Series System instrument commands have the following structure:

:VARIABLE:VALUE “<Command>”, “<Argument>”

- You can abbreviate VARIABLE:VALUE to VARI:VAL if desired, and it is not case sensitive.
- There are no abbreviated versions of the “<Command>”, “<Argument>” part of the VM Series System commands; you must enter the full name of this part of a command.
- The <Command> field is case sensitive, and use of incorrect command case spelling can result in an unexpected response from the instrument.
- All commands have a single <Argument>, which is case insensitive and cannot be the empty string “”.
- Arguments are limited to a maximum of 60 characters. Arguments longer than 60 characters should be avoided since they can cause unexpected behavior of the instrument and may require the application to be restarted.
- The comma character (,), the colon character (:), and the double quote character (”) are special characters and should not be used in the argument, otherwise unexpected behavior can result. All other printable characters are permitted in the argument.
- Commands that accept numeric arguments accept either integer or floating point values, with or without an exponent. This is equivalent to GPIB standard numeric format <NR1>.
- The VM Series System instrument does not support using a semicolon character (;) to concatenate commands.

Query Structure

VM Series System instrument queries have the following structure:

:VARIABLE:VALUE? “<Command>”

- You can abbreviate VARIABLE:VALUE? to VARI:VAL? if desired, and it is not case sensitive.
- There are no abbreviated versions of the “<Command>” part of the VM Series System queries; you must enter the full name of a query.
- The <Command> field is case sensitive, and use of incorrect command case spelling can result in an unexpected response from the instrument.
- The VM Series System instrument does not support using a semicolon character (;) to concatenate queries.
- Query responses are always in upper case.

- The units and precision of result queries are identical to those in the user interface and those produced by generating a report.
- In the current version (1.X) of the software, fractional numbers are not rounded as they were in the previous software version. If you enter a fractional number for a line number instead of whole number, you will receive an error.
- When specifying a name for a file (ReportGenerate or SaveSettings), you must include the file extension (.rtf, .pdf, .csv, or .vmset) or an error will occur.
- A 50 ms delay must occur between GPIB Set commands to ensure that the GPIB control program does not overflow the internal command buffer of the instrument. See *OpComplete* for more information on page 2-188.

Remote Startup and Exit of the Instrument

To start the application using remote commands, use the following command for Option SD/HD:

```
application:activate "VM HD and SD Video"
```

To start the application using remote commands, use the following command for Option VGA:

```
application:activate "VM VGA Video"
```

To exit the application using remote commands, use the following command:

```
VARIABLE:VALUE "application", "exit"
```

You can check whether or not the VM Series System application is running using the following query:

```
VARIABLE:VALUE? "application"
```

If the application is running, this query will return "VM Series". However, if the application is not currently running, it will return the empty string "".

Compatibility of the VM Series Option HD with the VM5000D

If you are upgrading an existing VM Series SystemHD, you should note that some default settings and command functionality have changed.

GPIB command differences

The changes to the GPIB commands are as follows:

- Default commands set status.
- Sync command results for the bi-level sync are the same format as the tri-level sync (for your convenience). The fields that do not apply to a bi-level sync return dashes. For example, bi-level sync does not have a positive going sync, so the positive sync width will be dashes.
- Sync command has three items added to the end.

Table 1-1: Compatibility of the VM Series System Option HD and SD with the VM5000HD

Description of setting	OLD	NEW
Default trigger channel	CH1	CH4
Operation menu setting "Run Mode" default	Continuously	Once



Option SD/HD Remote Commands

Option SD/HD Remote Commands

Command Groups

Table 2-1 through Table 2-9 lists the commands organized by functional group. (Refer to the *Table of Contents* for a list of all the commands in alphabetical order.)

Table 2-1: Configuration commands (Option SD/HD)

Header	Description
:VARIABLE:VALUE	
AutoScale	Set or query whether to use auto scale during measurement
AutoScaleInit	Set or query specifies the starting value used by the AutoScale command
ChannelDelaySet	Set or query whether to measure Channel Delay upon execute
ColorBarsSet	Set or query whether to measure Color Bars upon execute
ColorSpace	Set or query the video color space to use for measurement
Display	Set or query the Picture, Vectorscope, or Noise Spectrum display
Error	Reset error to 0 or query error value
Format	Set or query the video format to use for measurement
FrequencyResponseMeasLocation	Set or query the location at which the Frequency Response measurement is made
FrequencyResponseSet	Set or query whether to measure Frequency Response measurement is enabled
HSyncJitterDemarcFreq	Set or query the jitter demarcation frequency used to perform the H Sync Jitter measurement
HSyncJitterInputSetup	Set or query the input type (Jitter/Probability) and their values used to perform the H Sync Jitter measurement
HSyncJitterSet	Set or query whether to measure H Sync Jitter measurement is enabled
HSyncJitterWanderDemarcFreq	Set or query the wander demarcation frequency used to perform the H Sync Jitter measurement
LogErrors	Set or query whether errors are logged to a file
LevelsSet	Set or query whether to measure Levels upon execute
LineSelectSet	Set or query the line select option for Single Line/Multi Lines selection
MultiBurstSet	Set or query whether to measure Multiburst upon execute
NoiseCursorPos	Set or query the cursor position for the Noise Spectrum display
NoiseSet	Set or query whether to measure Noise upon execute
NonLinearitySet	Set or query whether to measure Non Linearity upon execute
PixAspectRatio	Set or query picture aspect ratio

Table 2-1: Configuration commands (Option SD/HD) (Cont.)

Header	Description
PixLine	Set or query picture line number to bright up
PopupWarnings	Set or query if Pop-up warnings appear on screen
RunMode	Set or query run mode to use for measurement
SetupAndOrRun	Set or query setup mode to use for measurement
SpatialDistortionSet	Set or query whether to measure Spatial Distortion upon execute
ShortTimeDistortionSet	Set or query whether to measure Short Time Distortion upon execute
SyncMeasuredOnCh1Set	Set or query the selection of sync measured on CH1 checkbox used to perform the H Sync measurement
SyncSet	Set or query whether to measure H Sync upon execute
Trigger	Set or query the video trigger to use for measurement
UserFormatDelete	Delete a user defined format from the list of the currently available user defined formats.
UserFormatDisplay	Query the details of the various parameters of the currently selected user-defined format.
UserFormatListAll	Query the list of the currently available user-defined formats from the instrument.
UserFormatSave	Create / update a user defined format All of the input arguments must be specified.
VectorscopeGrat	Set or query Vectorscope graticule
VectorscopeLine	Set or query Vectorscope line number to bright up
VectorscopeScale	Set or query Vectorscope scale
VSynSet	Set or query whether to measure V Sync upon execute
Warning	Reset warning to 0 or query warning value
WarningReportingMeasure	Set or query whether measurement warnings create a warning message
WarningReportingResults	Set or query whether results warnings are to create a warning message
WarningReportingSignal	Set or query whether signal warnings create a warning message

Table 2-2: Miscellaneous commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
AppStatus?	Query whether Application Status is: Configure, Measuring, Done, or Reported
DetectedFormat?	Query returns the detected format when autodetect is enabled
FieldSelect	Set or query the field selected for the V Sync measurement
ID?	Query the ID/Version of the application

Table 2-3: Reports commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	Specifies the file type to be used when ReportGenerate is invoked
ReportGenerate	Generates a measurement report of the specified type (if a measurement has been run and results are available), and saves it in the specified file
ReportMeasurements	Set or query the measurements to write to the report when ReportGenerate is called
ReportString	Set or query any additional information to write to the report when ReportGenerate is called

Table 2-4: Measurement Setup commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
ChannelDelayAverage	Set or query the number of samples over which to average the Channel Delay measurement
ChannelDelayLine	Set or query line number that is to be used for the Channel Delay measurement
ChannelDelayMultiLineEnd	Set or query the ending line number used to perform the Channel Delay measurement on multiple lines
ChannelDelayMultiLineStart	Set or query the starting line number used to perform the Channel Delay measurement on multiple lines
ColorBarsAverage	Set or query the number of samples over which to average the Color Bars measurement
ColorBarsLine	Set or query line number that is to be used for the Color Bars measurement
ColorBarsMultiLineEnd	Set or query the ending line number used to perform the Color Bars measurement on multiple lines
ColorBarsMultiLineStart	Set or query the starting line number used to perform the Color Bars measurement on multiple lines
FrequencyResponseAverage	Set or query frequency response average
FrequencyResponseFilterBW	Set or query the bandwidth used in the RMS distortion field in the Frequency Response measurement
FrequencyResponseFreq	Set or query frequency response frequency
FrequencyResponseLine	Set or query frequency response line number
FrequencyResponseMultiLineEnd	Set or query the ending line number used to perform the Frequency Response measurement on multiple lines
FrequencyResponseMultiLineStart	Set or query the starting line number used to perform the Frequency Response measurement on multiple lines
FrequencyResponseTime	Set or query frequency response time

Table 2-4: Measurement Setup commands (Option SD/HD) (Cont.)

Header	Description
HSyncJitterNumLines	Set or query the number of lines used to perform the H Sync Jitter measurement
LevelsAverage	Set or query the number of samples over which to average the Levels measurement
LevelsConfig[1..8]	Set or query the configuration details for the selected level used to perform the Levels measurement
LevelsConfigRef	Set or query the configuration details of the reference level used to perform the Levels measurement
LevelsLine	Set or query line number that is used for the Levels measurement
LevelsMultiLineEnd	Set or query the ending line number used to perform the Levels measurement on multiple lines
LevelsMultiLineStart	Set or query the starting line number used to perform the Levels measurement on multiple lines
MultiburstAverage	Set or query the number of samples over which to average the Multiburst measurement
MultiburstLine	Set or query line number that is to be used for the Multiburst measurement
MultiburstMultiLineEnd	Set or query the ending line number used to perform the Multiburst measurement on multiple lines
MultiburstMultiLineStart	Set or query the starting line number used to perform the Multiburst measurement on multiple lines
NoiseAverage	Set or query the number of samples over which to average the Noise measurement
NoiseBW	Set or query bandwidth of noise filter that is to be used for Noise measurement, if the unweighted noise filter is selected
NoiseCursorPos	Set or query the position of the cursor in the noise spectrum display
NoiseTimeWindowCursors	Set or query the start and the end cursor position values used to perform the Noise measurement
NoiseFilter	Set or query the type of noise filter that is used for the Noise measurement
NoiseLine	Set or query the line number that is used for the Noise measurement
NoiseMultiLineEnd	Set or query the ending line number used to perform the Noise measurement on multiple lines
NoiseMultiLineStart	Set or query the starting line number used to perform the Noise measurement on multiple lines
NonLinearityAverage	Set or query the number of samples over which to average the Non Linearity measurement
NonLinearityLine	Set or query line number that is to be used for the Non-Linearity measurement
NonLinearityMultiLineEnd	Set or query the ending line number used to perform the Non Linearity measurement on multiple lines
NonLinearityMultiLineStart	Set or query the starting line number used to perform the Non Linearity measurement on multiple lines

Table 2-4: Measurement Setup commands (Option SD/HD) (Cont.)

Header	Description
ShortTimeDistortionAverage	Set or query Short Time Distortion average
ShortTimeDistortionLine	Set or query Short Time Distortion line number
ShortTimeDistortionMultiLineEnd	Set or query the ending line number used to perform the Short Time Distortion measurement on multiple lines
ShortTimeDistortionMultiLineStart	Set or query the starting line number used to perform the Short Time Distortion measurement on multiple lines
SpatialDistortionAverage	Set or query the number of samples over which to average the Spatial Distortion measurement
SpatialDistortionBMPRefFile	Set the spatial distortion BMP reference file used to perform the Spatial Distortion measurement
SyncAverage	Set or query the number of samples over which to average the H Sync measurement
SyncLine	Set or query the line number that is used for the H Sync measurement
SyncMultiLineEnd	Set or query the ending line number used to perform the H Sync measurement on multiple lines
SyncMultiLineStart	Set or query the starting line number used to perform the H Sync measurement on multiple lines
VSyncAverage	Set or query the number of samples over which to average the V Sync measurement

Table 2-5: Results commands (Option SD/HD)

Header	Description
:VARIABLE:VALue:	
ChannelDelayAll?	Query all three delay measurements performed by the Channel Delay measurement
ChannelDelayCh1Ch2?	Query the Ch1Ch2 delay measurement performed by the Channel Delay measurement
ChannelDelayCh1Ch3?	Query the Ch1Ch3 delay measurement performed by the Channel Delay measurement
ChannelDelayCh2Ch3?	Query the Ch2Ch3 delay measurement performed by the Channel Delay measurement
ChannelDelayPassAll?	Query the pass/fail status for all the values resulting from the Channel Delay measurement
ChannelDelayPassCh1Ch2?	Query the pass/fail status of the Channel Delay Ch1Ch2 measurement
ChannelDelayPassCh1Ch3?	Query the pass/fail status of the Channel Delay Ch1Ch3 measurement
ChannelDelayPassCh2Ch3?	Query the pass/fail status of the Channel Delay Ch2Ch3 measurement
ChannelDelayRelAll?	Query the Channel Delay measurement for all of its relative results

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
ChannelDelayRelCh1Ch2?	Query the relative value of the Channel Delay Ch1Ch2 measurement
ChannelDelayRelCh1Ch3?	Query the relative value of the Channel Delay Ch1Ch3 measurement
ChannelDelayRelCh2Ch3?	Query the relative value of the Channel Delay Ch2Ch3 measurement
ColorBarsmVCh[1..3]?	Query all eight level values resulting from Color Bars measurement for the specified channel
ColorBarsmVCh[1..3]Val[1..8]?	Query all the values resulting from the specified Color Bars channel and value measurement
ColorBarsPassCh[1..3]?	Query the pass/fail status of all eight level values resulting from the Color Bars measurement for the specified channel
ColorBarsPassCh[1..3]Val[1..8]?	Query the pass/fail status from the Color Bars measurement for the specified channel and value
ColorBarsRelmVCh[1..3]?	Query all eight level values resulting from Color Bars relative measurement for the specified channel in mV
ColorBarsRelmVCh[1..3]Val[1..8]?	Query all the relative results values resulting from the specified Color Bars channel and value measurement in mV
ColorBarsRelPctmVCh[1..3]?	Query all eight level values resulting from Color Bars relative measurement for the specified channel in Percent
ColorBarsRelPctmVCh[1..3]Val[1..8]?	Query the value resulting from the Color Bars relative result for the specified channel and value in Percent
FrequencyResponseCh[1..3]?	Query all five values resulting from the Frequency Response measurement for the specified channel
FrequencyResponseCh[1..3]Val[1..5]?	Query the value resulting from the specified Frequency Response channel and value measurement
FrequencyResponsePassCh[1..3]?	Query the pass/fail status for all five values resulting from the Frequency Response relative results for the specified channel
FrequencyResponsePassCh[1..3]Val[1..5]?	Query the pass/fail status resulting from the Frequency Response results for the specified channel and value measurement
FrequencyResponseRelCh[1..3]?	Query all five pass/fail statuses resulting from the Frequency Response relative results for the specified channel
FrequencyResponseRelCh[1..3]Val[1..5]?	Query the value resulting from the Frequency Response relative results for the specified channel and value measurement
HSyncJitterAll?	Query all the measured values of the H Sync Jitter measurement
HSyncJitterAccumulatedTime?	Query the measured accumulated time resulting from the H Sync Jitter measurement
HSyncJitterMaxFreqDriftRate?	Query the measured maximum frequency drift rate resulting from the H Sync Jitter measurement
HSyncJitterMaxFreqOffset?	Query the measured maximum frequency offset resulting from the H Sync Jitter measurement
HSyncJitterMinFreqDriftRate?	Query the measured minimum frequency drift rate resulting from the H Sync Jitter measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
HSyncJitterMinFreqOffset?	Query the measured minimum frequency offset resulting from the H Sync Jitter measurement
HSyncJitterNegPeak?	Query the measured negative peak jitter value resulting from the H Sync Jitter measurement
HSyncJitterNegPeakProbability?	Query the probability of occurrence of negative peak jitter resulting from the H Sync Jitter measurement
HSyncJitterPassAll?	Query the pass/fail status for all the values resulting from the H Sync Jitter measurement
HSyncJitterPassAccumulatedTime?	Query the pass/fail status for the accumulated time resulting from the H Sync Jitter measurement
HSyncJitterPassNegPeak?	Query the pass/fail status for the measured negative peak jitter resulting from the H Sync Jitter measurement
HSyncJitterPassMaxFreqDriftRate?	Query the pass/fail status for the maximum frequency drift rate resulting from the H Sync Jitter measurement
HSyncJitterPassMaxFreqOffset?	Query the pass/fail status for the maximum peak frequency offset resulting from the H Sync Jitter measurement
HSyncJitterPassMinFreqDriftRate?	Query the pass/fail status for the minimum peak frequency drift rate resulting from the H Sync Jitter measurement
HSyncJitterPassMinFreqOffset?	Query the pass/fail status for the minimum peak frequency offset resulting from the H Sync Jitter measurement
HSyncJitterPassNegPeakProbability?	Query the pass/fail status for the probability of occurrence of negative peak jitter resulting from the H Sync Jitter measurement
HSyncJitterPassPosPeak?	Query the pass/fail status for the measured positive peak jitter resulting from the H Sync Jitter measurement
HSyncJitterPassPosPeakProbability?	Query the pass/fail status for the probability of occurrence of positive peak jitter resulting from the H Sync Jitter measurement
HSyncJitterPassRMSJitter?	Query the pass/fail status for the RMS jitter resulting from the H Sync Jitter measurement
HSyncJitterPosPeak?	Query the measured positive peak jitter resulting from the H Sync Jitter measurement
HSyncJitterPosPeakProbability?	Query the measured probability of occurrence of positive peak jitter resulting from the H Sync Jitter measurement
HSyncJitterRelAll?	Query the H Sync Jitter measurement for all of its relative results
HSyncJitterRelAccumulatedTime?	Query the accumulated time relative value resulting from the H Sync Jitter measurement
HSyncJitterRelMaxFreqDriftRate?	Query the maximum frequency drift rate relative value resulting from the H Sync Jitter measurement
HSyncJitterRelMaxFreqOffset?	Query the maximum frequency offset relative value resulting from the H Sync Jitter measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
HSyncJitterRelMinPeakFreqDriftRate?	Query the minimum frequency drift rate relative value resulting from the H Sync Jitter measurement
HSyncJitterRelMinPeakFreqOffset?	Query the maximum frequency offset relative value resulting from the H Sync Jitter measurement
HSyncJitterRelNegPeak?	Query the relative negative peak jitter value resulting from the H Sync Jitter measurement
HSyncJitterRelNegPeakProbability?	Query the probability of occurrence of negative peak jitter relative value resulting from the H Sync Jitter measurement
HSyncJitterRelPosPeak?	Query the relative positive peak jitter value resulting from the H Sync Jitter measurement
HSyncJitterRelPosPeakProbability?	Query the probability of occurrence of positive peak jitter relative value resulting from the H Sync Jitter measurement
HSyncJitterRelRMSJitter?	Query the RMS jitter relative value resulting from the H Sync Jitter measurement
HSyncJitterRMSJitter?	Query the measured RMS jitter resulting from the H Sync Jitter measurement
LevelsAll?	Query all the measured values of the Levels measurement
LevelsCh[1..3]?	Query the values resulting from the Levels measurement on the specified channel
LevelsCh[1..3]Val[1..8]?	Query the values resulting from the Levels measurement for the specified channel and level
LevelsPassAll?	Query the pass/fail status for all the values resulting from the Levels measurement on all the channels
LevelsPassCh[1..3]?	Query the pass/fail status for the values resulting from the Levels measurement on the specified channel
LevelsPassCh[1..3]Val[1..8]?	Query the pass/fail status for the values resulting from the Levels measurement on the specified channel and level
LevelsRelAll?	Query all the relative values resulting from the Levels measurement
LevelsRelCh[1..3]?	Query the relative values resulting from the Levels measurement on the specified channel
LevelsRelCh[1..3]Val[1..8]?	Query the relative values resulting from the Levels measurement on the specified channel and level
MultiburstAmpdBCh[1..3]?	Query all six amplitude values resulting from the specified Multiburst channel measurement
MultiburstAmpdBCh[1..3]Val[1..6]?	Query the amplitude value resulting from the specified Multiburst channel and value measurement
MultiburstFlagmVCh[1..3]?	Query the Flag value resulting from the Multiburst measurement for the specified channel
MultiburstFreqCh[1..3]?	Query all six frequency values resulting from the specified Multiburst channel measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
MultiburstFreqCh[1..3]Val[1..6]?	Query the frequency value resulting from the specified Multiburst channel and value measurement
MultiburstPassAmpdBCh[1..3]?	Query the pass/fail status for all six amplitude values resulting from the specified Multiburst channel measurement
MultiburstPassAmpdBCh[1..3]Val[1..5]?	Query the pass/fail status resulting from the Multiburst relative results for the specified channel and value measurement
MultiburstPassFlagmVCh[1..3]?	Query the pass/fail status for the Flag value resulting the from Multiburst measurement for the specified channel
MultiburstPassFreqCh[1..3]?	Query the pass/fail status for all six frequency values resulting from the specified Multiburst channel measurement
MultiburstPassFreqCh[1..3]Val[1..6]?	Query the pass/fail status for the frequency value resulting from the specified Multiburst channel and value measurement
MultiburstRelAmpdBCh[1..3]?	Query all six amplitude values resulting from the Multiburst relative results for the specified channel
MultiburstRelAmpdBCh[1..3]Val[1..6]?	Query the amplitude value resulting from the specified Multiburst relative channel and value measurement
MultiburstRelFlagmVCh[1..3]?	Query the Flag value resulting from the Multiburst relative measurement for the specified channel
MultiburstRelFreqCh[1..3]?	Query all six frequency values resulting from the specified Multiburst relative channel measurement
MultiburstRelFreqCh[1..3]Val[1..6]?	Query the frequency value resulting from the specified Multiburst relative channel and value measurement
NoiseAmpdBCh[1..3]?	Query amplitude value (in dB) resulting from Noise measurement for the specified channel
NoiseAmpmVCh[1..3]?	Query amplitude value (in mV) resulting from Noise measurement for the specified channel
NoiseFreqResolution?	Query returns the frequency resolution value in noise panel
NoisePassdBCh[1..3]?	Query the pass/fail status for the amplitude value (in dB) resulting from the specified Noise channel measurement
NoisePassmVCh[1..3]?	Query the pass/fail status for the amplitude value (in mV) resulting from the specified Noise channel measurement
NoiseRelAmpdBCh[1..3]?	Query amplitude value (in dB) resulting from the Noise relative result for the specified channel
NoiseRelAmpmVCh[1..3]?	Query amplitude value (in mV) resulting from the Noise relative result for the specified channel
NonLinearityPassCh[1..3]?	Query the pass/fail status for all six non-linearity values resulting from the Non Linearity measurement for the specified channel
NonLinearityPassCh[1..3]Max?	Query the pass/fail status for the maximum value resulting from the Non Linearity measurement for the specified channel

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
NonLinearityPassCh[1..3]Val[1..5]?	Query the pass/fail status for the value resulting from the Non Linearity measurement for the specified channel and value
NonLinearityPctCh[1..3]?	Query all six Non linearity values resulting from the Non Linearity measurement for the specified channel
NonLinearityPctCh[1..3]Max?	Query the maximum Non Linearity value for the specified channel
NonLinearityPctCh[1..3]Val[1..5]?	Query the maximum Non Linearity value for the specified channel and value
NonLinearityRelPctCh[1..3]?	Query all six non-linearity values resulting from the Non Linearity relative measurement for the specified channel
NonLinearityRelPctCh[1..3]Max?	Query the maximum Non Linearity relative value for the specified channel
NonLinearityRelPctCh[1..3]Val[1..5]?	Query the maximum Non Linearity relative value for the specified channel and value
ShortTimeDistortionCh[1..3]?	Query all six values resulting from the specified Short Time Distortion channel measurement
ShortTimeDistortionCh[1..3]Val[1..6]?	Query the value resulting from the specified Short Time Distortion channel and value measurement
ShortTimeDistortionK2T?	Query the result for the K2T value resulting from the Short Time Distortion measurement
ShortTimeDistortionPassCh[1..3]?	Query the pass/fail status for all six values resulting from the specified Short Time Distortion channel measurement
ShortTimeDistortionPassCh[1..3]Val[1..6]?	Query the pass/fail status for the value resulting from the specified Short Time Distortion channel and value measurement
ShortTimeDistortionPassK2T?	Query the pass/fail status for the K2T value resulting from the Short Time Distortion measurement
ShortTimeDistortionRelCh[1..3]?	Query all six values resulting from the specified Short Time Distortion relative channel measurement
ShortTimeDistortionRelCh[1..3]Val[1..6]?	Query the value resulting from the specified Short Time Distortion relative channel and value measurement
ShortTimeDistortionRelK2T?	Query the K2T value resulting from the Short Time Distortion relative measurement
ShortTimeDistortionResults?	Query all values resulting from the Short Time Distortion measurement
SpatialDistortionAll?	Query all the measured values of the Spatial Distortion measurement
SpatialDistortionBottomCrop?	Query the result for the bottom crop value resulting from the Spatial Distortion measurement
SpatialDistortionFirstActiveLine?	Query the result for the first active line value resulting from the Spatial Distortion measurement
SpatialDistortionHEnd?	Query the measured horizontal end value resulting from the Spatial Distortion measurement
SpatialDistortionHOffset?	Query the measured horizontal offset value resulting from the Spatial Distortion measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
SpatialDistortionHScaling?	Query the measured horizontal scaling value resulting from the Spatial Distortion measurement
SpatialDistortionHStart?	Query the measured horizontal start value resulting from the Spatial Distortion measurement
SpatialDistortionLastActiveLine?	Query the measured last active line value resulting from the Spatial Distortion measurement
SpatialDistortionLeftCrop?	Query the measured left crop value resulting from the Spatial Distortion measurement
SpatialDistortionRightCrop?	Query the measured right crop value resulting from the Spatial Distortion measurement
SpatialDistortionVOffset?	Query the measured vertical offset value resulting from the Spatial Distortion measurement
SpatialDistortionTopCrop?	Query the measured top crop value resulting from the Spatial Distortion measurement
SpatialDistortionVScaling?	Query the measured vertical scaling value resulting from the Spatial Distortion measurement
SpatialDistortionPassAll?	Query the pass/fail status for all the values resulting from the Spatial Distortion measurement
SpatialDistortionPassBottomCrop?	Query the pass/fail status for the bottom crop value resulting from the Spatial Distortion measurement
SpatialDistortionPassFirstActiveLine?	Query the pass/fail status for the first active line value resulting from the Spatial Distortion measurement
SpatialDistortionPassHEnd?	Query the pass/fail status for the horizontal end value resulting from the Spatial Distortion measurement
SpatialDistortionPassHOffset?	Query the pass/fail status for the horizontal offset value resulting from the Spatial Distortion measurement
SpatialDistortionPassHScaling?	Query the pass/fail status for the horizontal scaling value resulting from the Spatial Distortion measurement
SpatialDistortionPassHStart?	Query the pass/fail status for the horizontal start value resulting from the Spatial Distortion measurement
SpatialDistortionPassLastActiveLine?	Query the pass/fail status for the last active line value resulting from the Spatial Distortion measurement
SpatialDistortionPassLeftCrop?	Query the pass/fail status for the left crop value resulting from the Spatial Distortion measurement
SpatialDistortionPassRightCrop?	Query the pass/fail status for the right crop value resulting from the Spatial Distortion measurement
SpatialDistortionPassVOffset?	Query the pass/fail status for the vertical offset value resulting from the Spatial Distortion measurement
SpatialDistortionPassTopCrop?	Query the pass/fail status for the top crop value resulting from the Spatial Distortion measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
SpatialDistortionPassVScaling?	Query the pass/fail status for the vertical scaling value resulting from the Spatial Distortion measurement
SpatialDistortionRelAll?	Query the Spatial Distortion measurement for all of its relative results
SpatialDistortionRelBottomCrop?	Query the bottom crop relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelFirstActiveLine?	Query the first active line relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelHEnd?	Query the horizontal end relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelHOffset?	Query the horizontal offset relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelHScaling?	Query the horizontal scaling relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelHStart?	Query the horizontal start relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelLastActiveLine?	Query the last active line relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelLeftCrop?	Query the left crop line relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelRightCrop?	Query the right crop line relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelVOffset?	Query the vertical offset relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelTopCrop?	Query the top crop relative value resulting from the Spatial Distortion measurement
SpatialDistortionRelVScaling?	Query the vertical scaling relative value resulting from the Spatial Distortion measurement
SyncLevelsMV?	Query all synchronization levels resulting from the H Sync measurement
SyncLevelsMVVal[1..3]?	Query the specified synchronization level resulting from the H Sync measurement
SyncPassLevelsMV?	Query the pass/fail status for all synchronization levels resulting from the H Sync measurement
SyncPassLevelsMVVal[1..3]?	Query the pass/fail status for the specified synchronization level resulting from the H Sync measurement
SyncPassTimes?	Query the pass/fail statuses for all synchronization times resulting from the H Sync measurement
SyncPassTimesVal[1..10]?	Query the pass/fail status for the specified synchronization time resulting from the H Sync measurement
SyncRelLevelsMV?	Query the relative values for all synchronization levels
SyncRelLevelsMVVal[1..3]?	Query the relative value for the specified synchronization level

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
SyncRelTimes?	Query the relative values for all synchronization times
SyncRelTimesVal[1..10]?	Query the relative value for the specified synchronization time
SyncTimes?	Query all synchronization times resulting from the H Sync measurement
SyncTimesVal[1..10]?	Query the specified synchronization time resulting from the H Sync measurement
VSynAll?	Query all the measured values of the V Sync measurement. This command returns only the valid values depending upon the format
VSynBroadPulseEnd?	Query the measured broad pulse end value resulting from the V Sync measurement. This command is valid when the format is set to HD Interlaced or Progressive
VSynBroadPulseStart?	Query the measured broad pulse start value resulting from the V Sync measurement. This command is valid when the format is set to HD Interlaced or Progressive
VSynEqPulseWidth?	Query the measured pulse width value resulting from the V Sync measurement. This command is valid only when the format is set to SD Interlaced or Progressive
VSynPassAll?	Query the pass/fail status for all the values resulting from the V Sync measurement. This command returns the valid values depending upon the format
VSynPassBroadPulseEnd?	Query the pass/fail status for the broad pulse end value resulting from the V Sync measurement. This command is valid only when the format is set to a HD Interlaced or Progressive
VSynPassBroadPulseStart?	Query the pass/fail status for the broad pulse start value resulting from the V Sync measurement. This command is valid only when the format is set to a HD Interlaced or Progressive
VSynPassEqPulseWidth?	Query the pass/fail status for the equalization pulse width value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced or Progressive
VSynPassPeriod?	Query the pass/fail status for the period value resulting from the V Sync measurement
VSynPassPreEqDuration?	Query the pass/fail status for the equalization pulse duration value resulting from the V Sync measurement. This command is valid when the format is set to SD Interlaced
VSynPassSerrPulseWidth?	Query the pass/fail status for the serration pulse width value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSynPassVBlankDuration?	Query the pass/fail status for the vertical blank duration value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSynPassVBlankPreEq?	Query the pass/fail status for the vertical blank pre-equalization value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
VSyncPassVSyncDuration?	Query the pass/fail status for the vertical sync duration value resulting from the V Sync measurement
VSyncPeriod?	Query the measured period value resulting from the V Sync measurement
VSyncPreEqDuration?	Query the measured pre-equalization duration value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncRelAll?	Query the V Sync measurement for all of its relative results. This command returns only the valid values depending upon the format
VSyncRelBroadPulseEnd?	Query the broad pulse end relative value resulting from the V Sync measurement. This command is valid only when the format is set to a HD Interlaced or Progressive
VSyncRelBroadPulseStart?	Query the broad pulse start relative value resulting from the V Sync measurement. This command is valid only when the format is set to a HD Interlaced or Progressive
VSyncRelEqPulseWidth?	Query the pulse width relative value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced or Progressive
VSyncRelPeriod?	Query the period relative value resulting from the V Sync measurement
VSyncRelPreEqDuration?	Query the pre-equalization duration relative value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncRelSerrPulseWidth?	Query the pre-equalization duration relative value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncRelVBlankDuration?	Query the vertical blank duration relative value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncRelVBlankPreEq?	Query the vertical blank pre-equalization relative value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncRelVSyncDuration?	Query the vertical sync duration relative value resulting from the V Sync measurement
VSyncSerrPulseWidth?	Query the measured serration pulse width value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncVBlankDuration?	Query the measured vertical blank duration value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncVBlankPreEq?	Query the measured vertical blank pre-equalization value resulting from the V Sync measurement. This command is valid only when the format is set to a SD Interlaced
VSyncVSyncDuration?	Query the measured vertical sync duration value resulting from the V Sync measurement

Table 2-6: Run commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
Execute	Execute or stop the current set measurement(s), or query whether any measurement is currently being executed
OPComplete	Controls VM Series GPIB scripts by ensuring that the previous command is ready before either querying its value or calling the next command
StopOnError	Set or query whether Stop on Error is enabled

Table 2-7: Settings commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
DefaultSettings	Restore default (factory) settings
RecallSettings	Recall settings stored in the specified path/filename
SaveSettings	Save current settings in the specified path/filename

Table 2-8: Status commands (Option SD/HD)

Header	Description
ChannelDelayStatus?	Query the status of the Channel Delay measurement
ColorBarsStatus?	Query the status of the Color Bars measurement
FrequencyResponseStatus?	Query the status of the Frequency Response measurement
LevelsStatus?	Query the status of the Levels measurement
MultiburstStatus?	Query the status of the Multiburst measurement
NoiseStatus?	Query the status of the Noise measurement
NonLinearityStatus?	Query the status of the Non Linearity measurement
PassFailStatus?	Query either the pass or fail status for all the measurements at once
ShortTimeDistortionStatus?	Query the status of the Short Time Distortion measurement
SpatialDistortionStatus?	Query the status of the Spatial Distortion measurement
SyncStatus?	Query the status of the H Sync measurement
VSyncStatus?	Query the status of the V Sync measurement

Table 2-9: Reference and Limit Testing commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
LimitFileLoad	Specifies Limit file to be loaded for Limit Testing
LimitSet	Set or query whether Limit Testing is performed upon Execute
ReferenceFileLoad	Specifies Reference file to be loaded for Relative to Reference testing
ReferenceFileSave	Saves the current measurement results to a Reference file that can be used for Relative to Reference testing
ReferenceSet	Set or query whether Reference Testing is enabled or disabled

Commands

The following remote commands are listed in alphabetical order.

AppStatus?

Query whether Application Status is: Configure, Measuring, Done, or Reported.

Syntax VARIable:VALue? "AppStatus"

Group Miscellaneous

Returns Query returns the application status as Configure, Measuring, Done, or Reported.

Examples VARIable:VALue? "AppStatus"

Query may return: "AppStatus Configure"

AutoScale <setting>

Set or query whether to use auto scale during measurement.

Syntax VARIable:VALue “AutoScale”, “<setting>”
 VARIable:VALue? “AutoScale”

Group Configuration

Arguments <setting> Valid settings are: OFF, ON, 0, 1.

Returns Query returns the current specified setting.

Examples VARIable:VALue “AutoScale”, “ON”
 VARIable:VALue? “AutoScale”

Query may return: “AutoScale ON”

AutoScaleInit <setting>

AutoScaleInit specifies the starting values used by the AutoScale command. Loading specific starting values can speed up the process of taking measurements.

Syntax VARIable:VALue “AutoScaleInit”, “<setting>”
 VARIable:VALue? “AutoScaleInit”

Group Configuration

Arguments <setting>Valid settings are: LastMeas, PreStored, and Default.
LastMeas loads the final AutoScale values set at the end of the last measurement taken.
Prestored loads the initial values specified by the last .vmset loaded. If no .vmset has been loaded since the software was started, PreStored loads the values saved the last time the software was exited. Default loads the factory default settings. Default acts only once.
When you issue AutoScaleInit Default, the program loads the factory default settings and then reverts to the previous state. LastMeas and PreStored are settings and Default is not a setting. The next time Auto Scale is run, it will begin with either the settings from the last measurement or the settings loaded with the last .vmset, it will not begin with the factory default settings.

Returns Query returns the current specified setting.

Examples VARIable:VALue “AutoScaleInit”, “LastMeas”
 VARIable:VALue? “AutoScaleInit”

Query may return: “AutoScaleInit LastMeas”

ChannelDelayAll?

Query all three delay measurements performed by Channel Delay.

Syntax VARIABLE:VALUE? "ChannelDelayAll"

Group Results

Arguments None

Related Commands ChannelDelayCh1Ch2?
ChannelDelayCh1Ch3?
ChannelDelayCh2Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayAll"

Query may return: "ChannelDelayAll 1.84 0.04 -1.54"

ChannelDelayAverage <samples>

Set or query the number of samples over which to average the Channel Delay measurement.

Syntax VARIable:VALue “ChannelDelayAverage”, “<samples>”
 VARIable:VALue? “ChannelDelayAverage”

Group Setup

Related Commands ChannelDelayLine

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has not unit.

Examples VARIable:VALue “ChannelDelayAverage”, “8”
 VARIable:VALue? “ChannelDelayAverage”

Query may return: “ChannelDelayAverage 8”

ChannelDelayCh1Ch2?

Query the Ch1Ch2 delay measurement performed by Channel Delay.

Syntax VARIABLE:VALUE? "ChannelDelayCh1Ch2"

Group Results

Arguments None

Related Commands ChannelDelayAll?
ChannelDelayCh1Ch3?
ChannelDelayCh2Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChannelDelayCh1Ch2"

Query may return: "ChannelDelayCh1Ch2 1.84"

ChannelDelayCh1Ch3?

Query the Ch1Ch3 delay measurement performed by Channel Delay.

Syntax VARIable:VALue? "ChannelDelayCh1Ch3"

Group Results

Arguments None

Related Commands ChannelDelayAll?
ChannelDelayCh1Ch2?
ChannelDelayCh2Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ChannelDelayCh1Ch3"

Query may return: "ChannelDelayCh1Ch3 0.04"

ChannelDelayCh2Ch3?

Query the Ch2Ch3 delay measurement performed by Channel Delay.

Syntax VARIABLE:VALUE? "ChannelDelayCh2Ch3"

Group Results

Arguments None

Related Commands ChannelDelayAll?
ChannelDelayCh1Ch2?
ChannelDelayCh1Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChannelDelayCh2Ch3"

Query may return: "ChannelDelayCh2Ch3 -1.54"

ChannelDelayLine <line number>

Set or query line number that is to be used for the Channel Delay measurement.

Syntax VARIable:VALue "ChannelDelayLine", "<line number>"
 VARIable:VALue? "ChannelDelayLine"

Group Setup

Related Commands ChannelDelayAverage

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue "ChannelDelayLine", "200"
 VARIable:VALue? "ChannelDelayLine"

Query may return: "ChannelDelayLine 200"

ChannelDelayMultiLineEnd<line number>

Set or query the ending line number used to perform the Channel Delay measurement on multiple lines.

Syntax VARIable:VALue “ChannelDelayMultiLineEnd”, “<line number>”
VARIable:VALue? “ChannelDelayMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIable:VALue “ChannelDelayMultiLineEnd”, “93”

VARIable:VALue? “ChannelDelayMultiLineEnd”
Query may return: “ChannelDelayMultiLineEnd 93”

ChannelDelayMultiLineStart<line number>

Set or query the starting line number used to perform the Channel Delay measurement on multiple lines.

Syntax VARIable:VALue “ChannelDelayMultiLineStart”, “<line number>”
 VARIable:VALue? “ChannelDelayMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “ChannelDelayMultiLineStart”, “91”

 VARIable:VALue? “ChannelDelayMultiLineStart”
 Query may return: “ChannelDelayMultiLineStart 91”

ChannelDelayPassAll?

Query all three channel delay measurements for pass/fail status.

Syntax VARIABLE:VALUE? "ChannelDelayPassAll"

Group Results

Arguments None

Related Commands ChannelDelayPassCh1Ch2?
 ChannelDelayPassCh1Ch3?
 ChannelDelayPassCh2Ch3?

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "ChannelDelayPassAll"

Query may return: "ChannelDelayPassAll 1 1 1"

ChannelDelayPassCh1Ch2?

Query the Ch1Ch2 channel delay measurement for pass/fail status.

Syntax VARIable:VALue? "ChannelDelayPassCh1Ch2"

Group Results

Arguments None

Related Commands ChannelDelayPassAll?
ChannelDelayPassCh1Ch3?
ChannelDelayPassCh2Ch3?

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "ChannelDelayPassCh1Ch2"

Query may return: "ChannelDelayPassCh1Ch2 1"

ChannelDelayPassCh1Ch3?

Query the Ch1Ch3 channel delay measurement for pass/fail status.

Syntax VARIABLE:VALUE? "ChannelDelayPassCh1Ch3"

Group Results

Arguments None

Related Commands ChannelDelayPassAll?
 ChannelDelayPassCh1Ch2?
 ChannelDelayPassCh2Ch3?

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "ChannelDelayPassCh1Ch3"

Query may return: "ChannelDelayPassCh1Ch3 1"

ChannelDelayPassCh2Ch3?

Query the Ch2Ch3 channel delay measurement for pass/fail status.

Syntax VARIable:VALue? "ChannelDelayPassCh2Ch3"

Group Results

Arguments None

Related Commands ChannelDelayPassAll?
ChannelDelayPassCh1Ch2?
ChannelDelayPassCh1Ch3?

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "ChannelDelayPassCh2Ch3"

Query may return: "ChannelDelayPassCh2Ch3 1"

ChannelDelayRelAll?

Query all three channel delay relative results. The relative results are calculated from values defined in the specified reference file.

Syntax VARIABLE:VALUE? "ChannelDelayRelAll"

Group Results

Arguments None

Related Commands ChannelDelayRelCh1Ch2?
ChannelDelayRelCh1Ch3?
ChannelDelayRelCh2Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayRelAll"

Query may return: "ChannelDelayRelAll 1.0 0.8 -1.1"

ChannelDelayRelCh1Ch2?

Query the relative results for the Ch1Ch2 channel delay measurement. The relative result is calculated from values defined in the specified reference file.

Syntax VARIable:VALue? "ChannelDelayRelCh1Ch2"

Group Results

Arguments None

Related Commands ChannelDelayRelAll?
ChannelDelayRelCh1Ch3?
ChannelDelayRelCh2Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ChannelDelayRelCh1Ch2"

Query may return: "ChannelDelayRelCh1Ch2 1.5"

ChannelDelayRelCh1Ch3?

Query the relative results for the Ch1Ch3 channel delay measurement. The relative result is calculated from values defined in the specified reference file.

Syntax VARIABLE:VALUE? "ChannelDelayRelCh1Ch3"

Group Results

Arguments None

Related Commands ChannelDelayRelAll?
ChannelDelayRelCh1Ch2?
ChannelDelayRelCh2Ch3?

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayRelCh1Ch3"

Query may return: "ChannelDelayRelCh1Ch3 1.5"

ChannelDelayRelCh2Ch3?

Query the relative results for the Ch2Ch3 channel delay measurement. The relative result is calculated from values defined in the specified reference file.

Syntax VARIable:VALue? "ChannelDelayRelCh2Ch3"

Group Results

Arguments None

Related Commands ChannelDelayRelAll?
 ChannelDelayRelCh1Ch2?
 ChannelDelayRelCh1Ch3?

Returns The returned value is in nanoseconds (ns).
 Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ChannelDelayRelCh2Ch3"

 Query may return: "ChannelDelayRelCh2Ch3 1.5"

ChannelDelaySet <setting>

Set or query whether to measure Channel Delay upon Execute.

Syntax VARIABLE:VALue “ChannelDelaySet”, “<setting>”
 VARIABLE:VALue? “ChannelDelaySet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIABLE:VALue “ChannelDelaySet”, “ON”
 VARIABLE:VALue? “ChannelDelaySet”
 Query may return: “ChannelDelaySet ON”

ChannelDelayStatus?

Query the status of the Channel Delay measurement.

Syntax VARIable:VALue? "ChannelDelayStatus"

Group Status

Related Commands Execute
ExecuteReport
ChannelDelaySet

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "ChannelDelayStatus"
Query may return: "ChannelDelayStatus Pass"

ColorBarsAverage <samples>

Set or query the number of samples over which to average the Color Bars measurement.

Syntax VARIABLE:VALue “ColorBarsAverage”, “<samples>”
 VARIABLE:VALue? “ColorBarsAverage”

Group Setup

Related Commands ColorBarsLine

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIABLE:VALue “ColorBarsAverage”, “8”
 VARIABLE:VALue? “ColorBarsAverage”

Query may return: “ColorBarsAverage 8”

ColorBarsLine <line number>

Set or query line number that is to be used for the Color Bars measurement.

Syntax VARIable:VALue “ColorBarsLine”, “<line number>”
 VARIable:VALue? “ColorBarsLine”

Group Setup

Related Commands ColorBarsAverage

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “ColorBarsLine”, “200”
 VARIable:VALue? “ColorBarsLine”

Query may return: “ColorBarsLine 200”

ColorBarsMultiLineEnd<line number>

Set or query the ending line number used to perform the Color Bars measurement on multiple lines.

Syntax VARIABLE:VALUE “ColorBarsMultiLineEnd”, “<line number>”
VARIABLE:VALUE? “ColorBarsMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIABLE:VALUE “ColorBarsMultiLineEnd”, “29”

VARIABLE:VALUE? “ColorBarsMultiLineEnd”
Query may return: “ColorBarsMultiLineEnd 29”

ColorBarsMultiLineStart<line number>

Set or query the starting line number used to perform the Color Bars measurement on multiple lines.

Syntax VARIable:VALue “ColorBarsMultiLineStart”, “<line number>”
VARIable:VALue? “ColorBarsMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “ColorBarsMultiLineStart”, “30”

VARIable:VALue? “ColorBarsMultiLineStart”
Query may return: “ColorBarsMultiLineStart 30”

ColorBarsmVCh[1..3]?

Query all eight level values (in mV) resulting from Color Bars measurement for the specified channel.

Syntax VARIABLE:VALue? “ColorBarsmVCh[1..3]”

Group Results

Arguments None

Related Commands ColorBarsmVCh[1..3]Val[1..8]?

Returns The returned value is in millivolts (mV)
The order of results: White Yellow Cyan Green Magenta Red Blue Black.
Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsmVCh[1..3]”
Query may return: “ColorBarsmVCh1 699.76 650.52 552.75 501.98 201.89
150.74 52.11 0.49”

ColorBarsmVCh[1..3]Val[1..8]?

Query the value (in mV) resulting from the specified Color Bars channel and value measurement.

Syntax VARIable:VALue? “ColorBarsmVCh[1..3]Val[1..8]”

Group Results

Arguments None

Related Commands ColorBarsmVCh[1..3]?

Returns The returned value is in millivolts (mV).
Values must be in the range: 1..8
Values must designate the following colors:
1-White 2-Yellow 3-Cyan 4-Green 5-Magenta 6-Red 7-Blue 8-Black.
Returns “---” if no valid measurement is currently available

Examples VARIable:VALue? “ColorBarsmVCh[1..3]Val[1..8]”
Query may return: “ColorBarsmVCh2Val6 –78.89”

ColorBarsPassCh[1..3]?

Query the pass/fail status of all eight level values (in mV) resulting from the Color Bars measurement for the specified channel. The values used to define pass or fail are defined in the Limits file.

Syntax VARIABLE:VALue? “ColorBarsPassCh[1..3]”

Group Results

Related Commands ColorBarsPassCh[1..3]Val[1..8]?

Returns The order of results:White Yellow Cyan Green Magenta Red Blue Black.
A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALue? “ColorBarsPassCh[1..3]”
Query may return:“ColorBarsPassCh1 1 1 1 0 0 1 1 1”

ColorBarsPassCh[1..3]Val[1..8]?

Query the pass/fail status resulting from the Color Bars measurement for the specified channel and the values used to define pass or fail are defined in the Limits file.

Syntax VARIable:VALue? “ColorBarsPassCh[1..3]Val[1..8]”

Group Results

Arguments None

Related Commands ColorBarsPassCh[1..3]?

Returns Values must be in the range: 1..8.
Values must designate the following colors:
1-White 2-Yellow 3-Cyan 4-Green 5-Magenta 6-Red 7-Blue 8-Black.
A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIable:VALue? “ColorBarsPassCh[1..3]Val[1..8]”

Query may return: “ColorBarsPassCh2Val6 1”

ColorBarsRelmVCh[1..3]?

Query all eight level values resulting from Color Bars relative measurement for the specified channel in mV. The value to which the eight level values are compared is defined in the selected Reference file.

Syntax VARIABLE:VALue? “ColorBarsRelmVCh[1..3]”

Group Results

Arguments None

Related Commands ColorBarsRelmVCh[1..3]Val[1..8]?
ColorBarsRelPctmVCh[1..3]?
ColorBarsRelPctmVCh[1..3]Val[1..8]?

Returns The returned value is in millivolts (in mV).
The order of results: White Yellow Cyan Green Magenta Red Blue Black.
Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelmVCh[1..3]”
Query may return: “ColorBarsRelmVCh1 -2.66 1.58 0.97 1.27 -0.52 0.66 0.88
0.77”

ColorBarsRelmVCh[1..3]Val[1..8]?

Query the relative results value resulting from the specified Color Bars channel and value measurement in mV. The value to which the level value is compared is defined in the selected Reference file.

Syntax VARIABLE:VALue? "ColorBarsRelmVCh[1..3]Val[1..8]"

Group Results

Arguments None

Related Commands ColorBarsRelmVCh[1..3]?
ColorBarsRelPctmVCh[1..3]?
ColorBarsRelPctmVCh[1..3]Val[1..8]?

Returns The returned value is in millivolts (in mV).
The order of results: White Yellow Cyan Green Magenta Red Blue Black.
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsRelmVCh[1..3]Val[1..8]"
Query may return:"ColorBarsRelmVCh1Val4 1.27"

ColorBarsRelPctmVCh[1..3]?

Query all eight level values resulting from the Color Bars relative measurement, in percent, for the specified channel. The value to which the eight level values are compared is defined in the selected Reference file.

Syntax VARIable:VALue? “ColorBarsRelPctmVCh[1..3]”

Group Results

Arguments None

Related Commands ColorBarsRelPctmVCh[1..3]Val[1..8]?
ColorBarsRelmVCh[1..3]?
ColorBarsRelmVCh[1..3]Val[1..8]?

Returns The returned value is in percent (%).
The order of results: White Yellow Cyan Green Magenta Red Blue Black.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctmVCh[1..3]”
Query may return: “ColorBarsRelPctmVCh1 -0.16 0.28 0.17 0.13 -0.05 0.01
0.08 0.07”

ColorBarsRelPctmVCh[1..3]Val[1..8]?

Query the value resulting from the Color Bars relative result for the specified channel and value in Percent. The value to which the level value is compared is defined in the selected Reference file.

Syntax VARIABLE:VALUE? "ColorBarsRelPctmVCh[1..3]Val[1..8]"

Group Results

Arguments None

Related Commands ColorBarsRelPctmVCh[1..3]?
ColorBarsRelmVCh[1..3]?
ColorBarsRelmVCh[1..3]Val[1..8]?

Returns The returned value is in percent (%).
The order of results: White Yellow Cyan Green Magenta Red Blue Black.
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ColorBarsRelmVCh[1..3]Val[1..8]"
Query may return:"ColorBarsRelPctmVCh1Val4 0.27"

ColorBarsSet <setting>

Set or query whether to measure Color Bars upon Execute.

Syntax VARIable:VALue “ColorBarsSet”, “<setting>”
VARIable:VALue? “ColorBarsSet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, 1.

Related Commands Execute
ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “ColorBarsSet”, “ON”
VARIable:VALue? “ColorBarsSet”
Query may return: “ColorBarsSet ON”

ColorBarsStatus?

Query the status of the Color Bars measurement.

Syntax VARIable:VALue? "ColorBarsStatus"

Group Status

Related Commands Execute
ExecuteReport
ColorBarsSet

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "ColorBarsStatus"

Query may return: "ColorBarsStatus Done"

ColorSpace <colorspace>

Set or query video color space to use for measurement.

Syntax VARIable:VALue “ColorSpace”, “<colorspace>”
 VARIable:VALue? “ColorSpace”

Group Configuration

Arguments <colorspace> Valid values: YPbPr, RGB.

Returns Query returns the current specified color space.

Examples VARIable:VALue “ColorSpace”, “YPbPr”
 VARIable:VALue? “ColorSpace”
 Query may return: “ColorSpace YPbPr”

DefaultSettings<setting>

Restores default (factory) settings.

Syntax VARIable:VALue “DefaultSettings”, “<setting>”
 VARIable:VALue? “DefaultSettings”

Group Settings

Arguments <setting> Valid value is 1, OK.

Returns Query returns “OK” unless the command is still being processed, in which case it returns “1”.

Examples VARIable:VALue “DefaultSettings”, “OK”
 VARIable:VALue? “DefaultSettings”

Query may return: “DefaultSettings OK”

DetectedFormat?

Query returns the detected format when autodetect is enabled.

Syntax VARIable:VALue? “DetectedFormat”

Group Miscellaneous

Arguments None

Returns Query returns the format detected.
Returns “---” if no valid format is detected.

Examples VARIable:VALue? “DetectedFormat”
Query may return: “DetectedFormat SD480I60”

Display <None|Picture|Vectorscope|NoiseSpectrum|Minimized>

Set or query the Picture, Vectorscope, or Noise Spectrum display.

Syntax	VARIABLE:VALUE “Display”, “[None Picture Vectorscope NoiseSpectrum Minimized]” VARIABLE:VALUE? “Display”
Group	Configuration
Arguments	[None Picture Vectorscope NoiseSpectrum] None selects the normal display. Picture places the Picture display on top of all other displays. Vectorscope places the Vectorscope display on top of all other displays. NoiseSpectrum places the Noise Spectrum display on top of all other displays. Minimized option minimizes the display and reports whether the display is minimized.
Returns	The display on top of all other displays.
Examples	VARIABLE:VALUE “Display”, “Picture” VARIABLE:VALUE? “Display” Query may return: “Display Picture”

Error <setting>

Reset error to 0 or query error value. Command can be used to reset Error to “0”. Query returns the most recent error reported by the application, or “0” if no errors have occurred since Error was last reset.

Initialized to “0” on startup.

Syntax VARIable:VALue “Error”, “<setting>”
 VARIable:VALue? “Error”

Group Configuration

Arguments <setting> Valid values are: OFF, 0.

Returns Returns the most recent error reported by the application. Returns “0” if no error has occurred since the Error command was last reset.

Examples VARIable:VALue “Error”, “OFF”
 VARIable:VALue? “Error”

Query may return: “Error OFF”

Execute <setting>

Execute or stop the current set measurement(s), or query whether any measurement is currently being executed. If the measurement is already in the mode specified by the setting, the command has no effect. For example, if a measurement is already running and “VARIABLE:VALue “Execute”, “1” is received, the measurement will continue to run.

Syntax VARIABLE:VALue “Execute”, “<setting>”
VARIABLE:VALue? “Execute”

Group Run

Arguments <setting> Valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands ChannelDelaySet
ColorBarSet
FrequencyResponseSet
HSyncJitterSet
LevelsSet
MultiburstSet
NoiseSet
NonLinearitySet
ShortTimeDistortionSet
SpatialDistortionSet
SyncSet
VSyncSet

Returns Query returns 1 if any measurement is currently being executed, otherwise it returns 0.

Examples VARIABLE:VALue “Execute”, “1”
VARIABLE:VALue? “Execute”

Query may return: “Execute 1”

FieldSelect <setting>

Set or query the field selected for the V Sync measurement.

If you get the error message, “Invalid Argument”, make sure that you specified a valid format.

Syntax VARIable:VALue “FieldSelect”, “<setting>”
 VARIable:VALue? “FieldSelect”

Group Miscellaneous

Arguments <setting>Valid values: Field1, Field2.

Returns Returns “Field1” if the field is set to Field1.
 Returns “Field2” if the field is set to Field2.

Examples VARIable:VALue “FieldSelect”, “Field1”
 VARIable:VALue? “FieldSelect”
 Query may return: “FieldSelect Field1”

NOTE. This command is valid only for interlaced formats

Format <setting>

Set or query the video format to use for measurement. No defaults.

If you get the error message, “Invalid Argument”, make sure that you specified a valid format.

Syntax VARIable:VALue “Format”, “<setting>”
 VARIable:VALue? “Format”

Group Configuration

Arguments <setting> specifies format to be set.
 Valid HD formats are: HD720P60, HD720P50, HD720P30, HD1080I60,
 HD1080I50, HD1080P24, HD1080P50, HD1080P60
 Valid SD Formats are: SD480I60, SD576I50, HD480P60, HD576P50
 Other valid values: AutoDetect, UserDefined.

NOTE. For 480p60 and 576p50 SD formats, the format string used is HD480P60, HD576P50.

Returns Returns “AutoDetect” if the format selected is AutoDetect.
 Returns “UserDefined” if the format selected is User Defined.
 Returns “---” if no format is detected.

Examples VARIable:VALue “Format”, “HD1080I50”
 VARIable:VALue? “Format”
 Query may return: “Format HD1080I50”

VARIable:VALue “Format”, “SD480I60”
 VARIable:VALue? “Format”
 Query may return: “Format SD480I60”

VARIable:VALue “Format”, “AutoDetect”
 VARIable:VALue? “Format”
 Query may return: “Format AutoDetect”

NOTE. HD formats are available only if option HD is purchased. SD formats are available only if option SD is purchased.

FrequencyResponseAverage<samples>

Set or query frequency response average.

Syntax VARIable:VALue “FrequencyResponseAverage”, “<samples> ”
 VARIable:VALue? “FrequencyResponseAverage”

Group Setup

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands FrequencyResponseMeasLocation
 FrequencyResponseFreq
 FrequencyResponseLine
 FrequencyResponseTime

Returns The returned value has no unit.

Examples VARIable:VALue “FrequencyResponseAverage”, “50”
 VARIable:VALue? “FrequencyResponseAverage”

Query may return: “FrequencyResponseAverage 50”

FrequencyResponseCh[1..3]?

Query all five values resulting from the Frequency Response measurement for the specified channel.

Syntax VARIABLE:VALue? "FrequencyResponseCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponseCh[1..3]Val[1..5]?
FrequencyResponseFilterBW
FrequencyResponseMeasLocation

Returns The order of results: Frequency (MHz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALue? "FrequencyResponseCh[1..3]"
Query may return: "FrequencyResponseCh1 10 12.57 417.23 1.92 3.5"

FrequencyResponseCh[1..3]Val[1..5]?

Query the value resulting from the specified Frequency Response channel and value measurement.

Syntax VARIable:VALue? "FrequencyResponseCh[1..3]Val[1..5]"

Group Results

Arguments None

Related Commands FrequencyResponseCh[1..3]?
FrequencyResponseFilterBW
FrequencyResponseMeasLocation

Returns The order of results: Frequency (MHz), Time (μ s), Flag (mV), Amplitude (dB),
RMS Distortion (%).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "FrequencyResponseCh[1..3]Val[1..5]"
Query may return: "FrequencyResponseCh1Val3 417.23"

FrequencyResponseFilterBW <bandwidth>

Set or query the bandwidth used in the RMS Distortion field in the Frequency Response measurement.

Syntax VARIable:VALue “FrequencyResponseFilterBW”, “<bandwidth>”
 VARIable:VALue? “FrequencyResponseFilterBW”

Group Setup

Arguments <bandwidth> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands FrequencyResponseAverage
 FrequencyResponseLine
 FrequencyResponseMeasLocation
 FrequencyResponseTime

Returns The returned value is in Hertz (Hz).

Examples VARIable:VALue? “FrequencyResponseFilterBW” “297000000”
 Query may return: “FrequencyResponseFilterBW 297000000”

FrequencyResponseFreq<frequency>

Set or query frequency response frequency.

Syntax VARIable:VALue “FrequencyResponseFreq”, “<frequency>”
 VARIable:VALue? “FrequencyResponseFreq”

Group Setup

Arguments <frequency> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands FrequencyResponseAverage
 FrequencyResponseLine
 FrequencyResponseMeasLocation
 FrequencyResponseTime

Returns The returned value is in megahertz (MHz).
 Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue “FrequencyResponseFreq”, “3710000”
 Query may return:“FrequencyResponseMeasFreq 3710000”

FrequencyResponseLine<line number>

Set or query frequency response line number.

Syntax VARIable:VALue “FrequencyResponseLine”, “<line number>”
 VARIable:VALue? “FrequencyResponseLine”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands FrequencyResponseAverage
 FrequencyResponseFreq
 FrequencyResponseMeasLocation
 FrequencyResponseTime

Returns The returned value has no unit.

Examples VARIable:VALue “FrequencyResponseLine”, “229”
 VARIable:VALue? “FrequencyResponseLine”
 Query may return:“FrequencyResponseLine 229”

FrequencyResponseMeasLocation [Freq444 | Freq422 | Time]

Set or query the location at which the Frequency Response measurement is taken. You can specify the measurement location by either time or frequency. Set the measurement location to Time to have the instrument measure frequency response at a specified (elapsed) time or set the measurement location to Frequency to have the instrument take the measurement at a specified frequency. Freq444 uses the same frequency (set by FrequencyResponseFreq) for the measurement location on all three signals (CH1 (Y/G), CH2(Pb/B) and CH3(Pr/R)); it is the best option for RGB (GBR) signals. Freq422 uses the full frequency (FrequencyResponseFreq) for CH1 and half that frequency for CH2 and CH3. It is the best option for YPbPr signals.

Syntax VARIable:VALue “FrequencyResponseMeasLocation”, “[Freq444 | Freq422 |Time]”
 VARIable:VALue? “FrequencyResponseMeasLocation”

Group Results

Arguments [Freq444 | Freq422 |Time]
 If Freq444 is specified, the frequency at which the frequency response measurement is taken is the same for Y/G, Pb/B, and Pr/R.
 If Freq422 is specified, the frequency at which the frequency response measurement is taken for Pb/B and Pr/R is half the frequency used for Y/G.
 FrequencyResponseFreq is the command used to specify the frequency at which this measurement is taken.

Related Commands FrequencyResponseAverage
 FrequencyResponseFreq
 FrequencyResponseLine
 FrequencyResponseTime

Returns The returned value has no unit.
 Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue “FrequencyResponseMeasLocation”, “Freq444”
 VARIable:VALue? “FrequencyResponseMeasLocation”

Query may return:“FrequencyResponseMeasLocation Time”

FrequencyResponseMultiLineEnd<line number>

Set or query the ending line number used to perform the Frequency Response measurement on multiple lines.

Syntax VARIable:VALue “FrequencyResponseMultiLineEnd”, “<line number>”
VARIable:VALue? “FrequencyResponseMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIable:VALue “FrequencyResponseMultiLineEnd”, “109”

VARIable:VALue? “FrequencyResponseMultiLineEnd”
Query may return: “FrequencyResponseMultiLineEnd 109”

FrequencyResponseMultiLineStart<line number>

Set or query the starting line number used to perform the Frequency Response measurement on multiple lines.

Syntax VARIable:VALue "FrequencyResponseMultiLineStart", "<line number>"
 VARIable:VALue? "FrequencyResponseMultiLineStart"

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue "FrequencyResponseMultiLineStart", "108"

 VARIable:VALue? "FrequencyResponseMultiLineStart"
 Query may return: "FrequencyResponseMultiLineStart 108"

FrequencyResponsePassCh[1..3]?

Query the pass/fail status of all five values resulting from the Frequency Response relative results for the specified channel. The values used to define pass or fail are defined in the Limits file.

Syntax VARIABLE:VALUE? "FrequencyResponsePassCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponsePassCh[1..3]Val[1..5]?

Returns The order of results: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).
A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "FrequencyResponsePassCh[1..3]"
Query may return: "FrequencyResponsePassCh1 1 1 1 0 0"

FrequencyResponsePassCh[1..3]Val[1..5]?

Query the pass/fail status of the value resulting from the Frequency Response relative results for the specified channel and value measurement. The values used to define pass or fail are defined in the Limits file.

Syntax VARIable:VALue? “FrequencyResponsePassCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands FrequencyResponsePassCh[1..3]?

Returns The order of results: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).
A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIable:VALue? “FrequencyResponsePassCh[1..3]Val[1..5]”
Query may return: “FrequencyResponsePassCh1Val1 1”

FrequencyResponseRelCh[1..3]?

Query all five pass/fail status resulting from the Frequency Response relative results for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? "FrequencyResponseRelCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponseRelCh[1..3]Val[1..5]?

Returns The order of results: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "FrequencyResponseRelCh[1..3]"
Query may return: "FrequencyResponseRelCh1 0.0 0.03 0.68 -0.05 0.0"

FrequencyResponseRelCh[1..3]Val[1..5]?

Query the value resulting from the Frequency Response relative results for the specified channel and value measurement. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “FrequencyResponseRelCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands FrequencyResponseRelCh[1..3]?

Returns The order of results: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “FrequencyResponseRelCh[1..3]Val[1..5]”
Query may return: “FrequencyResponseRelCh1Val3 0.68 ”

FrequencyResponseSet<setting>

Set or query whether to measure Frequency Response measurement is enabled.

Syntax VARIable:VALue “FrequencyResponseSet”, “<setting>”
 VARIable:VALue? “FrequencyResponseSet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “FrequencyResponseSet”, “ON”
 VARIable:VALue? “FrequencyResponseSet”
 Query may return: “FrequencyResponseSet ON”

FrequencyResponseStatus?

Query the status of the Frequency Response measurement.

Syntax VARIable:VALue? "FrequencyResponseStatus"

Group Status

Related Commands Execute
ExecuteReport

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "FrequencyResponseStatus"
Query may return: "FrequencyResponseStatus Pass"

FrequencyResponseTime<time>

Set or query frequency response time.

Syntax VARIable:VALue "FrequencyResponseTime", "<time>"
 VARIable:VALue? "FrequencyResponseTime"

Group Setup

Arguments <time> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands FrequencyResponseAverage
 FrequencyResponseFreq
 FrequencyResponseLine
 FrequencyResponseMeasLocation

Returns The returned value is in microseconds (μ s).

Examples VARIable:VALue "FrequencyResponseTime", "12.5E-6"
 VARIable:VALue? "FrequencyResponseTime"
 Query may return:"FrequencyResponseTime 12.5E-6"

HSyncJitterAll?

Query the measured values of all the H Sync Jitter measurements.

Syntax	VARIABLE:VALUE? "HSyncJitterAll"
Group	Results
Arguments	None
Returns	<p>The order of results: RMS Jitter (ns), Accumulated Time (ms), Pos Peak Jitter (ns), Neg Peak Jitter (ns), Pos Peak Probability, Neg Peak Probability, Min Frequency Offset (ppm), Max Frequency Offset (ppm), Min Frequency Drift (ppm/s), and Max Frequency Drift (ppm/s).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HSyncJitterAll"</p> <p>Query may return: "HSyncJitterAll 1.84 0.0 1.0 -1.0 56.57 47.36 -21.82 27.95 -286.52 160.97"</p>

HSyncJitterAccumulatedTime?

Query the Accumulated Time measured value of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterAccumulatedTime"

Group Results

Arguments None

Returns The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterAccumulatedTime"
Query may return: "HSyncJitterAccumulatedTime 0.0"

HSyncJitterAverage <samples>

Set or query the number of samples over which to average the H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterAverage”, “<samples>”
 VARIable:VALue? “HSyncJitterAverage”

Group Setup

Related Commands HSyncJitterLine

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “HSyncJitterAverage”, “1”
 VARIable:VALue? “HSyncJitterAverage”

Query may return: “HSyncJitterAverage 1”

HSyncJitterDemarcFreq<setting>

Set or query the jitter demarcation frequency used to perform the H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterDemarcFreq”, “<setting>”

VARIable:VALue? “HSyncJitterDemarcFreq”

Group Measurement Setup

Arguments <setting> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue “HSyncJitterDemarcFreq”, “78.125”

VARIable:VALue? “HSyncJitterDemarcFreq”
Query may return: “HSyncJitterDemarcFreq 78.125”

HSyncJitterInputSetup<setting>

Set or query the input type (Jitter/Probability) and their values used to perform H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterInputSetup”, “<setting>”
 VARIable:VALue? “HSyncJitterInputSetup”

Group Configuration

Arguments <setting> specifies the input type (Jitter/Probability) and their values used to perform H Sync Jitter measurement.

Valid input type: Jitter, Probability.

When the input type is Jitter, the peak value can be set to an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

When the input type is Probability, the Probability can be set to an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Related Commands Execute
 ReportMeasurements

Returns The input type has no unit.
 The peak jitter value is in nanoseconds (ns).
 The probability value has no unit.

Examples VARIable:VALue “HSyncJitterInputSetup”, “Jitter 1”
 VARIable:VALue? “HSyncJitterInputSetup”

Query may return: “HSyncJitterInputSetup Jitter 1”

HSyncJitterMaxFreqDriftRate?

Query the H Sync Jitter frequency drift rate maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMaxFreqDriftRate"

Group Results

Arguments None

Returns The returned value is in parts per million per second (ppm/s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMaxFreqDriftRate"
Query may return: "HSyncJitterMaxFreqDriftRate 200"

HSyncJitterMaxFreqOffset?

Query the H Sync Jitter frequency offset maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncJitterMaxFreqOffset"

Group Results

Arguments None

Returns The returned value is in parts per million (ppm).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterMaxFreqOffset"
Query may return: "HSyncJitterMaxFreqOffset 30"

HSyncJitterMinFreqDriftRate?

Query the H Sync Jitter frequency drift rate minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMinFreqDriftRate"

Group Results

Arguments None

Returns The returned value is in parts per million per second (ppm/s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMinFreqDriftRate"
Query may return: "HSyncJitterMinFreqDriftRate 0.0"

HSyncJitterMinFreqOffset?

Query the H Sync Jitter frequency offset minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncJitterMinFreqOffset"

Group Results

Arguments None

Returns The returned value is in parts per million (ppm).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterMinFreqOffset"
Query may return: "HSyncJitterMinFreqOffset 0.0"

HSyncJitterNegPeak?

Query the measured negative peak jitter value of the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterNegPeak”

Group Results

Arguments None

Returns The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterNegPeak”
Query may return: “HSyncJitterNegPeak -1.0”

HSyncJitterNegPeakProbability?

Query the probability of occurrence of negative peak jitter measured value of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterNegPeakProbability"

Group Results

Arguments None

Returns The returned value has no unit.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterNegPeakProbability"
Query may return: "HSyncJitterNegPeakProbability 47.36"

HSyncJitterNumLines<number of lines>

Set or query the number of lines used to perform the H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterNumLines”, “<number of lines>”

VARIable:VALue? “HSyncJitterNumLines”

Group Measurement Setup

Arguments <number of lines> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue “HSyncJitterNumLines”, “100”

VARIable:VALue? “HSyncJitterNumLines”
Query may return: “HSyncJitterNumLines 100”

HSyncJitterPassAll?

Query the pass/fail status for all the values of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPassAll"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "HSyncJitterPassAll"
Query may return: "HSyncJitterPassAll 1 1 1 1 0 0 1 1 0 1"

HSyncJitterPassAccumulatedTime?

Query the pass/fail status for the accumulated time values of the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterPassAccumulatedTime”

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? “HSyncJitterPassAccumulatedTime”
Query may return: “HSyncJitterPassAccumulatedTime 1”

HSyncJitterPassMaxFreqDriftRate?

Query the pass/fail status for the H Sync Jitter frequency drift rate maximum limit value specified in the limits file of the H Sync Jitter measurement.

Syntax	VARIABLE:VALUE? "HSyncJitterPassMaxFreqDriftRate"
Group	Results
Arguments	None
Returns	A returned value of 1 means pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "HSyncJitterPassMaxFreqDriftRate" Query may return: "HSyncJitterPassMaxFreqDriftRate 1"

HSyncJitterPassMaxFreqOffset?

Query the pass/fail status for the H Sync Jitter frequency offset maximum limit value specified in the limits file of the H Sync measurement.

Syntax VARIable:VALue? “HSyncJitterPassMaxFreqOffset”

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? “HSyncJitterPassMaxFreqOffset”
Query may return: “HSyncJitterPassMaxFreqOffset 1”

HSyncJitterPassMinFreqDriftRate?

Query the pass/fail status for the H Sync Jitter frequency drift rate minimum limit value specified in the limits file of the H Sync measurement.

Syntax VARIable:VALue? "HSyncJitterPassMinFreqDriftRate"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "HSyncJitterPassMinFreqDriftRate"
Query may return: "HSyncJitterPassMinFreqDriftRate 0"

HSyncJitterPassMinFreqOffset?

Query the pass/fail status for the H Sync Jitter frequency offset minimum limit value specified in the limits file of the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncJitterPassMinFreqOffset"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "HSyncJitterPassMinFreqOffset"
Query may return: "HSyncJitterPassMinFreqOffset 1 "

HSyncJitterPassNegPeak?

Query the pass/fail status for the Negative Peak Jitter value of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPassNegPeak"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "HSyncJitterPassNegPeak"
Query may return: "HSyncJitterPassNegPeak 1"

HSyncJitterPassNegPeakProbability?

Query the pass/fail status for the measured Negative Peak Probability value of the H Sync Jitter measurement.

Syntax VARIABLE:VALUE? "HSyncJitterPassNegPeakProbability"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "HSyncJitterPassNegPeakProbability"
Query may return: "HSyncJitterPassNegPeakProbability 0"

HSyncJitterPassPosPeak?

Query the pass/fail status for the measured Positive Peak Jitter value of the H Sync Jitter measurement.

Syntax	VARIABLE:VALUE? "HSyncJitterPassPosPeak"
Group	Results
Arguments	None
Returns	A returned value of 1 means pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "HSyncJitterPassPosPeak" Query may return: "HSyncJitterPassPosPeak 1"

HSyncJitterPassPosPeakProbability?

Query the pass/fail status for the Positive Peak Probability value of the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterPassPosPeakProbability”

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? “HSyncJitterPassPosPeakProbability”
Query may return: “HSyncJitterPassPosPeakProbability 0”

HSyncJitterPassRMSJitter?

Query the pass/fail status for the RMS Jitter value of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPassRMSJitter"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "HSyncJitterPassRMSJitter"
Query may return: "HSyncJitterPassRMSJitter 1"

HSyncJitterPosPeak?

Query the measured Positive Peak Jitter value of the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterPosPeak”

Group Results

Arguments None

Returns The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterPosPeak”
Query may return: “HSyncJitterPosPeak 1.0”

HSyncJitterPosPeakProbability?

Query the Positive Peak Probability measured value of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPosPeakProbability"

Group Results

Arguments None

Returns The returned value has no unit.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterPosPeakProbability"
Query may return: "HSyncJitterPosPeakProbability 56.5789"

HSyncJitterRelAccumulatedTime?

Query the relative value of Accumulated Time resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterRelAccumulatedTime”

Group Results

Arguments None

Returns The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterRelAccumulatedTime”
Query may return: “HSyncJitterRelAccumulatedTime ---”

HSyncJitterRelMaxFreqDriftRate?

Query the relative value of the Frequency Drift Rate maximum limit value specified in the limits file resulting from the H Sync Jitter measurement.

Syntax	VARIABLE:VALUE? "HSyncJitterRelMaxFreqDriftRate"
Group	Results
Arguments	None
Returns	The returned value is in parts per million per second (ppm/s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncJitterRelMaxFreqDriftRate" Query may return: "HSyncJitterRelMaxFreqDriftRate 160.97"

HSyncJitterRelMaxFreqOffset?

Query the relative value of the Frequency Offset maximum limit value specified in the limits file resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALue? "HSyncJitterRelMaxFreqOffset"

Group Results

Arguments None

Returns The returned value is in parts per million (ppm).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncJitterRelMaxFreqOffset"
Query may return: "HSyncJitterRelMaxFreqOffset 27.95"

HSyncJitterRelMinFreqDriftRate?

Query the relative value of the Frequency Drift Rate minimum limit value specified in the limits file resulting from the H Sync Jitter measurement.

Syntax	VARIABLE:VALUE? "HSyncJitterRelMinFreqDriftRate"
Group	Results
Arguments	None
Returns	The returned value is in parts per million per second (ppm/s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncJitterRelMinFreqDriftRate" Query may return: "HSyncJitterRelMinFreqDriftRate -286.52"

HSyncJitterRelMinFreqOffset?

Query the relative value of the Frequency Offset minimum limit value specified in the limits file resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALue? "HSyncJitterRelMinFreqOffset"

Group Results

Arguments None

Returns The returned value is in parts per million (ppm).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncJitterRelMinFreqOffset"
Query may return: "HSyncJitterRelMinFreqOffset -21.82"

HSyncJitterRelNegPeak?

Query the relative Negative Peak Jitter value resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterRelNegPeak"

Group Results

Arguments None

Returns The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRelNegPeak"
Query may return: "HSyncJitterRelNegPeak -1.0"

HSyncJitterRelNegPeakProbability?

Query the relative value of Negative Peak Probability resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALUE? "HSyncJitterRelNegPeakProbability"

Group Results

Arguments None

Returns The returned value has no unit.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRelNegPeakProbability"
Query may return: "HSyncJitterRelNegPeakProbability 50.0684"

HSyncJitterRelPosPeak?

Query the relative Positive Peak Jitter value resulting from the H Sync Jitter measurement.

Syntax	VARIABLE:VALUE? "HSyncJitterRelPosPeak"
Group	Results
Arguments	None
Returns	The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncJitterRelPosPeak" Query may return: "HSyncJitterRelPosPeak 1.0"

HSyncJitterRelPosPeakProbability?

Query the relative value of Positive Peak Probability resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALUE? "HSyncJitterRelPosPeakProbability"

Group Results

Arguments None

Returns The returned value has no unit.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRelPosPeakProbability"
Query may return: "HSyncJitterRelPosPeakProbability 53.8799"

HSyncJitterRelRMSJitter?

Query the relative value of RMS Jitter resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterRelRMSJitter"

Group Results

Arguments None

Returns The Returns is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRelRMSJitter"
Query may return: "HSyncJitterRelRMSJitter 1.84"

HSyncJitterRMSJitter?

Query the RMS Jitter measured value of the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterRMSJitter”

Group Results

Arguments None

Returns The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterRMSJitter”
Query may return: “HSyncJitterRMSJitter 1.84”

HSyncJitterSet<setting>

Set or query whether to perform H Sync Jitter measurement upon execute.

Syntax VARIable:VALue “HSyncJitterSet”, “<setting>”
 VARIable:VALue? “HSyncJitterSet”

Group Configuration

Arguments Valid values are: OFF, ON, 0, or 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “HSyncJitterSet”, “ON”
 VARIable:VALue? “HSyncJitterSet”

Query may return: “HSyncJitterSet ON”

HSyncJitterStatus?

Query the status of the H Sync Jitter Status measurement.

Syntax VARIABLE:VALue? "HSyncJitterStatus"

Group Status

Related Commands Execute
ExecuteReport

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIABLE:VALue? "HSyncJitterStatus"
Query may return: "HSyncJitterStatus Pass"

HSyncJitterWanderDemarcFreq<Setting>

Set or query the wander demarcation frequency used to perform the H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterWanderDemarcFreq”, “<setting>”

VARIable:VALue? “HSyncJitterWanderDemarcFreq”

Group Measurement Setup

Arguments <setting> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue “HSyncJitterWanderDemarcFreq”, “1”

VARIable:VALue? “HSyncJitterWanderDemarcFreq”
Query may return: “HSyncJitterWanderDemarcFreq 1”

ID?

Query the ID/Version of the application.

Syntax VARIable:VALue? "ID"

Group Miscellaneous

Arguments None

Returns Returns the application's ID.

Examples VARIable:VALue? "ID"

Query may return: "ID Tek/VMSeries FW: 3.x"

LevelsAverage<samples>

Set or query Levels average.

Syntax VARIable:VALue “LevelsAverage”, “<samples>”
 VARIable:VALue? “LevelsAverage”

Group Setup

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands LevelsLine

Returns The returned value has no unit.

Examples VARIable:VALue “LevelsAverage”, “50”
 VARIable:VALue? “LevelsAverage”

Query may return: “LevelsAverage 50”

LevelsConfig[1..8]<setting>

Set or query the configuration details used to perform the Levels measurement for the selected level.

Syntax VARIABLE:VALUE “LevelsConfig[1..8]”, “<setting>”
 VARIABLE:VALUE? “LevelsConfig[1..8]”

Group Setup

Arguments <setting> The valid values for <setting> are: ON, OFF, 0, or 1.
 The Level Name must be less than 60 characters in length. The character can be lowercase, uppercase, number, any symbol, or any special character.
 Cursor 1 must be in the form of an integer or a floating point value with an exponent.
 Cursor 2 must be in the form of an integer or a floating point value with an exponent.

Returns The returned values for Cursor 1 and Cursor 2 are in microseconds (μ s).

Examples VARIABLE:VALUE “LevelsConfig1”, “ON White 9.295 14.176”

 Query may return: “LevelsConfig1 ON White 9.295 14.176”

LevelsConfigRef<setting>

Set or query the configuration details of the reference level used to perform the Levels measurement.

Syntax VARIable:VALue “LevelsConfigRef”, “<setting>”
VARIable:VALue? “LevelsConfigRef”

Group Setup

Arguments <setting> The valid values for <setting> are: ON, OFF, 0, or 1.
Cursor 1 must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.
Cursor 2 must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned values for Cursor 1 and Cursor 2 are in microseconds (μ s).

Examples VARIable:VALue “LevelsConfigRef”, “ON 9.295 14.176”
VARIable:VALue? “LevelsConfigRef”

Query may return: “LevelsConfigRef OFF 27.144 37.744”

LevelsLine <line number>

Set or query line number that is used for the Levels measurement.

Syntax VARIable:VALue “LevelsLine”, “<line number>”
 VARIable:VALue? “LevelsLine”

Group Setup

Related Commands LevelsAverage

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “LevelsLine”, “29”
 VARIable:VALue? “LevelsLine”

Query may return: “LevelsLine 29”

LevelsMultiLineEnd <line number>

Set or query returns the currently assigned ending line number used to perform the Levels measurement on multiple lines.

Syntax VARIable:VALue “LevelsMultiLineEnd”,“<line number>”

VARIable:VALue? “LevelsMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIable:VALue “LevelsMultiLineEnd”, “29”

VARIable:VALue? “LevelsMultiLineEnd”

Query may return: “LevelsMultiLineEnd 29”

LevelsMultiLineStart <line number>

Set or query returns the currently assigned starting line number used to perform the Levels measurement on multiple lines.

Syntax VARIABLE:VALue “LevelsMultiLineStart”,“<line number>”

VARIABLE:VALue? “LevelsMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIABLE:VALue “LevelsMultiLineStart”, “30”

VARIABLE:VALue? “LevelsMultiLineStart”
Query may return: “LevelsMultiLineStart 30”

LevelsPassCh[1..3]?

Query the pass/fail status for the all the levels resulting from the Levels measurement on the specified channel.

Syntax VARIable:VALue? “LevelsPassCh[1..3]”

Group Results

Arguments None

Related Commands LevelsPassCh[1..3]Val[1..8]

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.
The order of results: White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, White.

Examples VARIable:VALue? “LevelsPassCh[1..3]”

Query may return: “LevelsPassCh1 1 1 1 1 1 1 1 1”

LevelsPassCh[1..3]Val[1..8]?

Query the pass/fail status for all the values resulting from the Levels measurement on the specified channel and level.

Syntax VARIABLE:VALue? “LevelsPassCh[1..3]Val[1..8]”

Group Results

Arguments None

Related Commands LevelsPassCh[1..3]

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALue? “LevelsPassCh[1..3]Val[1..8]”

Query may return: “LevelsPassCh1Val1 1”

LevelsRelCh[1..3]?

Query all the relative values resulting from the Levels measurement on all the channels.

Syntax VARIable:VALue? “LevelsRelCh[1..3]”

Group Results

Arguments None

Related Commands LevelsRelCh[1..3]Val[1..8]

Returns The order of results: White Yellow Cyan Green Magenta Red Blue Black.
The returned value is in millivolts (mV).
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “LevelsRelCh[1..3]”
Query may return: “LevelsRelCh1 0.81 1.01 1.08 1.12 Infinity Infinity Infinity
Infinity”

LevelsRelCh[1..3]Val[1..8]?

Query the relative value resulting from the Levels measurement on the specified channel and level.

Syntax VARIABLE:VALUE? "LevelsRelCh[1..3]Val[1..8]"

Group Results

Arguments None

Related Commands LevelsRelCh[1..3]

Returns The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "LevelsRelCh[1..3]Val[1..8]"
Query may return: "LevelsRelCh1Val1 0.81"

LevelsCh[1..3]?

Query all the eight level values resulting from the Levels measurement on the specified channel.

Syntax VARIable:VALue? “LevelsCh[1..3]”

Group Results

Arguments None

Related Commands LevelsCh[1..3]Val[1..8]

Returns The returned value is in millivolts (mV).
The order of results is: White Yellow Cyan Green Magenta Red Blue Black.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “LevelsCh[1..3]”
Query may return: “LevelsCh1 705.65 707.09 707.53 707.53 2.55 1.15 0.74
0.34”

LevelsCh[1..3]Val[1..8]?

Query the measured value resulting from the Levels measurement on the specified channel and level.

Syntax VARIABLE:VALUE? "LevelsCh[1..3]Val[1..8]"

Group Results

Arguments None

Related Commands LevelsCh[1..3]

Returns The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "LevelsCh[1..3]Val[1..8]"
Query may return: "Levels1Ch1Val1 705.65"

LevelsSet<setting>

Set or query whether to perform the Levels measurement upon execute.

Syntax VARIable:VALue “LevelsSet”, “<setting>”
 VARIable:VALue? “LevelsSet”

Group Configuration

Arguments Valid values for <setting> are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “LevelsSet”, “ON”
 VARIable:VALue? “LevelsSet”

Query may return: “LevelsSet ON”

LevelsStatus?

Query the status of the Levels measurement.

Syntax VARIable:VALue? “LevelsStatus”

Group Status

Related Commands Execute
ExecuteReport

Returns Query will return one of these values: “Done”, “Pass”, or “Fail”.
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? “LevelsStatus”

Query may return: “LevelsStatus Pass”

LimitFileLoad <pathstring>

Specifies Limit file to be loaded for Limit Testing.

Syntax VARIable:VALue “LimitFileLoad”, “<pathstring>”

Group Setup

Arguments <pathstring> specifies the path/filename with extension where the Limit file is located. Can either be (1) the full path and filename with extension, or (2) just the filename, and the default path “C:\VMApps\OptHDSD\RefLimFiles” will be used. The file extension must be “.csv”. You have to specify the extension for the filename. The command does not append the filename extension automatically. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands LimitSet

Returns None

Examples VARIable:VALue “LimitFileLoad C:\VMApps\OptHDSD\RefLimFiles\
DefaultLim1080i60-YPbPr.csv”

LimitSet<setting>

Set or query whether Limit Testing is performed upon Execute.

Syntax VARIABLE:VALue "LimitSet", "<setting>"
 VARIABLE:VALue? "LimitSet"

Group Configuration

Arguments <setting> Valid values: OFF, ON, 0, 1.

Related Commands Execute

Returns Query returns 0 or 1.

Examples VARIABLE:VALue "LimitSet", "ON"
 VARIABLE:VALue? "LimitSet"

Query may return: "LimitSet ON"

LineSelectSet<setting>

Set or query the Line Select option for single line or multi lines.

Syntax VARIable:VALue “LineSelectSet”, “<setting>”
 VARIable:VALue? “LineSelectSet”

Group Configuration

Arguments Valid values for <setting> are: Single, Multi.

Related Commands Execute
 ReportMeasurements

Returns The returned value is Single for single line.
 The returned value is Multi for multi lines.

Examples VARIable:VALue “LevelsSelectSet”, “Single”
 VARIable:VALue? “LevelsSelectSet”

Query may return: “LevelsSelectSet Single”

LogErrors<setting>

Set or query whether errors are logged to a file. If enabled, errors are logged in the C:\VMApps\OptHDSD\Log.txt file.

When enabled, LogErrors will append warnings to the existing log file until the file reaches 1MB in size. When this occurs, the file is renamed "logold.txt" and a new log.txt file is created. When the log file reaches 1MB in size again, it is renamed logold.txt and overwrites the existing logold.txt file. Thus, if the customer wants to save the old file, they must rename it before it is overwritten. There is only one "old" file.

Syntax VARIABLE:VALUE "LogErrors", "<setting>"
 VARIABLE:VALUE? "LogErrors"

Group Configuration

Arguments <setting>Valid values: OFF, ON, 0, 1.

Related Commands Execute

Returns Query returns 0 or 1.

Examples VARIABLE:VALUE "LogErrors", "ON"
 VARIABLE:VALUE? "LogErrors"

Query may return:"LogErrors ON "

MultiburstAmpdBCh[1..3]?

Query all six amplitude values (in dB) resulting from Multiburst measurement for the specified channel.

Syntax VARIable:VALue? "MultiburstAmpdBCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstAmpdBCh[1..3]Val[1..6]

Returns The returned value is in decibels (dB).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "MultiburstAmpdBCh[1..3]"

Query may return: "MultiburstAmpdBCh2 -0.09 -0.18 -0.14 -0.13 -0.08 -0.02"

MultiburstAmpdBCh[1..3]Val[1..6]?

Query the amplitude value (in dB) resulting from Multiburst measurement for the specified channel and value.

Syntax VARIable:VALue? “MultiburstAmpdBCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstAmpdBCh[1..3]

Returns The returned value is in decibels (dB).
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “MultiburstAmpdBCh[1..3]Val[1..6]”

Query may return: “MultiburstAmpdBCh1Val2 - 0.26”

MultiburstAverage <samples>

Set or query the number of samples over which to average the Multiburst measurement.

Syntax VARIable:VALue “MultiburstAverage”, “<samples>”
 VARIable:VALue? “MultiburstAverage”

Group Setup

Related Commands MultiburstLine

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “MultiburstAverage”, “1”
 VARIable:VALue? “MultiburstAverage”

Query may return: “MultiburstAverage 1”

MultiburstFlagmVCh[1..3]?

Query the Flag value (in mV) resulting from Multiburst measurement for the specified channel.

Syntax VARIABLE:VALue? "MultiburstFlagmVCh[1..3]"

Group Results

Arguments None

Returns The returned value is in millivolts (mV).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALue? "MultiburstFlagmVCh[1..3]"

Query may return: "MultiburstFlagmVCh3 428.01"

MultiburstFreqCh[1..3]?

Query all six frequency values resulting from Multiburst measurement for the specified channel.

Syntax VARIable:VALue? "MultiburstFreqCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstFreqCh[1..3]Val[1..6]

Returns The returned value is in megahertz (MHz).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "MultiburstFreqCh[1..3]"

Query may return: "MultiburstFreqCh1 10.00 12.00 14.00 16.00 18.01 20.00"

MultiburstFreqCh[1..3]Val[1..6]?

Query the frequency value resulting from Multiburst measurement for the specified channel and value.

Syntax VARIABLE:VALue? “MultiburstFreqCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstFreqCh[1..3]

Returns The returned value is in megahertz (MHz).
Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALue? “MultiburstFreqCh[1..3]Val[1..6]”

Query may return: “MultiburstFreqCh1Val2 12.00”

MultiburstLine <line number>

Set or query line number that is to be used for the Multiburst measurement.

Syntax VARIable:VALue “MultiburstLine”, “<line number>”
 VARIable:VALue? “MultiburstLine”

Group Setup

Related Commands MultiburstAverage

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “MultiburstLine”, “200”
 VARIable:VALue? “MultiburstLine”

Query may return: “MultiburstLine 325”

MultiburstMultiLineEnd<line number>

Set or query the ending line number used to perform the Multiburst measurement on multiple lines.

Syntax VARIable:VALue “MultiburstMultiLineEnd”, “<line number>”
VARIable:VALue? “MultiburstMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIable:VALue “MultiburstMultiLineEnd”, “125”

VARIable:VALue? “MultiburstMultiLineEnd”
Query may return: “MultiburstMultiLineEnd 125”

MultiburstMultiLineStart<line number>

Set or query the starting line number used to perform the Multiburst measurement on multiple lines.

Syntax VARIable:VALue “MultiburstMultiLineStart”, “<line number>”
VARIable:VALue? “MultiburstMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “MultiburstMultiLineStart”, “130”

VARIable:VALue? “MultiburstMultiLineStart”
Query may return: “MultiburstMultiLineStart 130”

MultiburstPassAmpdBCh[1..3]?

Query the pass/fail status for all six amplitude values (in dB) resulting from the Multiburst measurement for the specified channel. The values used for the limit comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "MultiburstPassAmpdBCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstPassAmpdBCh[1..3]Val[1..6]

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "MultiburstPassAmpdBCh[1..3]"

Query may return:
"MultiburstPassAmpdBCh2 1 1 1 1 1 0"

MultiburstPassAmpdBCh[1..3]Val[1..6]?

Query the pass/fail status resulting from the Multiburst relative results for the specified channel and value measurement. The value used for the limit comparison is defined in the Limits file.

Syntax VARIable:VALue? "MultiburstPassAmpdBCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands MultiburstPassAmpdBCh[1..3]

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIable:VALue? "MultiburstPassAmpdBCh[1..3]Val[1..6]"

Query may return: "MultiburstPassAmpdBCh1Val2 1"

MultiburstPassFlagmVCh[1..3]?

Query the pass/fail status for the Flag value resulting from the Multiburst measurement for the specified channel. The values used for the limit comparison are defined in the Limits file.

Syntax VARIABLE:VALue? “MultiburstPassFlagmVCh[1..3]”

Group Results

Arguments None

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALue? “MultiburstPassFlagmVCh[1..3]”

Query may return: “MultiburstPassFlagmVCh3 0”

MultiburstPassFreqCh[1..3]?

Query the pass/fail status of all six frequency values resulting from the Multiburst measurement for the specified channel. The values used for the limit comparison are defined in the Limits file.

Syntax VARIable:VALue? "MultiburstPassFreqCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstPassFreqCh[1..3]Val[1..6]

Returns A returned status of 1 means Pass; a returned status of 0 means Fail.

Examples VARIable:VALue? "MultiburstPassFreqCh[1..3]"

Query may return: "MultiburstPassFreqCh1 1 1 1 1 1 1"

MultiburstPassFreqCh[1..3]Val[1..6]?

Query the pass/fail status for the frequency value resulting from the Multiburst measurement for the specified channel and value. The values used for the limit comparison are defined in the Limits file.

Syntax VARIABLE:VALue? “MultiburstPassFreqCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstPassFreqCh[1..3]

Returns A returned status of 1 means Pass; a returned status of 0 means Fail.

Examples VARIABLE:VALue? “MultiburstPassFreqCh[1..3]Val[1..6]”

Query may return: “MultiburstPassFreqCh1Val2 1”

MultiburstRelAmpdBCh[1..3]?

Query all six amplitude values resulting from the Multiburst relative results for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? "MultiburstRelAmpdBCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstRelAmpdBCh[1..3]Val[1..6]

Returns The returned value is in decibels (dB).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "MultiburstRelAmpdBCh[1..3]"

Query may return: "MultiburstRelAmpdBCh2 0.0 -0.01 -0.22 -0.42 -0.66
-1.02"

MultiburstRelAmpdBCh[1..3]Val[1..6]?

Query the relative amplitude value resulting from the Multiburst measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALue? “MultiburstRelAmpdBCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstRelAmpdBCh[1..3]

Returns The returned value is in decibels (dB).
Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “MultiburstRelAmpdBCh[1..3]Val[1..6]”

Query may return: “MultiburstRelAmpdBCh1Val2 -0.01”

MultiburstRelFlagmVCh[1..3]?

Query the relative Flag value resulting from the Multiburst relative measurement for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax	VARIABLE:VALUE? "MultiburstRelFlagmVCh[1..3]"
Group	Results
Arguments	None
Returns	The returned value is in millivolts (mV). Returns "---" if no valid measurement currently available.
Examples	VARIABLE:VALUE? "MultiburstRelFlagmVCh3" Query may return: "MultiburstRelFlagmVCh3 -0.33"

MultiburstRelFreqCh[1..3]?

Query all six frequency values resulting from the specified Multiburst relative channel measurement. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? "MultiburstRelFreqCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstRelFreqCh[1..3]Val[1..6]

Returns The returned value is in megahertz (MHz).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "MultiburstRelFreqCh[1..3]"

Query may return: "MultiburstRelFreqCh1 0.01 0.01 0.01 0.02 0.01 0.01"

MultiburstRelFreqCh[1..3]Val[1..6]?

Query the relative frequency value resulting from the specified Multiburst measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? “MultiburstRelFreqCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstRelFreqCh[1..3]

Returns The returned value is in megahertz (MHz).
Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “MultiburstRelFreqCh[1..3]Val[1..6]”

Query may return: “MultiburstRelFreqCh1Val1 0.01”

MultiburstSet <setting>

Set or query whether to measure Multiburst upon Execute.

Syntax VARIable:VALue “MultiburstSet”, “<setting>”
 VARIable:VALue? “MultiburstSet”

Group Configuration

Arguments Valid values for <setting> are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “MultiburstSet”, “ON”
 VARIable:VALue? “MultiburstSet”

Query may return: “MultiburstSet ON”

MultiburstStatus?

Query the status of the Multiburst measurement.

Syntax VARIable:VALue? "MultiburstStatus"

Group Status

Related Commands Execute
ExecuteReport

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "MultiburstStatus"

Query may return: "MultiburstStatus Pass"

NoiseAmpdBCh[1..3]?

Query amplitude value (in dB) resulting from Noise measurement for the specified channel.

Syntax VARIable:VALue? “NoiseAmpdBCh[1..3]”

Group Results

Arguments None

Returns The returned value is in decibels (dB).
Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “NoiseAmpdBCh[1..3]”

Query may return: “NoiseAmpdBCh2 66.43”

NoiseAmpmVCh[1..3]?

Query amplitude value (in mV) resulting from Noise measurement for the specified channel.

Syntax VARIable:VALue? "NoiseAmpmVCh[1..3]"

Group Results

Arguments None

Returns The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "NoiseAmpmVCh[1..3]"

Query may return: "NoiseAmpmVCh2 0.33"

NoiseAverage <samples>

Set or query the number of samples over which to average the Noise measurement.

Syntax VARIABLE:VALue "NoiseAverage", "<samples>"
 VARIABLE:VALue? "NoiseAverage"

Group Setup

Related Commands NoiseBW
 NoiseFilter
 NoiseLine
 NoiseCursorPos

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIABLE:VALue "NoiseAverage", "8"
 VARIABLE:VALue? "NoiseAverage"

Query may return: "NoiseAverage 8"

NoiseBW <bandwidth>

Set or query bandwidth of noise filter that is to be used for noise measurement, if the unweighted noise filter is selected.

Syntax VARIable:VALue "NoiseBW", "<bandwidth>"
 VARIable:VALue? "NoiseBW"

Group Setup

Related Commands NoiseAverage
 NoiseFilter
 NoiseLine
 NoiseCursorPos

Arguments <bandwidth> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands NoiseFilter

Returns The returned value is in Hertz (Hz).

Examples VARIable:VALue "NoiseBW", "30000000"
 VARIable:VALue? "NoiseBW"

Query may return: "NoiseBW 30000000"

NoiseCursorPos<frequency>

Set or query the position of the cursor in the Noise Spectrum display.

Syntax VARIABLE:VALue “NoiseCursorPos”, “<frequency>”
 VARIABLE:VALue? “NoiseCursorPos?”

Group Setup

Related Commands NoiseAverage
 NoiseBW
 NoiseFilter
 NoiseLine

Arguments <frequency> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value is in Hertz (Hz).

Examples VARIABLE:VALue “NoiseCursorPos”, “3.71E6”
 VARIABLE:VALue? “NoiseCursorPos”

Query may return: “NoiseCursorPos 3.71E6”

NoiseFreqResolution?

Query returns the frequency resolution value in the Noise results panel used to perform the Noise measurement.

Syntax VARIable:VALue? "NoiseFreqResolution"

Group Setup

Related Command Noise Average
NoiseFilter
NoiseLine
NoiseCursorPos

Related Commands NoiseFilter

Returns The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseFreqResolution"
Query may return: "NoiseFreqResolution 19073.49"

NoiseMultiLineEnd <line number>

Set or query the ending line number used to perform the Noise measurement on multiple lines.

Syntax VARIABLE:VALue “NoiseMultiLineEnd”,“<line number>”

VARIABLE:VALue? “NoiseMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIABLE:VALue “NoiseMultiLineEnd”, “229”

VARIABLE:VALue? “NoiseMultiLineEnd”
Query may return: “NoiseMultiLineEnd 229”

NoiseMultiLineStart <line number>

Set or query the starting line number used to perform the Noise measurement on multiple lines.

Syntax VARIable:VALue “NoiseMultiLineStart”,“<line number>”

VARIable:VALue? “NoiseMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “NoiseMultiLineStart”, “230”

VARIable:VALue? “NoiseMultiLineStart”

Query may return: “NoiseMultiLineStart 230”

NoiseTimeWindowCursors<time>

Set or query the start and the end cursor position values used to perform the Noise measurement.

Syntax VARIABLE:VALue “NoiseTimeWindowCursors”, “<time>”
 VARIABLE:VALue? “NoiseTimeWindowCursors”

Group Setup

Related Commands NoiseAverage
 NoiseBW
 NoiseFilter
 NoiseLine

Arguments <time> The start and the end cursor position values must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value is in microseconds (μ s).

Examples VARIABLE:VALue “NoiseTimeWindowCursors”, “default”
 VARIABLE:VALue? “NoiseTimeWindowCursors”

Query may return: “NoiseTimeWindowCursors 20.0 80.0”

NoiseFilter <noisefilter>

Set or query type of noise filter that is to be used for noise measurement.

Syntax VARIable:VALue “NoiseFilter”, “<noisefilter>”
 VARIable:VALue? “NoiseFilter”

Group Setup

Arguments <noisefilter> Valid noise filters: Off, Unified, or Unweighted.

Related Commands NoiseAverage
 Noise BW
 NoiseCursorPos
 NoiseLine

Returns The returned value has no unit.

Examples VARIable:VALue “NoiseFilter”, “Unified”
 VARIable:VALue? “NoiseFilter”

Query may return: “NoiseFilter Unified”

NoiseLine <line number>

Set or query line number that is to be used for Noise measurement.

Syntax VARIABLE:VALue “NoiseLine”, “<line number>”
 VARIABLE:VALue? “NoiseLine”

Group Setup

Related Commands NoiseAverage
 Noise BW
 NoiseCursorPos
 NoiseFilter

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIABLE:VALue “NoiseLine”, “200”
 VARIABLE:VALue? “NoiseLine”

Query may return: “NoiseLine 200”

NoisePassdBCh[1..3]?

Query the pass/fail status for the amplitude value (in dB) resulting from the Noise measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax	VARIABLE:VALUE? "NoisePassdBCh[1..3]"
Group	Results
Arguments	None
Returns	A returned value of 1 means Pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "NoisePassdBCh[1..3]" Query may return: "NoisePassdBCh2 1"

NoisePassmVCh[1..3]?

Query the pass/fail status for the amplitude value (in mV) resulting from a Noise measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALue? “NoisePassmVCh[1..3]”

Group Results

Arguments None

Returns A returned status of 1 means Pass; a returned status of 0 means Fail.

Examples VARIABLE:VALue? “NoisePassmVCh[1..3]”

Query may return: “NoisePassmVCh2 0”

NoiseRelAmpdBCh[1..3]?

Query amplitude value (in dB) resulting from the Noise relative result for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax	VARIABLE:VALUE? "NoiseRelAmpdBCh[1..3]"
Group	Results
Arguments	None
Returns	The returned value is in decibels (dB).
Examples	VARIABLE:VALUE? "NoiseRelAmpdBCh[1..3]" Query may return: "NoiseRelAmpdBCh2 0.08"

NoiseRelAmpmVCh[1..3]?

Query amplitude value (in mV) resulting from the Noise relative result for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALue? "NoiseRelAmpmVCh[1..3]"

Group Results

Arguments None

Returns The returned value is in millivolts (mV).

Examples VARIABLE:VALue? "NoiseRelAmpmVCh[1..3]"

Query may return: "NoiseRelAmpmVCh2 -0.15"

NoiseSet <setting>

Set or query whether to measure Noise upon Execute.

Syntax VARIable:VALue “NoiseSet”, “<setting>”
 VARIable:VALue? “NoiseSet”

Group Configuration

Arguments <setting> Valid values: OFF, ON, 0, or 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “NoiseSet”, “ON”
 VARIable:VALue? “NoiseSet”

Query may return: “NoiseSet ON”

NoiseStatus?

Query the status of the Noise measurement.

Syntax VARIable:VALue? "NoiseStatus"

Group Status

Related Commands Execute
NoiseMeasurements

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "NoiseStatus"

Query may return: "NoiseStatus Pass"

NonLinearityAverage <samples>

Set or query the number of samples over which to average the Non-Linearity measurement.

Syntax VARIable:VALue “NonLinearityAverage”, “<samples>”
 VARIable:VALue? “NonLinearityAverage”

Group Setup

Related Commands NonLinearityLine

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “NonLinearityAverage”, “1”
 VARIable:VALue? “NonLinearityAverage”

Query may return: “NonLinearityAverage 1”

NonLinearityLine <line number>

Set or query line number that is to be used for the Non-Linearity measurement.

Syntax VARIABLE:VALue "NonLinearityLine", "<line number>"
 VARIABLE:VALue? "NonLinearityLine"

Group Setup

Related Commands NonLinearityAverage

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIABLE:VALue "NonLinearityLine", "200"
 VARIABLE:VALue? "NonLinearityLine"

Query may return: "NonLinearityLine 200"

NonLinearityMultiLineEnd <line number>

Set or query the ending line number used to perform the Non Linearity measurement on multiple lines.

Syntax VARIable:VALue “NonLinearityMultiLineEnd”,“<line number>”
VARIable:VALue? “NonLinearityMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIable:VALue “NonLinearityMultiLineEnd”, “189”
VARIable:VALue? “NonLinearityMultiLineEnd”
Query may return: “NonLinearityMultiLineEnd 189”

NonLinearityMultiLineStart <line number>

Set or query the starting line number used to perform the Non Linearity measurement on multiple lines.

Syntax VARIable:VALue “NonLinearityMultiLineStart”,“<line number>”

VARIable:VALue? “NonLinearityMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “NonLinearityMultiLineStart”, “195”

VARIable:VALue? “NonLinearityMultiLineStart”

Query may return: “NonLinearityMultiLineStart 195”

NonLinearityPassCh[1..3]?

Query the pass/fail status for all six non-linearity values resulting from the Non-Linearity measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NonLinearityPassCh[1..3]"

Group Results

Arguments None

Related Commands NonLinearityPassCh[1..3]Max
NonLinearityPassCh[1..3]Val[1..5]

Returns The order of results: Maximum Step1 Step2 Step3 Step4 Step5.
A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "NonLinearityPassCh[1..3]"

Query may return: "NonLinearityPassCh3 1 0 1 1 1 1"

NonLinearityPassCh[1..3]Max?

Query pass/fail status for the maximum value resulting from the Non-Linearity measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NonLinearityPassCh[1..3]Max"

Group Results

Arguments None

Related Commands NonLinearityPassCh[1..3]
NonLinearityPassCh[1..3]Val[1..5]

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "NonLinearityPassCh[1..3]Max"

Query may return: "NonLinearityPassCh3Max 1"

NonLinearityPassCh[1..3]Val[1..5]?

Query the pass/fail status for the value resulting from the Non-Linearity measurement for the specified channel and value. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NonLinearityPassCh[1..3]Val[1..5]"

Group Results

Arguments None

Related Commands NonLinearityPassCh[1..3]
NonLinearityPassCh[1..3]Max

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "NonLinearityPassCh[1..3]Val[1..5]"

Query may return: "NonLinearityPassCh3Val4 0"

NonLinearityPctCh[1..3]?

Query all six Non-linearity values resulting from the Non-Linearity measurement for the specified channel.

Syntax VARIABLE:VALue? “NonLinearityPctCh[1..3]”

Group Results

Arguments None

Related Commands NonLinearityPctCh[1..3]Max
NonLinearityPctCh[1..3]Val[1..5]

Returns The returned value is in percent (%)
The order of results: Maximum Step1 Step2 Step3 Step4 Step5.
Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “NonLinearityPctCh[1..3]”
Query may return: “NonLinearityPctCh3 0.82 0.00 0.82 0.69 0.21 0.28”

NonLinearityPctCh[1..3]Max?

Query the maximum Non-linearity value for the specified channel.

Syntax VARIable:VALue? "NonLinearityPctCh[1..3]Max"

Group Results

Arguments None

Related Commands NonLinearityPctCh[1..3]
NonLinearityPctCh[1..3]Val[1..5]

Returns The returned value is in percent (%).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "NonLinearityPctCh[1..3]Max"

Query may return: "NonLinearityPctCh3Max 0.82"

NonLinearityPctCh[1..3]Val[1..5]?

Query the maximum Non-linearity value for the specified channel and value.

Syntax VARIable:VALue? “NonLinearityPctCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands NonLinearityPctCh[1..3]
NonLinearityPctCh[1..3]Max

Returns The returned value is in percent (%).
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “NonLinearityPctCh[1..3]Val[1..5]”

Query may return: “NonLinearityPctCh3Val4 0.21”

NonLinearityRelPctCh[1..3]?

Query all six non linearity values resulting from the Non Linearity relative measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? “NonLinearityRelPctCh[1..3]”

Group Results

Arguments None

Related Commands NonLinearityRelPctCh[1..3]Max
NonLinearityRelPctCh[1..3]Val[1..5]

Returns The returned value is in percent (%).
The order of results: Maximum Step1 Step2 Step3 Step4 Step5.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “NonLinearityRelPctCh[1..3]”

Query may return: “NonLinearityRelPctCh3 2 0.59 0.0 1.24 0.4 0.4”

NonLinearityRelPctCh[1..3]Max?

Query the maximum Non-linearity relative value for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? "NonLinearityRelPctCh[1..3]Max"

Group Results

Arguments None

Related Commands NonLinearityRelPctCh[1..3]
NonLinearityRelPctCh[1..3]Val[1..5]

Returns The returned value is in percent (%).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "NonLinearityRelPctCh[1..3]Max"

Query may return: "NonLinearityRelPctCh3Max 0.82"

NonLinearityRelPctCh[1..3]Val[1..5]?

Query the maximum Non-linearity relative for the specified channel and value.
The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “NonLinearityRelPctCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands NonLinearityRelPctCh[1..3]
NonLinearityRelPctCh[1..3]Max

Returns The returned value is in percent (%).
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “NonLinearityRelPctCh[1..3]Val[1..5]”

Query may return: “NonLinearityRelPctCh3Val4 0.21”

NonLinearitySet <setting>

Set or query whether to measure Non Linearity upon Execute.

Syntax VARIABLE:VALue “NonLinearitySet”, “<setting>”
 VARIABLE:VALue? “NonLinearitySet”

Group Configuration

Related Commands Execute
 ReportMeasurements

Arguments <setting> Valid values are: OFF, ON, 0, or 1.

Returns Query returns 0 or 1.

Examples VARIABLE:VALue “NonLinearitySet”, “ON”
 VARIABLE:VALue? “NonLinearitySet”

Query may return: “NonLinearitySet ON”

NonLinearityStatus?

Query the status of the Non Linearity Status measurement.

Syntax VARIable:VALue? "NonLinearityStatus"

Group Status

Related Commands Execute
ExecuteReport

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "NonLinearityStatus"

Query may return: "NonLinearityStatus Pass"

OPComplete <setting>

Controls VM Series System GPIB scripts by ensuring that the previous command is ready before either querying its value or calling the next command.

OPComplete is set to “1” whenever a VM Series System GPIB command has been received and processed and a new command is ready to be processed (except for the resetting of OPComplete itself, which sets OPComplete to “0”).

OPComplete can only be reset to “0” by the user, and it can only be set to “1” when a command has been sent and the next command is ready to be input.

OPComplete is designed to control VM Series System GPIB scripts by ensuring that the previous command was accepted before either (1) querying its potentially updated value or (2) calling the next command. Setting and checking this variable may be used in lieu of the 50 ms delay*. So long as the handshake is performed on every command.

If a command sets its value to the same value that it is currently set to, OPComplete will not be set to “1”. To avoid this, either set Header to “ON”, or use all lowercase arguments for text (such as “hd480p60” and “on”), and floating-point input for numeric values (such as 21.0 instead of 21). This will always cause OPComplete to be set.

Initialized to “0” on startup.

For the Execute command, OPComplete is set to “1” after execution begins, not when execution stops.

Syntax VARIABLE:VALue “OPComplete”, “<setting>”
 VARIABLE:VALue? “OPComplete”

Group Run

Arguments <setting> Valid values are: OFF, 0.

Returns Query returns “1” if a command has been completed since OPComplete was last reset, otherwise it returns “0”.

* See Command Structure on page 1.

Examples

```
VARIABLE:VALUE "OPComplete", "OFF"
VARIABLE:VALUE? "OPComplete"
```

Query may return: "OPComplete OFF"

A typical general-case usage of OPComplete might be:

```
VARIABLE:VALUE "OPComplete", "OFF"
// reset first so we know it is set to "0"
```

```
VARIABLE:VALUE "Command1", "Argument1"
// call first command
```

```
While ((VARIABLE:VALUE? "OPComplete") == "0") (
    Wait;
)
// wait till first command is ready before calling next command
```

```
// Now repeat the same process for the next command:
VARIABLE:VALUE "OPComplete", "OFF"
```

```
// reset first so we know it is set to "0"
VARIABLE:VALUE "Command2", "Argument2"
// call next command
```

```
While ((VARIABLE:VALUE? "OPComplete") == "0") (
    Wait;
)
// wait till this command is ready before calling next command
// and so on for subsequent commands
```

PassFailStatus?

Query the pass or fail status for all the measurements at once.

Syntax VARIable:VALue? "PassFailStatus"

Group Status

Related Commands ReportGenerate

Returns The order of results:
OverallStatus ChannelDelay ColorBars FrequencyResponse Multiburst Noise
NonLinearity ShortTimeDistortion SpatialDistortion HSync VSync HSyncJitter
Levels.

Query will return one of these values: "Done", "Pass", or "Fail".

Returns Pass when the measurement is completed with limit testing enabled and passed.

Returns Fail when the measurement is completed with limit testing enabled and failed.

Returns Done when the measurement is completed without limit testing.

Returns --- when no measurement is taken.

Examples VARIable:VALue? "PassFailStatus"

Query may return: "PassFailStatus" "overall_fail fail pass done fail pass pass fail fail pass pass pass fail"

PixAspectRatio <Auto|4x3|16x9>

Set or query Picture aspect ratio.

Syntax VARIable:VALue "PixAspectRatio", "[Auto|4x3|16x9]"
VARIable:VALue? "PixAspectRatio"

Group Results

Arguments [Auto|4x3|16x9] Auto allows the instrument to select the aspect ratio based on the selected format. 4x3 sets the aspect ratio to standard definition. 16x9 sets the aspect ratio to high definition ratio.

Returns Returns the display aspect ratio.

Examples VARIable:VALue "PixAspectRatio", "16x9"
VARIable:VALue? "PixAspectRatio"

Query may return: "PixAspectRatio 16x9"

PixLine <line number>

Set or query Picture line number to bright up. VectorscopeLine and PixLine change the same setting. Thus, if you set Vectorscope Line to 250, then PixLine will also be 250. Likewise, if you set PixLine to 300, Vectorscope Line will be set to 300.

Syntax VARIABLE:VALue "PixLine", "<line number>"
 VARIABLE:VALue? "PixLine"

Group Configuration

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands VectorscopeLine

Returns The returned value has no unit.

Examples VARIABLE:VALue "PixLine", "165"
 VARIABLE:VALue? "PixLine"

Query may return: "PixLine 165"

PopupWarnings <setting>

Set or query if Pop-up warnings appear on screen.

Syntax VARIable:VALue "PopupWarnings", "<setting>"
 VARIable:VALue? "PopupWarnings"

Group Configuration

Arguments <setting>Valid values are: OFF, ON, 0, or 1.

Related Commands VectorscopeLine

Returns Returns setting for whether or not warnings are displayed.

Examples VARIable:VALue "PopupWarnings", "OFF"
 VARIable:VALue? "PopupWarnings"

Query may return:"PopupWarnings OFF"

RecallSettings <pathstring>

Recall settings stored in the specified path/filename.

Command recalls settings stored in the specified path/filename.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you only specify the filename with extension, the default path “C:\VMApps\OptHDSD” is used. The file specified in pathstring must have the default extension “.vmset”. You have to specify the extension for the filename. The command does not append the filename extension automatically.

If you get the error message, “Invalid Filename”, confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “RecallSettings”, “<pathstring>”
 VARIABLE:VALUE? “RecallSettings”

Group Settings

Arguments <pathstring> specifies the path/filename where the setup file is stored. Can either be (1) the full path and filename, or (2) just the filename, and the default path “C:\VMApps\OptHDSD” will be used. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

NOTE. The VM Series System allowed filenames without extensions. This is no longer allowed. A filename without an extension will return an error.

Related Commands SaveSettings

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “RecallSettings”, “c:\VMApps\OptHDSD\Tek1.vmset”
 VARIABLE:VALUE “RecallSettings”, “Tek2.vmset”
 VARIABLE:VALUE? “RecallSettings”

Query may return: “RecallSettings OK”

ReferenceFileLoad <pathstring>

Specifies Reference file to be loaded for Relative to Reference testing.

Syntax VARIable:VALue “ReferenceFileLoad”, “<pathstring>”

Group Setup

Arguments <pathstring> specifies the path/filename with extension where the Reference file is located. Can either be (1) the full path and filename with extension, or (2) just the filename with extension, and the default path “C:\VMApps\OptHDSD\RefLimFiles” will be used. The file extension must be “.csv”. You have to specify the extension for the filename. The command appends the filename extension .csv automatically. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands ReferenceSet

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIable:VALue “ReferenceFileLoad”, “C:\VMApps\OptHDSD\RefLimFiles\DefaultRef1080i60-YPbPr.csv”

ReferenceFileSave <pathstring>

Saves the current measurement results to a Reference file that can be used for Relative to Reference testing.

Syntax VARIABLE:VALUE "ReferenceFileSave", "<pathstring>"

Group Setup

Arguments <pathstring> path/filename with extension where file is to be stored. Can either be (1) the full path and filename with extension, or (2) just the filename with extension, and the default path "c:\VMApps\OptHDSD\RefLimFiles" will be used. You have to specify the extension for the filename. The command does not append the filename extension automatically. The default extension ".csv" will be appended if it is not specified. The specified directory will be created if it doesn't exist. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands ReferenceSet

Returns Returns OK after the file is written.

Examples VARIABLE:VALUE "ReferenceFileSave c:\VMApps\OptHDSD\RefLimFiles\DU-TRef1080i60-YPbPr.csv"

ReferenceSet<setting>

Set or query whether Reference Testing is enabled or disabled.

Syntax VARIable:VALue “ReferenceSet”, “<setting>”
 VARIable:VALue? “ReferenceSet”

Group Reference and Limit Testing

Arguments <setting> Valid values are: OFF, ON, 0, or 1.

Returns Query returns 0 or 1.

Examples VARIable:VALue “ReferenceSet”, “ON”
 VARIable:VALue? “ReferenceSet”

Query may return: “ReferenceSet ON”

ReportGenerate <pathstring>

Generates a measurement report of the specified type (if a measure has been run and results are available), and saves it in the file specified by pathstring.

You have to specify the extension for the filename. The command does not append the filename extension automatically. The type of file (.rtf, .csv or .pdf) is determined by the file extension in the pathstring. If the extension does not match one of these endings, an error is returned.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “ReportGenerate”, “<pathstring>”
 VARIABLE:VALUE? “ReportGenerate”

Group Reports

Arguments <pathstring> path/filename where file is to be stored. Can either be (1) the full path and filename with extension or (2) just the filename with extension, and the default path “C:\VMApps\OptHDSD\Reports” will be used. You have to specify the extension for the filename. The specified directory will be created if it doesn’t currently exist. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands ReportString
 ReportMeasurements

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “ReportGenerate”, “C:\VMApps\OptHDSD\Reports\color-bars.csv”
 VARIABLE:VALUE? “ReportGenerate”

Query may return: “ReportGenerate OK”

ReportMeasurements <setting>

Set or query the measurements to write to the report when ReportGenerate is called.

Set to "All" when application starts.

Syntax VARIABLE:VALUE "ReportMeasurements", "<setting>"
VARIABLE:VALUE? "ReportMeasurements"

Group Reports

Arguments <setting>Valid measurement mode values are All and Selected. All reports all current valid measurements results, while Selected reports only those measurements that are currently set.

Related Commands ChannelDelaySet
ColorBarsSet
FrequencyResponseSet
HSyncJitterSet
LevelsSet
MultiburstSet
NoiseSet
NonLinearitySet
ReportGenerate
ShortTimeDistortionSet
SpatialDistortionSet
SyncSet
VSyncSet

Returns Query returns the current specified report measurement mode.

Examples VARIABLE:VALUE "ReportMeasurements", "All"
VARIABLE:VALUE? "ReportMeasurements"

Query may return: "ReportMeasurements All"

ReportString <string>

Set or query any additional information to write to the report when ReportGenerate is called.

Initialized to empty string "" on startup.

Syntax VARIable:VALue "ReportString", "<string>"
 VARIable:VALue? "ReportString"

Group Reports

Arguments <string> can be up to 46 characters in length. The comma and double quote characters are not permitted and their usage may result in unexpected program behavior. All other printable characters are permitted.

Related Commands ReportGenerate

Returns Query returns the currently specified report string.

Examples VARIable:VALue "ReportString", "Tested by Joe P - DUT A1"
 VARIable:VALue? "ReportString"

Query may return: "ReportString Tested by Joe P - DUT A1"

If assigning consecutive long strings to ReportString, truncation of the second string may occur if the length of the consecutive strings exceeds a limit (67 characters if Header is ON). For example:

```
VARIable:VALue "ReportString", "This is a long string which has 45 characters"
```

```
VARIable:VALue? "ReportString"  
"ReportString This is a long string which has 45 characters"
```

```
VARIable:VALue "ReportString", "This string will be truncated, it is 45 chars"
```

```
VARIable:VALue? "ReportString"  
"ReportString This string will be tr"
```

RunMode <runmode>

Set or query run mode to use for measurement.

Syntax VARIable:VALue “RunMode”, “<runmode>”
 VARIable:VALue? “RunMode”

Group Configuration

Arguments <runmode> specifies the run mode that is to be used.
 Valid run modes for single line: Once, Continuously, OnceAndReport.
 Valid run modes for multi lines: OnceAndReport.

Related Commands LineSelectSet

Returns Query returns the currently specified run mode.

Examples VARIable:VALue “RunMode”, “OnceAndReport”
 VARIable:VALue? “RunMode”

Query may return: “RunMode OnceAndReport”

SaveSettings <pathstring>

Save current settings in the specified path/filename.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you only specify the filename, the default path “C:\VMApps\OptHDSD” is used. You have to specify the extension (.vmset) for the filename.

The command does not append the filename extension automatically.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “SaveSettings”, “<pathstring>”
 VARIABLE:VALUE? “SaveSettings”

Group Settings

Arguments <pathstring> specifies the path/filename where the file is to be stored. Can either be (1) the full path and filename, or (2) just the filename, and the default path “C:\VMApps\OptHDSD” will be used. The default extension is “.vmset” and will not be appended if it is not specified automatically. The specified directory will be created if it doesn’t currently exist. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands RecallSettings

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “SaveSettings”, “C:\VMApps\OptHDSD\Tek1.vmset”
 VARIABLE:VALUE? “SaveSettings”

Query may return: “SaveSettings OK”

SetupAndOrRun <setuprunmode>

Set or query the setup mode to use for measurement.

Syntax VARIable:VALue "SetupAndOrRun", "<setuprunmode>"
 VARIable:VALue? "SetupAndOrRun"

Group Configuration

Arguments <setuprunmode> Valid modes are: SetupAndRun, SetupOnly, or RunOnly.

Returns Query returns the current specified setuprunmode.

Examples VARIable:VALue "SetupAndOrRun", "SetupAndRun"
 VARIable:VALue? "SetupAndOrRun"

Query may return: "SetupAndOrRun", "SetupAndRun"

ShortTimeDistortionAverage<samples>

Set or query Short Time Distortion average.

Syntax VARIABLE:VALue "ShortTimeDistortionAverage", "<samples>"
 VARIABLE:VALue? "ShortTimeDistortionAverage"

Group Setup

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands ShortTimeDistortionLine

Returns The returned value has no unit.

Examples VARIABLE:VALue "ShortTimeDistortionAverage", "50"
 VARIABLE:VALue? "ShortTimeDistortionAverage"

Query may return: "ShortTimeDistortionAverage", "50"

ShortTimeDistortionCh[1..3]?

Query all six values resulting from the Short Time Distortion measurement for the specified channel.

Syntax VARIable:VALue? "ShortTimeDistortionCh[1..3]"

Group Results

Arguments None

Related Commands ShortTimeDistortionCh[1..3]Val[1..6]?
ShortTimeDistortionK2T?

Returns The order of results: Rise (ns), Fall (ns), Overshoot (%), Undershoot (%), Settling Rise (ns), Settling Fall (ns).
Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ShortTimeDistortionCh[1..3]"

Query may return: "ShortTimeDistortionCh2 30.74 25.37 1.33 3.52 0.0 0.0"

ShortTimeDistortionCh[1..3]Val[1..6]?

Query the value resulting from the Short Time Distortion measurement for the specified channel and value.

Syntax VARIABLE:VALue? “ShortTimeDistortionCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands ShortTimeDistortionCh[1..3]?
ShortTimeDistortionK2T?

Returns The order of results: 1-Rise (ns), 2-Fall (ns), 3-Overshoot (%), 4-Undershoot (%), 5-Settling Rise (ns), 6-Settling Fall (ns).
Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALue? “ShortTimeDistortionCh[1..3]Val[1..6]”

Query may return: “ShortTimeDistortionCh2Val3 25.37”

ShortTimeDistortionK2T?

Query the result for the K2T value resulting from the Short Time Distortion measurement.

Syntax VARIable:VALue? "ShortTimeDistortionK2T"

Group Results

Arguments None

Related Commands ShortTimeDistortionCh[1..3]
ShortTimeDistortionCh[1..3]Val[1..6]?

Returns The returned value is in percent (%).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ShortTimeDistortionK2T"

Query may return: "ShortTimeDistortionK2T 2.56"

ShortTimeDistortionLine <line number>

Set or query Short Time Distortion line number.

Syntax VARIABLE:VALue "ShortTimeDistortionLine", "<line number>"
 VARIABLE:VALue? "ShortTimeDistortionLine"

Group Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands ShortTimeDistortionAverage

Returns The returned value has no unit.

Examples VARIABLE:VALue "ShortTimeDistortionLine", "165"
 VARIABLE:VALue? "ShortTimeDistortionLine"

Query may return: "ShortTimeDistortionLine 165"

ShortTimeDistortionMultiLineEnd <line number>

Set or query the ending line number used to perform the Short Time Distortion measurement on multiple lines.

Syntax VARIable:VALue “ShortTimeDistortionMultiLineEnd”, “<line number>”

VARIable:VALue? “ShortTimeDistortionMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIable:VALue “ShortTimeDistortionMultiLineEnd”, “77”

VARIable:VALue? “ShortTimeDistortionMultiLineEnd”

Query may return: “ShortTimeDistortionMultiLineEnd 77”

ShortTimeDistortionMultiLineStart <line number>

Set or query the starting line number used to perform the Short Time Distortion measurement on multiple lines.

Syntax VARIable:VALue “ShortTimeDistortionMultiLineStart”, “<line number>”

VARIable:VALue? “ShortTimeDistortionMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “ShortTimeDistortionMultiLineStart”, “79”

VARIable:VALue? “ShortTimeDistortionMultiLineStart”
Query may return: “ShortTimeDistortionMultiLineStart 79”

ShortTimeDistortionPassCh[1..3]?

Query the pass/fail status for all six values resulting from the Short Time Distortion measurement for the specified channel. The values used for the relative comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionPassCh[1..3]"

Group Results

Arguments None

Related Commands ShortTimeDistortionPassCh[1..3]Val[1..6]?
ShortTimeDistortionPassK2T?

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "ShortTimeDistortionPassCh[1..3]"

Query may return: "ShortTimeDistortionPassCh1 1 1 1 1 0 0"

ShortTimeDistortionPassCh[1..3]Val[1..6]?

Query the pass/fail status for the value resulting from the Short Time Distortion measurement for the specified channel and value. The values used for the relative comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionPassCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands ShortTimeDistortionPassCh[1..3]?
ShortTimeDistortionPassK2T?

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "ShortTimeDistortionPassCh[1..3]Val[1..6]"

Query may return: "ShortTimeDistortionPassCh2Val3 1"

ShortTimeDistortionPassK2T?

Query the pass/fail status for the K2T value resulting from the Short Time Distortion measurement. The value used for the relative comparison is defined in the Limits file.

Syntax VARIable:VALue? "ShortTimeDistortionPassK2T"

Group Results

Arguments None

Related Commands ShortTimeDistortionPassCh[1..3]?
ShortTimeDistortionPassCh[1..3]Val[1..6]?

Returns A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIable:VALue? "ShortTimeDistortionPassK2T"

Query may return:"ShortTimeDistortionPassK2T 1"

ShortTimeDistortionRelCh[1..3]?

Query all six values resulting from the Short Time Distortion relative measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionRelCh[1..3]"

Group Results

Arguments None

Related Commands ShortTimeDistortionRelCh[1..3]Val[1..6]?
ShortTimeDistortionRelK2T?

Returns The order of results: Rise (ns), Fall (ns), Overshoot (%), Undershoot (%),
Settling Rise (ns), Settling Fall (ns).
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionRelCh[1..3]"

Query may return: "ShortTimeDistortionRelCh2 0.52 0.13 0.17 0.17 0.0 0.0"

ShortTimeDistortionRelCh[1..3]Val[1..6]?

Query the value resulting from the Short Time Distortion relative measurement for the specified channel and value. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “ShortTimeDistortionRelCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands ShortTimeDistortionRelCh[1..3]?
ShortTimeDistortionRelK2T?

Returns The order of results: 1-Rise (ns), 2-Fall (ns), 3-Overshoot (%), 4-Undershoot (%), 5-Settling Rise (ns), 6-Settling Fall (ns).
Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “ShortTimeDistortionRelCh[1..3]Val[1..6]”

Query may return:“ShortTimeDistortionCh2Val2 0.13”

ShortTimeDistortionRelK2T?

Query the K2T value resulting from the Short Time Distortion relative measurement. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionRelK2T"

Group Results

Arguments None

Related Commands ShortTimeDistortionRelCh[1..3]?
ShortTimeDistortionRelCh[1..3]Val[1..6]?

Returns The returned value is in percent (%).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionRelK2T"

Query may return: "ShortTimeDistortionRelK2T 0.42"

ShortTimeDistortionSet<setting>

Set or query whether to measure Short Time Distortion upon Execute.

Syntax VARIable:VALue “ShortTimeDistortionSet”, “<setting>”
VARIable:VALue? “ShortTimeDistortionSet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, or 1.

Related Commands Execute
ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “ShortTimeDistortionSet”, “ON”
VARIable:VALue? “ShortTimeDistortionSet”

Query may return: “ShortTimeDistortionSet ON”

ShortTimeDistortionStatus?

Query the status of the Short Time Distortion measurement.

Syntax VARIABLE:VALUE? "ShortTimeDistortionStatus"

Group Status

Related Commands Execute
ExecuteReport

Returns Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed.
Returns --- when no measurement is taken.

Examples Query may return: "ShortTimeDistortionStatus Pass"

SpatialDistortionAll?

Query the measured values of all the Spatial Distortion measurements.

Syntax	VARIABLE:VALUE? "SpatialDistortionAll"
Group	Results
Arguments	None
Returns	The order of results: Top crop (lines), Bottom crop (lines), First active line, Last active line, V Scaling (%), V Offset (lines), Left crop (pixels), Right crop (pixels), H start (pixels), H end (pixels), H Scaling (%), and H Offset (pixels). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "SpatialDistortionAll" Query may return: "SpatialDistortionAll 0.0 0.0 21.0 525.0 99.14 0.31 -1.08 -1.62 119.74 840.34 113.96 -4.04"

SpatialDistortionAverage <samples>

Set or query the total number of samples over which to average the Spatial Distortion measurement.

Syntax VARIABLE:VALue “SpatialDistortionAverage”, “<samples>”

VARIABLE:VALue? “SpatialDistortionAverage”

Group Measurement Setup

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIABLE:VALue “SpatialDistortionAverage”, “1”

VARIABLE:VALue? “SpatialDistortionAverage”

Query may return: “SpatialDistortionAverage 1”

SpatialDistortionBMPRefFile<pathstring>

Load the spatial distortion BMP reference file to perform the Spatial Distortion measurement.

Syntax VARIABLE:VALue “SpatialDistortionBMPRefFile”, “<pathstring>”
 VARIABLE:VALue? “SpatialDistortionBMPRefFile”

Group Measurement Setup

Arguments <pathstring> specifies the path/filename with extension where the Reference file is located. Can either be the full path and filename with extension, or just the filename with extension.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALue “SpatialDistortionBMPRefFile”,
 “C:\VMApps\OptHDSD\RefBmps\M1080.bmp”

Query may return: “SpatialDistortionBMPRefFile OK”

SpatialDistortionBottomCrop?

Query the measured Bottom crop value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionBottomCrop"

Group Results

Arguments None

Returns The returned value is in lines. The returned value is an integer or a floating point number.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionBottomCrop"
Query may return: "SpatialDistortionBottomCrop 0.0"

SpatialDistortionFirstActiveLine?

Query the measured First active line value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionFirstActiveLine"

Group Results

Arguments None

Returns The returned value has no unit. The returned value is an integer or a floating point number.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionFirstActiveLine"
Query may return: "SpatialDistortionFirstActiveLine 21.0"

SpatialDistortionHEnd?

Query the measured horizontal end value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionHEnd"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionHEnd"
Query may return: "SpatialDistortionHEnd 840.34"

SpatialDistortionHOffset?

Query the measured horizontal offset value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionHOffset"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionHOffset"
Query may return: "SpatialDistortionHOffset -4.04"

SpatialDistortionHScaling?

Query the measured horizontal scaling value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionHScaling"

Group Results

Arguments None

Returns The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionHScaling"
Query may return: "SpatialDistortionHScaling 113.96"

SpatialDistortionHStart?

Query the measured horizontal start value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionHStart"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionHStart"
Query may return: "SpatialDistortionHStart 119.74"

SpatialDistortionLastActiveLine?

Query the measured Last active line value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? “SpatialDistortionLastActiveLine”

Group Results

Arguments None

Returns The returned value has no unit.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “SpatialDistortionLastActiveLine”
Query may return: “SpatialDistortionLastActiveLine 525.0”

SpatialDistortionLeftCrop?

Query the measured Left crop value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionLeftCrop"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionLeftCrop"
Query may return: "SpatialDistortionLeftCrop -1.08"

SpatialDistortionPassAll?

Query the pass/fail status for all the values of the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionPassAll"

Group Results

Arguments None

Returns The order of results: Top crop (lines), Bottom crop (lines), First active line, Last active line, V Scaling (%), V Offset (lines), Left crop (pixels), Right crop (pixels), H start (pixels), H end (pixels), H Scaling (%), and H Offset (pixels).

A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SpatialDistortionPassAll"
Query may return: "SpatialDistortionPassAll 1 1 1 1 1 1 0 0 0 0 0"

SpatialDistortionPassBottomCrop?

Query the pass/fail status for the measured Bottom crop value of the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionPassBottomCrop"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "SpatialDistortionPassBottomCrop"
Query may return: "SpatialDistortionPassBottomCrop 1"

SpatialDistortionPassFirstActiveLine?

Query the pass/fail status for the measured First active line value of the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionPassFirstActiveLine"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SpatialDistortionPassFirstActiveLine"
Query may return: "SpatialDistortionPassFirstActiveLine 1"

SpatialDistortionPassHEnd?

Query the pass/fail status for the measured horizontal end value of the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionPassHEnd"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "SpatialDistortionPassHEnd"
Query may return: "SpatialDistortionPassHEnd 0"

SpatialDistortionPassHOffset?

Query the pass/fail status for the measured horizontal offset value of the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionPassHOffset"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SpatialDistortionPassHOffset"
Query may return: "SpatialDistortionPassHOffset 0"

SpatialDistortionPassHScaling?

Query the pass/fail status for the measured horizontal scaling value of the Spatial Distortion measurement.

Syntax	VARIABLE:VALUE? "SpatialDistortionPassHScaling"
Group	Results
Arguments	None
Returns	A returned value of 1 means pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "SpatialDistortionPassHScaling" Query may return: "SpatialDistortionPassHScaling 0"

SpatialDistortionPassHStart?

Query the pass/fail status for the measured horizontal start value of the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionPassHStart"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SpatialDistortionPassHStart"
Query may return: "SpatialDistortionPassHStart 0"

SpatialDistortionPassLastActiveLine?

Query the pass/fail status for the measured Last active line value of the Spatial Distortion measurement.

Syntax	VARIABLE:VALUE? "SpatialDistortionPassLastActiveLine"
Group	Results
Arguments	None
Returns	A returned value of 1 means pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "SpatialDistortionPassLastActiveLine" Query may return: "SpatialDistortionPassLastActiveLine 1"

SpatialDistortionPassLeftCrop?

Query the pass/fail status for the measured Left crop value of the Spatial Distortion measurement.

Syntax VARIable:VALue? “SpatialDistortionPassLeftCrop”

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? “SpatialDistortionPassLeftCrop”
Query may return: “SpatialDistortionPassLeftCrop 0”

SpatialDistortionPassRightCrop?

Query the pass/fail status for the measured Right crop value of the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionPassRightCrop"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "SpatialDistortionPassRightCrop"
Query may return: "SpatialDistortionPassRightCrop 0"

SpatialDistortionPassTopCrop?

Query the pass/fail status for the measured Top crop value of the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionPassTopCrop"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SpatialDistortionPassTopCrop"
Query may return: "SpatialDistortionPassTopCrop 1"

SpatialDistortionPassVOffset?

Query the pass/fail status for the measured vertical Offset value of the Spatial Distortion measurement.

Syntax	VARIABLE:VALUE? "SpatialDistortionPassVOffset"
Group	Results
Arguments	None
Returns	A returned value of 1 means pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "SpatialDistortionPassVOffset" Query may return: "SpatialDistortionPassVOffset 1"

SpatialDistortionPassVScaling?

Query the pass/fail status for the measured vertical Scaling value of the Spatial Distortion measurement.

Syntax VARIable:VALue? “SpatialDistortionPassVScaling”

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

Examples VARIable:VALue? “SpatialDistortionPassVScaling”
Query may return: “SpatialDistortionPassVScaling 1”

SpatialDistortionRelAll?

Query returns all the relative values resulting from the Spatial Distortion measurement.

Syntax	VARIABLE:VALUE? "SpatialDistortionRelAll"
Group	Results
Arguments	None
Returns	The order of results: Top crop (lines), Bottom crop (lines), First active line, Last active line, V Scaling (%), V Offset (lines), Left crop (pixels), Right crop (pixels), H Start (pixels), H End (pixels), H Scaling (%), H Offset (pixels). Returns "--" if no valid value is currently available.
Examples	VARIABLE:VALUE? "SpatialDistortionRelAll" Query may return: "SpatialDistortionRelAll 0.0 0.0 -1.0 0.0 -0.86 0.31 -1.08 -1.62 -1.88 -1.01 13.96 -4.04"

SpatialDistortionRelBottomCrop?

Query the relative value of Bottom crop resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionRelBottomCrop"

Group Results

Arguments None

Returns The returned value is in lines.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionRelBottomCrop"
Query may return: "SpatialDistortionRelBottomCrop 0.0"

SpatialDistortionRelFirstActiveLine?

Query returns the relative value of the First active line resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionRelFirstActiveLine"

Group Results

Arguments None

Returns The returned value has no unit.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionRelFirstActiveLine"
Query may return: "SpatialDistortionRelFirstActiveLine -1.0"

SpatialDistortionRelHEnd?

Query returns the horizontal end relative value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALue? "SpatialDistortionRelHEnd"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "SpatialDistortionRelHEnd"
Query may return: "SpatialDistortionRelHEnd -1.01"

SpatialDistortionRelHOffset?

Query returns the horizontal offset relative value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionRelHOffset"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionRelHOffset"
Query may return: "SpatialDistortionRelHOffset -4.04"

SpatialDistortionRelHScaling?

Query returns the horizontal scaling relative value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionRelHScaling"

Group Results

Arguments None

Returns The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionRelHEnd"
Query may return: "SpatialDistortionRelHEnd 13.96"

SpatialDistortionRelHStart?

Query returns the horizontal start relative value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionRelHStart"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionRelHStart"
Query may return: "SpatialDistortionRelHStart -1.88"

SpatialDistortionRelLastActiveLine?

Query returns the Last active line relative value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionRelLastActiveLine"

Group Results

Arguments None

Returns The returned value has no unit.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionRelLastActiveLine"
Query may return: "SpatialDistortionRelLastActiveLine 0.0"

SpatialDistortionRelLeftCrop?

Query returns the Left crop relative value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionRelLeftCrop"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionRelLeftCrop"
Query may return: "SpatialDistortionRelLeftCrop -0.44"

SpatialDistortionRelRightCrop?

Query returns the Right crop relative value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionRelRightCrop"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionRelRightCrop"
Query may return: "SpatialDistortionRelRightCrop -1.62"

SpatialDistortionRelTopCrop?

Query returns the Top crop relative value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionRelTopCrop"

Group Results

Arguments None

Returns The returned value is in lines.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionRelTopCrop"
Query may return: "SpatialDistortionRelTopCrop 0.0"

SpatialDistortionRelVScaling?

Query returns the vertical scaling relative value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALUE? "SpatialDistortionRelVScaling"

Group Results

Arguments None

Returns The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "SpatialDistortionRelVScaling"
Query may return: "SpatialDistortionRelVScaling -0.86"

SpatialDistortionRelVOffset?

Query returns the vertical offset relative value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionRelVOffset"

Group Results

Arguments None

Returns The returned value is in lines.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionRelVOffset"
Query may return: "SpatialDistortionRelVOffset 0.31"

SpatialDistortionRightCrop?

Query returns the measured Right crop value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALue? "SpatialDistortionRightCrop"

Group Results

Arguments None

Returns The returned value is in pixels.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "SpatialDistortionRightCrop"
Query may return: "SpatialDistortionRightCrop -1.62"

SpatialDistortionSet<setting>

Set or query whether to perform the Spatial Distortion measurement upon execute.

Syntax VARIable:VALue “SpatialDistortionSet”, “<setting>”
 VARIable:VALue? “SpatialDistortionSet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, or 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “SpatialDistortionSet”, “ON”
 VARIable:VALue? “SpatialDistortionSet”

Query may return: “SpatialDistortionSet ON”

SpatialDistortionStatus?

Query the status of the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionStatus"

Group Status

Arguments None

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "SpatialDistortionStatus"
Query may return: "SpatialDistortionStatus Pass"

SpatialDistortionTopCrop?

Query the measured Top crop value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionTopCrop"

Group Results

Arguments None

Returns The returned value is in lines.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionTopCrop"
Query may return: "SpatialDistortionTopCrop 0.0"

SpatialDistortionVOffset?

Query the measured vertical Offset value resulting from the Spatial Distortion measurement.

Syntax VARIABLE:VALue? "SpatialDistortionVOffset"

Group Results

Arguments None

Returns The returned value is in lines.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "SpatialDistortionVOffset"
Query may return: "SpatialDistortionVOffset 0.31"

SpatialDistortionVScaling?

Query the measured V Scaling value resulting from the Spatial Distortion measurement.

Syntax VARIable:VALue? "SpatialDistortionVScaling"

Group Results

Arguments None

Returns The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "SpatialDistortionVScaling"
Query may return: "SpatialDistortionVScaling 99.14"

StopOnError <setting>

Set or query Stop on Error is enabled. It enables Stop on Limit testing failure option.

Syntax VARIABLE:VALUE "StopOnError", "<setting>"
 VARIABLE:VALUE? "StopOnError"

Group Run

Arguments <setting> Valid values are: OFF, ON, 0, or 1.

Returns Returns OFF or ON.

Examples VARIABLE:VALUE "StopOnError", "OFF"
 VARIABLE:VALUE? "StopOnError"

Query may return: "StopOnError OFF"

SyncAverage <samples>

Set or query the number of samples over which to average the H Sync measurement.

Syntax VARIable:VALue “SyncAverage”, “<samples>”
 VARIable:VALue? “SyncAverage”

Group Setup

Related Commands SyncLine
 SyncTimes?

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “SyncAverage”, “1”
 VARIable:VALue? “SyncAverage”

Query may return: “SyncAverage 1”

SyncLevelsmV?

Query all synchronization levels resulting from the H Sync measurement. For Tri-Level Sync, this returns three levels. For Bi-Level Sync, this returns two levels.

Syntax VARIABLE:VALue? "SyncLevelsmV"

Group Results

Arguments None

Related Commands SyncLevelsmVVal[1..3]

Returns The order of results:
For Tri-Level: FrontPorchLevel NegativeSyncLevel PositiveSyncLevel.
For Bi-Level: FrontPorchLevel SyncLevel.
Returns "----" if no valid measurement currently available.

Examples VARIABLE:VALue? "SyncLevelsmV"

Query may return: "SyncLevelsmV 0.89 -298.31 299.11"

SyncLevelsmVVal[1..3]?

Query the specified synchronization level resulting from a H Sync measurement.

Syntax VARIable:VALue? “SyncLevelsmVVal[1..3]”

Group Results

Arguments None

Returns The returned value is in millivolts (mV).
Values must be in the following ranges:
For Tri-Level, 1..3
For Bi-Level, 1..2
Values must designate the following levels:
For Tri-Level: 1. FrontPorchLevel, 2. NegativeSyncLevel, 3. PositiveSyncLevel.
For Bi-Level: 1. FrontPorchLevel, 2. SyncLevel.
Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “SyncLevelsmVVal[1..3]”

Query may return: “SyncLevelsmVVal3 299.11”

SyncLine <line number>

Set or query line number that is to be used for H Sync measurement.

Syntax VARIable:VALue “SyncLine”, “<line number>”
 VARIable:VALue? “SyncLine”

Group Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “SyncLine”, “200”
 VARIable:VALue? “SyncLine”

Query may return: “SyncLine 200”

SyncMeasuredOnCh1Set<setting>

Set or query the selection of the Measured on CH1 checkbox used to perform the H Sync measurement.

Syntax VARIable:VALue “SyncMeasuredOnCh1Set”, “<setting>”
VARIable:VALue? “SyncMeasuredOnCh1Set”

Group Setup

Related Commands Trigger

Arguments <setting>Valid values are: OFF, ON, 0, or 1.

Returns Query returns 1 if selected or 0 if deselected.

Examples VARIable:VALue “SyncMeasuredOnCh1Set”, “1”
VARIable:VALue? “SyncMeasuredOnCh1Set”

Query may return: “SyncMeasuredOnCh1Set 1”

SyncMultiLineEnd <line number>

Set or query the ending line number used to perform the H Sync measurement on multiple lines.

Syntax VARIABLE:VALue “SyncMultiLineEnd”, “<line number>”

VARIABLE:VALue? “SyncMultiLineEnd”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the ending line number must be greater than or equal to the starting line number.

Returns The returned value has no unit.

Examples VARIABLE:VALue “SyncMultiLineEnd”, “229”

VARIABLE:VALue? “SyncMultiLineEnd”
Query may return: “SyncMultiLineEnd 229”

SyncMultiLineStart <line number>

Set or query the starting line number used to perform the H Sync measurement on multiple lines.

Syntax VARIable:VALue “SyncMultiLineStart”, “<line number>”

VARIable:VALue? “SyncMultiLineStart”

Group Measurement Setup

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. The value for the starting line number must be less than or equal to the ending line number.

Returns The returned value has no unit.

Examples VARIable:VALue “SyncMultiLineStart”, “229”

VARIable:VALue? “SyncMultiLineStart”
Query may return: “SyncMultiLineStart 229”

SyncPassLevelsmV?

Query the pass/fail status for all synchronization levels. For Tri-Level Sync, this returns three values. For Bi-Level Sync, this also returns three values but with “---” returned for the third value (instead of a pass/fail indicator).

The values used for the relative comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? “SyncPassLevelsmV”

Group Results

Arguments None

Related Commands SyncPassLevelsmVVal[1..3]

Returns The order of results:
For Tri-Level: FrontPorchLevel, NegativeSyncLevel, PositiveSyncLevel.
For Bi-Level: FrontPorchLevel, SyncLevel.
A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? “SyncPassLevelsmV”

Query may return: “SyncPassLevelsmV 1 1 1”

SyncPassLevelsmVVal[1..3]?

Query pass/fail status for the specified synchronization level. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "SyncPassLevelsmVVal[1..3]"

Group Results

Arguments None

Related Commands SyncPassLevelsmV

Returns Values must be in the following ranges:
For Tri-Level, 1..3
For Bi-Level, 1..2
Values designate the following levels:
For Tri-Level: 1. FrontPorchLevel, 2. NegativeSyncLevel, 3. PositiveSyncLevel.
For Bi-Level: 1. FrontPorchLevel, 2. SyncLevel.
A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SyncPassLevelsmVVal[1..3]"

Query may return: "SyncPassLevelsmVVal3 1"

SyncPassTimes?

Query the pass/fail status for all synchronization times. The values used for the pass/fail test determination are defined in the Limits file.

For Tri-Level Sync, the query returns ten values.
For Bi-Level Sync, the query returns eight values.

Syntax VARIABLE:VALue? “SyncPassTimes”

Group Results

Arguments None

Related Commands SyncPassTimesVal[1..10]

Returns The order of results:
For Tri-Level: 1. Front Porch, 2. Negative Sync Fall,
3. Negative Sync Width, 4. Sync Rise, 5. Positive Sync Width,
6. Positive Sync Fall, 7. Back Porch, 8. Total Line Time,
9. Start of Addressable Video, 10. End of Addressable Video.

For Bi-Level: 1. Front Porch, 2. Negative Sync Fall,
3. Negative Sync Width, 4. Sync Rise), 5. Back Porch,
6. Total Line Time, 7. Start of Addressable Video,
8. End of Addressable Video.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALue? “SyncPassTimes”

Query may return: “SyncPassTimes 1 1 1 1 1 1 1 1 1 1”

SyncPassTimesVal[1..10]?

Query the pass/fail status for the specified synchronization time. The value used for the pass/fail test determination is defined in the Limits file.

Syntax VARIABLE:VALUE? "SyncPassTimesVal[1..10]"

Group Results

Arguments None

Related Commands SyncTimes

Returns Values must be in these ranges:
For Tri-Level 1..10
For Bi-Level 1..8

Values designate the following times:
For Tri-Level: 1. Front Porch, 2. Negative Sync Fall,
3. Negative Sync Width, 4. Sync Rise, 5. Positive Sync Width,
6. Positive Sync Fall, 7. Back Porch, 8. Total Line Time,
9. Start of Addressable Video, 10. End of Addressable Video.

For Bi-Level: 1. Front Porch, 2. Negative Sync Fall,
3. Negative Sync Width, 4. Sync Rise), 5. Back Porch,
6. Total Line Time, 7. Start of Addressable Video,
8. End of Addressable Video.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "SyncTimesVal[1..10]"

Query may return: "SyncTimesVal2 0"

SyncRelLevelsM?

Query the relative values for all synchronization levels. For Tri-Level Sync, this returns three values.

For Bi-Level Sync, this also returns three values but with “---” returned for the third value.

The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? “SyncRelLevelsM”

Group Results

Arguments None

Related Commands SyncRelLevelsMVal[1..3]

Returns The returned value is in millivolts (mV).
The order of results:
For Tri-Level: Front Porch Level, Negative Sync Level, Positive Sync Level.
For Bi-Level: Front Porch Level, Sync Level.

Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALUE? “SyncRelLevelsM”

Query may return: “SyncPassLevelsM 0.36 1.06 -1.57”

SyncRelLevelsMVVal[1..3]?

Query relative values for the specified synchronization level. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? "SyncRelLevelsMVVal[1..3]"

Group Results

Arguments None

Related Commands SyncRelLevelsMV

Returns The returned value is in millivolts (mV).
Values must be in the following ranges:
For Tri-Level, 1..3
For Bi-Level, 1..2
Values designate the following levels:
For Tri-Level: 1. Front Porch Level, 2. Negative Sync Level,
3. Positive Sync Level.
For Bi. Level: 1. Front Porch Level, 2. Sync Level.

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "SyncRelLevelsMVVal[1..3]"

Query may return: "SyncRelLevelsMVVal3 -1.57"

SyncRelTimes?

Query the relative values for all synchronization times. The values used for the relative comparison are defined in the Reference file.

For Tri-Level Sync, this returns ten times.
For Bi-Level Sync, this returns eight times.

Syntax VARIABLE:VALue? "SyncRelTimes"

Group Results

Arguments None

Related Commands SyncRelTimesVal[1..10]

Returns The order of results:
For Tri-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Positive Sync Width (ns),
6. Positive Sync Fall (ns), 7. Back Porch (ns), 8. Total Line Time (μ s),
9. Start of Addressable Video (μ s), 10. End of Addressable Video (μ s).
For Bi-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Back Porch (ns),
6. Total Line Time (μ s), 7. Start of Addressable Video (μ s),
8. End of Addressable Video (μ s).

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALue? "SyncRelTimes"

Query may return: "SyncRelTimes 40.34 1.47 0.21 -0.76 1.01 1.19 39.95 0.0
0.04 -0.04"

SyncRelTimesVal[1..10]?

Query the relative values of the specified synchronization time. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “SyncRelTimesVal[1..10]”

Group Results

Arguments None

Related Commands SyncRelTimes

Returns Values must be in these ranges:
For Tri-Level 1..10
For Bi-Level 1..8

The order of results:

For Tri-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Positive Sync Width (ns),
6. Positive Sync Fall (ns), 7. Back Porch (ns), 8. Total Line Time (μs),
9. Start of Addressable Video (μs), 10. End of Addressable Video (μs).
For Bi-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Back Porch (ns),
6. Total Line Time (μs), 7. Start of Addressable Video (μs),
8. End of Addressable Video (μs).

Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “SyncRelTimesVal[1..10]”

Query may return: “SyncRelTimesVal2 1.47”

SyncSet <setting>

Set or query whether to measure H Sync upon Execute.

Syntax VARIABLE:VALue “SyncSet”, “<setting>”
 VARIABLE:VALue? “SyncSet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIABLE:VALue “SyncSet”, “ON”
 VARIABLE:VALue? “SyncSet”

Query may return: “SyncSet ON”

SyncStatus?

Query the status of the H Sync measurement.

Syntax VARIable:VALue? "SyncStatus"

Group Status

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "SyncStatus"
Query may return: "SyncStatus Pass"

SyncTimes?

Query all synchronization times resulting from the H Sync measurement.

For Tri-Level Sync, the query returns seven times.

For Bi-Level Sync, the query returns five times.

Syntax VARiable:VALue? "SyncTimes"

Group Results

Arguments None

Related Commands SyncTimesVal[1..10]

Returns The order of results:
For Tri-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth
4. SyncRise, 5. PositiveSyncWidth, 6. PositiveSyncFall, 7. BackPorch.
For Bi-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth
4. SyncRise, 5 BackPorch.

Returns "---" if no valid measurement currently available.

Examples VARiable:VALue? "SyncTimes"

Query may return: "SyncTimes 3822.39 59.03 592.01 52.61 590.40 55.24
1995.19"

SyncTimesVal[1..10]?

Query the specified synchronization time resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "SyncTimesVal[1..10]"

Group Results

Arguments None

Related Commands SyncTimes

Returns Values must be in these ranges:
For Tri-Level 1..7
For Bi-Level 1..5

Values must designate the following times:
For Tri-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth, 4. SyncRise, 5. PositiveSyncWidth, 6. PositiveSyncFall, 7. BackPorch.
For Bi-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth, 4. SyncRise, 5. BackPorch.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "SyncTimesVal[1..10]"

Query may return: "SyncTimesVal2 59.03"

Trigger <trigger>

Set or query video trigger to use for measurement.

Syntax VARIable:VALue “Trigger”, “<trigger>”
 VARIable:VALue? “Trigger”

Group Configuration

Arguments <trigger> Valid triggers are: Ch1, Ch4.

Returns Query returns the current specified trigger.

Examples VARIable:VALue “Trigger”, “Ch4”
 VARIable:VALue? “Trigger”

Query may return: “Trigger Ch4”

UserFormatDelete <user format name>

Delete a user defined format from the list of the currently available user defined formats. The list of the available user defined formats can be queried by using the “UserFormatListAll” command.

Syntax VARIable:VALue “UserFormatDelete”, “<user format name>”

Group Configuration

Arguments <user format name> is a string corresponding to the name of a user defined format.

Returns None

Examples VARIable:VALue “UserFormatDelete”, “HD1080I50”
VARIable:VALue? “UserFormatDelete”

Query may return: “Format HD1080I50”

NOTE. HD formats are available only if option HD is purchased. SD formats are available only if option SD is purchased.

UserFormatDisplay?

Query the details of the various parameters of the currently selected user defined format.

Syntax VARIABLE:VALUE? "UserFormatDisplay"

Group Configuration

Returns Query will return an array of values, delimited by a space (" ") character; in the following order:

"<user format name> <H Active Time> <H Blank Time>
<H Back Porch Time> <H Sync Time> <V Active Time> <V Blank Time>
<V Back Porch Time> <V Sync Time> <Scan Type><Sync Type><Frame
Rate>"

The list of values correspond to the following parameter settings of the user defined format:

<user format name> is the name of the new user defined format.
<H Active Time> specifies the total number of pixels for H Active.
<H Blank Time> specifies the total number of pixels for H Blank.
<H Back Porch Time> specifies the total number of pixels for H Back Porch.
<H Sync Time> specifies the total number of pixels for H Sync.
<V Active Time> specifies the total number of lines for V Active.
<V Blank Time> specifies the total number of lines for V Blank.
<V Back Porch Time> specifies the total number of lines for V Back Porch.
<V Sync Time> specifies the total number of lines for V Sync.
<Scan Type> The setting can be: "Interlaced" and "Progressive".
<Sync Type> The setting can be: "Tri-Level" and "Bi-Level".
<Frame Rate> specifies the frame rate.

Examples The following command will display the details, if a user-format named as "myCustomFormat" has been selected.
VARIABLE:VALUE? "UserFormatDisplay"

Query may return: VARIABLE:VALUE "UserFormatDisplay myCustomFormat
2000 700 300 200 1500 70 60 4 Interlaced Tri-Level 80"

NOTE. HD formats are available only if option HD is purchased. SD formats are available only if option SD is purchased.

UserFormatListAll

Query the list of the currently available user defined formats from the instrument.

Syntax VARIable:VALue? "UserFormatListAll"

Group Configuration

Arguments None

Returns Query returns a list of the names of the currently available user defined format. The individual names are separated/delimited by a space (" ") character. E.g. "user1 user2 user3"

Examples VARIable:VALue? "UserFormatListAll"
Query may return: "UserFormatListAll myCustomFormat1 myCustomFormat2 myCustomFormat3"

NOTE. HD formats are available only if option HD is purchased. SD formats are available only if option SD is purchased.

UserFormatSave <user format name>

Create / update a user defined format All of the input arguments must be specified. The arguments that correspond to an integer value, should be within their respective maximum and minimum limits.

Syntax VARiable:VALue “UserFormatSave”, “<user format name>
 <H Active Time> <H Blank Time> <H Back Porch Time>
 <H Sync Time> <V Active Time> <V Blank Time> <V Back Porch Time>
 <V Sync Time> <Scan Type><Sync Type><Frame Rate>”

Group Configuration

Arguments <user format name> identifies the new user defined format and should be a string (of length ≤ 20).
 <H Active Time> specifies the total number of pixels for H Active and the valid value range is 1..2048.
 <H Blank Time> specifies the total number of pixels for H Blank and the valid value range is 1..(H Active Time).
 <H Back Porch Time> specifies the total number of pixels for H Back Porch and the valid value range is 1..(H Active Time).
 <H Sync Time> specifies the total number of pixels for H Sync and the valid value range is 1..(H Active Time).
 <V Active Time> specifies the total number of lines for V Active and the valid value range is $1.. \leq 600$ (Option SD), Option HD should be ≥ 600 .
 <V Blank Time> specifies the total number of lines for V Blank and the valid value range is 1..(V Active Time).
 <V Back Porch Time> specifies the total number of lines for V Back Porch and the valid value range is 1..(V Active Time).
 <V Sync Time> specifies the total number of lines for V Sync and the valid value range is 1..(V Active Time).
 <Scan Type> valid values: Interlaced, Progressive.
 <Sync Type> valid values: Tri-Level, Bi-Level.
 <Frame Rate> specifies the frame rate, should be a valid positive integer ranging from $1.. \left(\frac{2048X2048X60}{VactiveTime \times HactiveTime} \right)$.

Returns None

Examples The following command will create a new user defined format named as “myCustomFormat”.

```
VARiable:VALue “UserFormatSave”, “myCustomFormat 2000 700 300 200  
1500 70 60 4 86 Interlaced Tri-Level 80”
```

NOTE. *HD formats are available only if option HD is purchased. SD formats are available only if option SD is purchased.*

UserFormatSet <user format name>

Set or query a user defined format from the list of the currently available user defined formats. The list of the available user defined formats can be queried by using the “UserFormatListAll” command.

Syntax VARIABLE:VALue “UserFormatSet”, “<user format name>”
 VARIABLE:VALue? “UserFormatSet”

Group Configuration

Arguments < user format name > must be a string corresponding to the name of a user defined format already present on the instrument.

Returns Query returns the currently selected user defined format.

Examples VARIABLE:VALue “UserFormatSet”, “myTekUserCustomFormat”

 VARIABLE:VALue? “UserFormatSet”
 Query may return: “UserFormatSet myTekUserCustomFormat”

NOTE. HD formats are available only if option HD is purchased. SD formats are available only if option SD is purchased.

VectorscopeGrat <setting>

Set or query Vectorscope graticule. VectorscopeLine and PixLine change the same setting. Thus, if you set VectorscopeLine to 250, then PixLine will also be 250. Likewise, if you set PixLine to 300, Vectorscope Line will be set to 300.

Syntax VARIable:VALue “VectorscopeGrat”, “<setting>”
 VARIable:VALue? “VectorscopeGrat”

Group Configuration

Arguments <setting> valid values: Auto, 709-HD, or 601-SD.
 Auto allows the instrument to select the graticule.
 709-HD selects the graticule for HD signals.
 601-SD selects the graticule for SD signals.

Related Commands VectorscopeLine
 VectorscopeScale

Returns Returns the graticule type used for Vectorscope display.

Examples VARIable:VALue “VectorscopeGrat”, “Auto”
 VARIable:VALue? “VectorscopeGrat”

Query may return: “VectorscopeGrat Auto”

VectorscopeLine <line number>

Set or query Vectorscope Line number to bright up.

Syntax VARIABLE:VALUE "VectorscopeLine", "<line number>"
 VARIABLE:VALUE? "VectorscopeLine"

Group Configuration

Arguments <line number> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Related Commands PixLine
 VectorscopeGrat
 VectorscopeScale

Returns The returned value has no unit.

Examples VARIABLE:VALUE "VectorscopeLine", "165"
 VARIABLE:VALUE? "VectorscopeLine"

Query may return: "VectorscopeLine 165"

VectorscopeScale <setting>

Set or query Vectorscope scale.

Syntax VARIable:VALue “VectorscopeScale”, “<setting>”
VARIable:VALue? “VectorscopeScale”

Group Configuration

Arguments <setting>. Valid values: Auto, 75Pct, and 100Pct.
Auto allows the instrument to select the scale.
75Pct selects the 75% scale.
100Pct selects the 100% scale.

Related Commands VectorscopeGrat
VectorscopeLine

Returns Returns the display scale used for the Vectorscope display.

Examples VARIable:VALue “VectorscopeScale”, “Auto”
VARIable:VALue? “VectorscopeScale”

Query may return: “VectorscopeScale Auto”

VSynCAll?

Query all the measured values resulting from the V Sync measurement. The results returned vary depending on the format setting.

Syntax VARiAble:VALue? “VSynCAll”

Group Results

Arguments None

Returns When the input is set to an SD Interlaced format, the order of results is: Field Period (ms), Vertical Blanking Before Pre Equalization (μ s), Vertical Blanking (mV), Pre Equalization Duration (lines), Equalization Pulse Width (μ s), Equalization Pulse Width (μ s), Vertical Sync Duration (lines), Serration Pulse Width (μ s).

When the input is set to an SD Progressive format, the order of results is: Field Period (ms), Serration Pulse Width (μ s), Vertical Sync Duration (lines).

When the input is set to an HD Interlaced format, the order of results is: Field Period (ms), Vertical Sync Duration (lines), Broad Pulse Start (μ s), Broad Pulse End (μ s).

When the input is set to a HD Progressive format, the order of results is: Frame Period (ms), Vertical Sync Duration (lines), Broad Pulse Start (μ s), Broad Pulse End (μ s).

Returns “---” if no valid value is currently available.

Examples VARiAble:VALue? “VSynCAll”

Query may return: “VSynCAll 16.682 1.308 20.5 3.0 2.3 3.0 4.7” when the input is set to an SD Interlaced format.

Query may return: “VSynCAll 16.874 2.334 6.0” when the input is set to an SD Progressive format.

Query may return: “VSynCAll 16.683 5.0 1.779 13.643” when the input is set to an HD Interlaced format.

Query may return: “VSynCAll 16.683 5.0 3.506 13.51” when the input is set to an HD Progressive format.

NOTE. *In case of interlaced formats, the values returned by the VSyncRelAll command will depend on the field selected using the FieldSelect command. For progressive formats, the FieldSelect command is not applicable.*

VSyncAverage<samples>

Set or query the number of samples over which to average the V Sync measurement.

Syntax VARIable:VALue “VSyncAverage”, “<samples>”
 VARIable:VALue? “VSyncAverage”

Group Results

Arguments <samples> must be in the form of an integer or a floating point value with an exponent. Fractional numbers will return errors. Values outside the range will be adjusted to be within range.

Returns The returned value has no unit.

Examples VARIable:VALue “VSyncAverage”, “1”

 VARIable:VALue? “VSyncAverage”
 Query may return: “VSyncAverage 1”

VSyncBroadPulseEnd?

Query the Broad Pulse End measured value of the V Sync measurement. This command is valid only when the input is set to a HD Interlaced or Progressive format.

Syntax	VARIABLE:VALUE? "VSyncBroadPulseEnd"
Group	Results
Arguments	None
Returns	The returned value is microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncBroadPulseEnd" Query may return: "VSyncBroadPulseEnd 13.643"

VSyncBroadPulseStart?

Query the Broad Pulse Start measured value of the V Sync measurement. This command is valid only when the input is set to a HD Interlaced or Progressive format.

Syntax VARIABLE:VALUE? "VSyncBroadPulseStart"

Group Results

Arguments None

Returns The returned value is microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncBroadPulseStart"
Query may return: "VSyncBroadPulseStart 13.643"

VSyncEqPulseWidth?

Query the Equalization Pulse Width measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIable:VALue? "VSyncEqPulseWidth"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncEqPulseWidth"
Query may return: "VSyncEqPulseWidth 2.3"

VSyncPassAll?

Query the pass/fail status of all the values for the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassAll"

Group Results

Arguments None

Returns A returned value of 1 means pass, a returned value of 0 means Fail.

When the input is set to a SD Interlaced format, the order of results is: Field Period (ms), V Blank Before Pre Eq (μ s), Vertical Blanking (mV), Pre Eq Duration (lines), Eq Pulse Width (μ s), Eq Pulse Width (μ s), V Sync Duration (lines), Serr Pulse Width (μ s).

When the input is set to a SD Progressive format the order of results is: Field Period (ms), Serr Pulse Width (μ s), V Sync Duration (lines).

When the input is set to a HD Interlaced format the order of results is: Field Period (ms), V Sync Duration (lines), Broad Pulse Start (μ s), Broad Pulse End (μ s).

When the input is set to a HD Progressive format the order of results is: Frame Period (ms), V Sync Duration (lines), Broad Pulse Start (μ s), Broad Pulse End (μ s).

Examples VARIABLE:VALue? "VSyncPassAll"

Query may return: "VSyncPassAll 1 0 0 1 1 1 1" when the input is set to an SD Interlaced format.

Query may return: "VSyncPassAll 0 0 1" when the input is set to an SD Progressive format.

Query may return: "VSyncPassAll 1 1 1 1" when the input is set to an HD Interlaced format.

Query may return: "VSyncPassAll 1 1 1 1" when the input is set to an HD Progressive format.

NOTE. *In case of interlaced formats, the values returned by the VSyncRelAll command will depend on the field selected using the FieldSelect command. For progressive formats, the FieldSelect command is not applicable.*

VSyncPassBroadPulseEnd?

Query the pass/fail status for the Broad Pulse End result of the V Sync measurement. This command is valid only when the input is set to an HD Interlaced or Progressive format.

Syntax VARIABLE:VALue? “VSyncPassBroadPulseEnd”

Group Results

Arguments None

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALue? “VSyncPassBroadPulseEnd”
Query may return: “VSyncPassBroadPulseEnd 1”

VSyncPassBroadPulseStart?

Query the pass/fail status for the Broad Pulse Start result of the V Sync measurement. This command is valid only when the input is set to an HD Interlaced or Progressive format.

Syntax	VARIABLE:VALUE? "VSyncPassBroadPulseStart"
Group	Results
Arguments	None
Returns	A returned value of 1 means Pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "VSyncPassBroadPulseStart" Query may return: "VSyncPassBroadPulseStart 1"

VSyncPassEqPulseWidth?

Query the pass/fail status for the Equalization Pulse Width result of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIABLE:VALUE? "VSyncPassEqPulseWidth"

Group Results

Arguments None

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "VSyncPassEqPulseWidth"
Query may return: "VSyncPassEqPulseWidth 1"

VSyncPassPeriod?

Query the pass/fail status for the Period value of the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassPeriod"

Group Results

Arguments None

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIable:VALue? "VSyncPassPeriod"
Query may return: "VSyncPassPeriod 1"

VSyncPassPreEqDuration?

Query the pass/fail status for the Pre-Equalization Duration measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIABLE:VALue? “VSyncPassPreEqDuration”

Group Results

Arguments None

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALue? “VSyncPassPreEqDuration”
Query may return: “VSyncPassPreEqDuration 1”

VSyncPassSerrPulseWidth?

Query the pass/fail status for the Serration Pulse Width measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced or Progressive format.

Syntax	VARIABLE:VALUE? "VSyncPassSerrPulseWidth"
Group	Results
Arguments	None
Returns	A returned value of 1 means Pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "VSyncPassSerrPulseWidth" Query may return: "VSyncPassSerrPulseWidth 1"

VSyncPassVBlankDuration?

Query the pass/fail status for the V Blank Duration measured value of the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncPassVBlankDuration"

Group Results

Arguments None

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALUE? "VSyncPassVBlankDuration"
Query may return: "VSyncPassVBlankDuration 1"

VSyncPassVBlankPreEq?

Query the pass/fail status for the V Blank Pre-Equalization measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax	VARIABLE:VALUE? "VSyncPassVBlankPreEq"
Group	Results
Arguments	None
Returns	A returned value of 1 means Pass, a returned value of 0 means Fail.
Examples	VARIABLE:VALUE? "VSyncPassVBlankPreEq" Query may return: "VSyncPassVBlankPreEq 0"

VSyncPassVSyncDuration?

Query the pass/fail status for the V Sync Duration measured value of the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassVSyncDuration"

Group Results

Arguments None

Returns A returned value of 1 means Pass, a returned value of 0 means Fail.

Examples VARIABLE:VALue? "VSyncPassVSyncDuration"
Query may return: "VSyncPassVSyncDuration 1"

VSyncPeriod?

Query the Period measured value of the V Sync measurement.

Syntax VARIable:VALue? "VSyncPeriod"

Group Results

Arguments None

Returns The returned value is milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPeriod"
Query may return: "VSyncPeriod 16.682"

VSyncPreEqDuration?

Query the Pre-Equalization Duration measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIABLE:VALue? "VSyncPreEqDuration"

Group Results

Arguments None

Returns The returned value is in lines.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPreEqDuration"
Query may return: "VSyncPreEqDuration 3.0"

VSyncRelAll?

Query all the relative values resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncRelAll"
Group	Results
Arguments	None
Returns	<p>When the input is set to an SD Interlaced format the order of results is: Field Period (ms), V Blank Before Pre Eq (μs), Vertical Blanking (mV), Pre Eq Duration (lines), Eq Pulse Width (μs), Eq Pulse Width (μs), V Sync Duration (lines), Serr Pulse Width (μs).</p> <p>When the input is set to an SD Progressive format the order of results is: Field Period (ms), Serr Pulse Width (μs), V Sync Duration (lines).</p> <p>When the input is set to an HD Interlaced format the order of results is: Field Period (ms), V Sync Duration (lines), Broad Pulse Start (μs), Broad Pulse End (μs).</p> <p>When the input is set to an HD Progressive format the order of results is: Frame Period (ms), V Sync Duration (lines), Broad Pulse Start (μs), Broad Pulse End (μs).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "VSyncRelAll"</p> <p>Query may return: "VSyncRelAll 16.682 1.308 20.5 3.0 2.3 3.0 4.7" when the input is set to an SD Interlaced format.</p> <p>Query may return: "VSyncRelAll 16.874 2.334 6.0" when the input is set to an SD Progressive format.</p> <p>Query may return: "VSyncRelAll 16.683 5.0 1.779 13.643" when the input is set to an HD Interlaced format.</p> <p>Query may return: "VSyncRelAll 16.683 5.0 3.506 13.51" when the input is set to an HD Progressive format.</p>

NOTE. In the case of interlaced formats, the values returned by the VSyncRelAll command will depend on the field selected using the FieldSelect command. For progressive formats, the FieldSelect command is not applicable.

VSyncRelBroadPulseEnd?

Query the Broad Pulse End relative value resulting from the V Sync measurement. This command is valid only when the input is set to an SD Interlaced or Progressive format.

Syntax	VARIABLE:VALUE? "VSyncRelBroadPulseEnd"
Group	Results
Arguments	None
Returns	The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRelBroadPulseEnd" Query may return: "VSyncRelBroadPulseEnd 0.021"

VSyncRelBroadPulseStart?

Query the Broad Pulse Start relative value resulting from the V Sync measurement. This command is valid only when the input is set to an SD Interlaced or Progressive format.

Syntax VARIABLE:VALue? "VSyncRelBroadPulseStart"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRelBroadPulseStart"
Query may return: "VSyncRelBroadPulseStart 0.0050"

VSyncRelEqPulseWidth?

Query the relative value of the Equalization Pulse Width resulting from the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax	VARIABLE:VALUE? "VSyncRelEqPulseWidth"
Group	Results
Arguments	None
Returns	The returned value is in microseconds(μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRelEqPulseWidth" Query may return: "VSyncRelEqPulseWidth 0.0"

VSyncRelFieldPeriod?

Query the relative value of the Field Period resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncRelFieldPeriod"

Group Results

Arguments None

Returns The returned value is in milliseconds (ms).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRelFieldPeriod"
Query may return: "VSyncRelFieldPeriod 0.016"

VSyncRelPreEqDuration?

Query the relative value of the Pre-Equalization Duration resulting from the V Sync measurement. This command is valid only when the format is set to an SD Interlaced format.

Syntax	VARIABLE:VALUE? "VSyncRelPreEqDuration"
Group	Results
Arguments	None
Returns	The returned value is in lines. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRelPreEqDuration" Query may return: "VSyncRelPreEqDuration 0.0"

VSyncRelSerrPulseWidth?

Query the relative value of the Serration Pulse Width measurement resulting from the V Sync measurement. This command is valid only when the input is set to an SD Interlaced or Progressive format.

Syntax VARIABLE:VALue? "VSyncRelSerrPulseWidth"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRelSerrPulseWidth"
Query may return: "VSyncRelSerrPulseWidth 0.0"

VSyncRelVBlankDuration?

Query the relative value of the V Blank Duration measurement resulting from the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax	VARIABLE:VALUE? "VSyncRelVBlankDuration"
Group	Results
Arguments	None
Returns	The returned value is in lines. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRelVBlankDuration" Query may return: "VSyncRelVBlankDuration 0.0"

VSyncRelVBlankPreEq?

Query the relative value of the V Blank Pre-Equalization measurement resulting from the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIABLE:VALue? "VSyncRelVBlankPreEq"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRelVBlankPreEq"
Query may return: "VSyncRelVBlankPreEq -0.192"

VSyncRelVSyncDuration?

Query the relative value of the V Sync Duration measurement resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelVSyncDuration"

Group Results

Arguments None

Returns The returned value is in lines.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelVSyncDuration"
Query may return: "VSyncRelVSyncDuration 0.0"

VSyncSerrPulseWidth?

Query the Serration Pulse Width measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced or Progressive format.

Syntax VARIABLE:VALUE? "VSyncSerrPulseWidth"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncSerrPulseWidth"
Query may return: "VSyncSerrPulseWidth 0.0"

VSyncSet <setting>

Set or query whether to measure V Sync upon Execute.

Syntax VARIable:VALue “VSyncSet”, “<setting>”
 VARIable:VALue? “VSyncSet”

Group Configuration

Arguments <setting> Valid values are: OFF, ON, 0, or 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1.

Examples VARIable:VALue “VSyncSet”, “ON”
 VARIable:VALue? “VSyncSet”

Query may return: “VSyncSet ON”

VSyncStatus?

Query the status of the V Sync measurement.

Syntax VARIable:VALue? "VSyncStatus"

Group Status

Arguments None

Returns Query will return one of these values: "Done", "Pass", or "Fail".
Returns Pass when the measurement is completed with limit testing enabled and passed.
Returns Fail when the measurement is completed with limit testing enabled and failed.
Returns Done when the measurement is completed without limit testing.
Returns --- when no measurement is taken.

Examples VARIable:VALue? "VSyncStatus"
Query may return: "VSync Pass"

VSyncVBlankDuration?

Query the V Blank Duration measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIABLE:VALUE? "VSyncVBlankDuration"

Group Results

Arguments None

Returns The returned value is in lines.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncVBlankDuration"
Query may return: "VSyncVBlankDuration 3.0"

VSyncVBlankPreEq?

Query the V Blank Pre-Equalization measured value of the V Sync measurement. This command is valid only when the input is set to an SD Interlaced format.

Syntax VARIABLE:VALUE? "VSyncVBlankPreEq"

Group Results

Arguments None

Returns The returned value is in microseconds (μ s).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncVBlankPreEq"
Query may return: "VSyncVBlankPreEq 1.308"

VSyncVSyncDuration?

Query the V Sync duration measured value of the V Sync measurement.

Syntax VARIable:VALue? "VSyncVSyncDuration"

Group Results

Arguments None

Returns The returned value is in lines.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncVSyncDuration"
Query may return: "VSyncVSyncDuration 3.0"

Warning <string>

Reset warning to 0 or query warning value.

Syntax VARIABLE:VALUE "Warning", "<string>"

Group Setup

Arguments <string> is the warning message reported when a warning is generated.

Related Commands WarningLogSet
WarningReportingMeasure
WarningReportingResults
WarningReportingSignal

Returns None

Examples VARIABLE:VALUE "Warning", "An error has been generated"

WarningReportingMeasure <setting>

Set or query whether measurement warnings create a warning message.

Syntax VARIable:VALue “WarningReportingMeasure”, “<setting>”
 VARIable:VALue? “WarningReportingMeasure”

Group Configuration

Arguments <setting> Valid settings are: OFF, ON, 0, or 1.
 OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportResults
 WarningReportSignal

Returns Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingMeasure”, “ON”
 VARIable:VALue? “WarningReportingMeasure”

Query may return: “WarningReportingMeasure ON”

WarningReportingResults <setting>

Set or query whether results warnings are to create a warning message.

Syntax VARIABLE:VALue “WarningReportingResults”, “<setting>”
 VARIABLE:VALue? “WarningReportingResults”

Group Configuration

Arguments <setting> valid settings are: OFF, 0, ON, or 1.
 OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
 WarningReportingSignal

Returns Query returns the current specified setting.

Examples VARIABLE:VALue “WarningReportingResults”, “ON”
 VARIABLE:VALue? “WarningReportingResults”

Query may return: “WarningReportingResults ON”

WarningReportingSignal <setting>

Set or query whether signal warnings create a warning message.

Syntax VARIable:VALue “WarningReportingSignal”, “<setting>”
VARIable:VALue? “WarningReportingSignal”

Group Configuration

Arguments <setting> valid settings are: OFF, 0, ON, or 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
WarningReportingResults

Returns Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingSignal”, “ON”
VARIable:VALue? “WarningReportingSignal”

Query may return: “WarningReportingSignal ON”



Option VGA Remote Commands

Option VGA Remote Commands

Command Groups

Table 3-1 through Table 3-13 lists the commands organized by functional group. (Refer to the *Table of Contents* for a list of all the commands in alphabetical order.)

Table 3-1: Measurement Setup commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchAverage	Set or query the number of samples over which to average the Ch-Ch Mismatch measurement.
ChChMismatchLine	Set or query the line number used to perform the Ch-Ch Mismatch measurement.
ChChMismatchMultiLineEnd	Set or query the ending line number used to perform the Ch-Ch Mismatch measurement on multiple lines.
ChChMismatchMultiLineStart	Set or query the starting line number used to perform the Ch-Ch Mismatch measurement on multiple lines.
ChChMismatchSet	Set or query whether to perform the Ch-Ch Mismatch measurement upon Execute.
ChChSkewAverage	Set or query the number of samples over which to average the Ch-Ch Skew measurement.
ChChSkewLine	Set or query the line number used to perform the Ch-Ch Skew measurement.
ChChSkewMultiLineEnd	Set or query the ending line number used to perform the Ch-Ch Skew measurement on multiple lines.
ChChSkewMultiLineStart	Set or query the starting line number used to perform the Ch-Ch Skew measurement on multiple lines.
ChChSkewSet	Set or query whether to perform the Ch-Ch Skew measurement upon Execute.
ColorBarsAverage	Set or query the total number of samples over which to average the Color Bars measurement.
ColorBarsLine	Set or query the line number used to perform the Color Bars measurement.
ColorBarsMultiLineEnd	Set or query the ending line number used to perform the Color Bars measurement on multiple lines.
ColorBarsMultiLineStart	Set or query the starting line number used to perform the Color Bars measurement on multiple lines.
ColorBarsSet	Set or query whether to perform the Color Bars measurement upon Execute.
HSyncAverage	Set or query the total number of samples over which to average the H Sync measurement.
HSyncLine	Set or query the line number used to perform the H Sync measurement.

Table 3- 1: Measurement Setup commands (Option VGA) (Cont.)

Header	Description
HSyncMultiLineEnd	Set or query the ending line number used to perform the H Sync measurement on multiple lines.
HSyncMultiLineStart	Set or query the starting line number used to perform the H Sync measurement on multiple lines.
HSyncSet	Set or query whether to perform the H Sync measurement upon Execute.
HSyncJitterLine	Set or query the number of lines used to perform the H Sync Jitter measurement.
HSyncJitterSet	Set or query whether to perform the H Sync Jitter measurement upon Execute.
HTimingAverage	Set or query the total number of samples over which to average the H Timing measurement.
HTimingLine	Set or query the line number used to perform the H Timing measurement.
HTimingMultiLineEnd	Set or query the ending line number used to perform the H Timing measurement on multiple lines.
HTimingMultiLineStart	Set or query the starting line number used to perform the H Timing measurement on multiple lines.
HTimingSet	Set or query whether to perform the H Timing measurement upon Execute.
LinearityAverage	Set or query the total number of samples over which to average the Linearity measurement.
LinearityLine	Set or query the line number used to perform the Linearity measurement.
LinearityMultiLineEnd	Set or query the ending line number used to perform the Linearity measurement on multiple lines.
LinearityMultiLineStart	Set or query the starting line number used to perform the Linearity measurement on multiple lines.
LinearitySet	Set or query whether to perform the Linearity measurement upon Execute.
LumaLevelsAverage	Set or query the total number of samples over which to average the Luma Levels measurement.
LumaLevelsLine	Set or query the line number used to perform the Luma Levels measurement.
LumaLevelsMultiLineEnd	Set or query the ending line number used to perform the Luma Levels measurement on multiple lines.
LumaLevelsMultiLineStart	Set or query the starting line number used to perform the Luma Levels measurement on multiple lines.
LumaLevelsSet	Set or query whether to perform the Luma Levels measurement upon Execute.
NoiseAverage	Set or query the total number of samples over which to average the Noise measurement.
NoiseLine	Set or query the line number performed by the Noise measurement.
NoiseSet	Set or query whether to perform the Noise measurement upon Execute.
VSyncAverage	Set or query the total number of samples over which to average the V Sync measurement.
VSyncSet	Set or query whether to perform the V Sync measurement upon Execute.

Table 3-1: Measurement Setup commands (Option VGA) (Cont.)

Header	Description
VTimingAverage	Set or query the total number of samples over which to average the V Timing measurement.
VTimingSet	Set or query whether to perform the V Timing measurement upon Execute.
VideoTransientAverage	Set or query the total number of samples over which to average the Video Transient measurement.
VideoTransientLine	Set or query the line number used to perform the Video Transient measurement.
VideoTransientMultiLineEnd	Set or query the ending line number used to perform the Video Transient measurement on multiple lines.
VideoTransientMultiLineStart	Set or query the starting line number used to perform the Video Transient measurement on multiple lines.
VideoTransientSet	Set or query whether to perform the Video Transient measurement upon Execute.

Table 3-2: Configuration Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
AutoScale	Set or query whether to use auto scale during measurement.
AutoScaleInit	AutoScaleInit specifies the starting values used by the AutoScale command. Loading specific starting values can speed up the process of taking measurements.
Format	Set or query the video format to use for measurement.
Display	Set or query the Picture display.
Noise500MHzFilterSet	Set or query whether to enable the 500 MHz filter for performing the Noise measurement.
SelectLine	Set or query the line mode to be used for the measurements.
SyncPolarityDetectSet	Set or query the Sync Polarity option which is performed automatically while running the measurements.
TimingStandardType	Set or query the timing standard used while performing the measurements.
UseMIUSet	Set or query, if the hardware accessory "RGBHV MIU" is connected, the VM Series System runs tests in an automatic mode that does not require user intervention. If the RGBHV MIU is not connected, the user must make manual connection changes when prompted by the VM Series System.
UserFormatSet	Set or query a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the "UserFormatListAll" command.

Table 3-2: Configuration Commands (Option VGA) (Cont.)

Header	Description
UserFormatSave	Create/Update a user defined format. All of the input arguments must be specified and should not have any illegal characters. The arguments that correspond to an integer value should be within their respective maximum and minimum limits.
UserFormatDelete	Delete a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the "UserFormatListAll" command.
UserFormatDisplay?	Query the details of the various parameters of the currently selected user-defined format.
UserFormatListAll?	Query the list of the currently available user-defined formats from the instrument.

Table 3-3: Global commands (Option VGA)

Header	Description
:VARIABLE:VALue	
AppStatus?	Query whether the Application Status is: Configure, Measuring, Done, Reported.
DefaultSettings	Restores the default (factory) settings.
Execute	Execute or stop the currently set measurement(s), or query whether any measurement is currently being executed. If the measurement is already in the mode specified by the setting, the command has no effect. For example, if a measurement is already running and VARIABLE:VALue "Execute", "1" is received, the measurement will continue to run.
ID?	Query the ID/Version of the application.
OPComplete	This command is used to ensure that the previous commands have been processed by the instrument before either querying its value or calling the next command. OPComplete is set to "1" whenever a GPIB command has been received and processed and a new command is ready to be processed. OPComplete can only be reset to "0" by the user, and it can only be set to "1", when a command has been sent and the next command is ready to be input. It is initialized to "0" on startup. For the "Execute" command, OPComplete is set to "1" after the execution begins.
RecallSettings	Recall the settings stored in the specified path/filename. Query returns "OK" unless the command is still being processed, in which case it returns the current pathstring argument.
SaveSettings	Save the current settings in the specified path/filename. Query returns "OK" unless the command is still being processed, in which case it returns the current pathstring argument.

Table 3-4: Operations commands (Option VGA)

Header	Description
:VARIABLE:VALue	
RunMode	Set or query the run mode to use for measurements.
SetupAndOrRun	Set or query the setup mode to use for measurements.

Table 3-5: Reference / Limits commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ReferenceFileSave	Saves the current measurement results to a Reference file that can be used for Relative to Reference testing.
ReferenceFileLoad	Specifies the Reference file to be loaded for Relative to Reference testing.
LimitFileLoad	Specifies the Limit file to be loaded for Limit Testing.
ReferenceSet	Set or query whether Reference Testing is enabled or disabled.
LimitSet	Set or query whether Limit Testing is performed upon Execute.
StopOnError	Set or query Stop on Error is enabled.

Table 3-6: Reporting commands (Option VGA)

Header	Description
:VARIABLE:VALue	
EmbedScreenCaptureSet	Set or query whether the screen capture of the instrument display is included in the report file for the measurements.
LogErrors	Set or query whether errors are logged to a file. If enabled, errors are logged in the "C:\VMApps\OptVGA\log.txt" file.
PopupWarnings	Set or query if Pop-up warnings appear on screen.
ReportFormatType	Specifies the file type to be used when ReportGenerate is called.
ReportGenerate	Generates a measurement report of the specified type (if a measurement has been run and results are available), and saves it in the file specified by the pathstring.
ReportMeasurements	Set or query the measurements to write to the report when ReportGenerate is called.
ReportString	Set or query any additional information to write to the report when ReportGenerate is called. This string is initialized to an empty string "" on startup.

Table 3-6: Reporting commands (Option VGA) (Cont.)

Header	Description
WarningReportingMeasure	Set or query whether measurement warnings are reported. These settings are tied to the Warning Types Reported settings located on the Warnings tab.
WarningReportingResults	Set or query whether results warnings are reported. These settings are tied to the Warning Types Reported settings located on the Warnings tab.
WarningReportingSignal	Set or query whether signal warnings are reported. These settings are tied to the Warning Types Reported settings located on the Warnings tab.

Table 3-7: Pass/Fail Status Query commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchPassCh1Ch2?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 measurement.
ChChMismatchPassCh1Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 measurement.
ChChMismatchPassCh2Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 measurement.
ChChMismatchPassPeakToPeakCh1Ch2?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 (%) Peak-Peak measurement.
ChChMismatchPassPeakToPeakCh1Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 (%) Peak-Peak measurement.
ChChMismatchPassPeakToPeakCh2Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 (%) Peak-Peak measurement.
ChChMismatchPassAll?	Query the pass/fail status for all the values of the Ch-Ch Mismatch measurement.
ChChSkewPassCh1Ch2?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 measurement.
ChChSkewPassCh1Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch3 measurement.
ChChSkewPassCh2Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 measurement.
ChChSkewPassPixelClockCh1Ch2?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 pixel clock measurement.
ChChSkewPassPixelClockCh1Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 pixel clock measurement.
ChChSkewPassPixelClockCh2Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 pixel clock measurement.
ChChSkewPassAll?	Query the pass/fail status for all the values of the Ch-Ch Skew measurement.
ColorBarsPassCh[1..3]?	Query the pass/fail status for all the eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val1?	Query the pass/fail status for the White color bar resulting from the Color Bars measurement on the specified channel.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
ColorBarsPassCh[1..3]Val2?	Query the pass/fail status for the Yellow color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val3?	Query the pass/fail status for the Cyan color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val4?	Query the pass/fail status for the Green color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val5?	Query the pass/fail status for the Magenta color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val6?	Query the pass/fail status for the Red color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val7?	Query the pass/fail status for the Blue color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val8?	Query the pass/fail status for the Black color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassAll?	Query the pass/fail status for all the color bars values resulting from the Color Bars measurement on all the channels.
HSyncPassPolarity?	Query the pass/fail status for the Polarity value resulting from the H Sync measurement.
HSyncPassSyncPulseWidth?	Query the pass/fail status for the Pulse Width value resulting from the H Sync measurement.
HSyncPassSyncPeriod?	Query the pass/fail status for the Sync Period value resulting from the H Sync measurement.
HSyncPassFrequency?	Query the pass/fail status for the Frequency value resulting from the H Sync measurement.
HSyncPassRiseTime?	Query the pass/fail status for the Rise Time value resulting from the H Sync measurement.
HSyncPassFallTime?	Query the pass/fail status for the Fall Time value resulting from the H Sync measurement.
HSyncPassOvershoot?	Query the pass/fail status for the Overshoot value resulting from the H Sync measurement.
HSyncPassUndershoot?	Query the pass/fail status for the Undershoot value resulting from the H Sync measurement.
HSyncPassOvershootSettlingTime?	Query the pass/fail status for the Overshoot Settling Time value resulting from the H Sync measurement.
HSyncPassUndershootSettlingTime?	Query the pass/fail status for the Undershoot Settling Time value resulting from the H Sync measurement.
HSyncPassMonotonicRise?	Query the pass/fail status for the Monotonic Rise value resulting from the H Sync measurement.
HSyncPassMonotonicFall?	Query the pass/fail status for the Monotonic Fall value resulting from the H Sync measurement.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
HSyncPassLogicLevel1Value1?	Query the pass/fail status for the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncPassLogicLevel0Value1?	Query the pass/fail status for the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncPassLogicLevel1Value2?	Query the pass/fail status for the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncPassLogicLevel0Value2?	Query the pass/fail status for the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncPassAll?	Query the pass/fail status for all the values resulting from the H Sync measurement.
HSyncJitterPassTime?	Query the pass/fail status for the Time period resulting from the H Sync Jitter measurement.
HSyncJitterPassPixelClock?	Query the pass/fail status for the (%) Pixel Clock value resulting from the H Sync Jitter measurement.
HSyncJitterPassAll?	Query the pass/fail status for all the values resulting from the H Sync Jitter measurement.
HTimingPassBackPorchCh[1..3]?	Query the pass/fail status for the Back Porch value resulting from the H Timing measurement on the specified channel.
HTimingPassLeftBorderCh[1..3]?	Query the pass/fail status for the Left Border value resulting from the H Timing measurement on the specified channel.
HTimingPassAddressableVideoCh[1..3]?	Query the pass/fail status for the Addressable Video value resulting from the H Timing measurement on the specified channel.
HTimingPassRightBorderCh[1..3]?	Query the pass/fail status for the Right Border value resulting from the H Timing measurement on the specified channel.
HTimingPassFrontPorchCh[1..3]?	Query the pass/fail status for the Front Porch value resulting from the H Timing measurement on the specified channel.
HTimingPassSyncPulseWidth?	Query the pass/fail status for the Sync Pulse Width value resulting from the H Timing measurement on the specified channel.
HTimingPassPixelClock?	Query the pass/fail status for the (%) Pixel Clock value resulting from the H Timing measurement on the specified channel.
HTimingPassAll?	Query the pass/fail status for all the values resulting from the H Timing measurement on the specified channel.
LinearityPassResolutionCh[1..3]?	Query the pass/fail status for the Resolution value resulting from the Linearity measurement on the specified channel.
LinearityPassMaxINLCh[1..3]?	Query the pass/fail status for the Max INL value resulting from the Linearity measurement on the specified channel.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
LinearityPassMaxDNLCh[1..3]?	Query the pass/fail status for the Max DNL value resulting from the Linearity measurement on the specified channel.
LinearityPassMonotonicCh[1..3]?	Query the pass/fail status for the Monotonic value resulting from the Linearity measurement on the specified channel.
LinearityPassAll?	Query the pass/fail status for all the values resulting from the Linearity measurement on all the channels.
LumaLevelsPassAmpMaxCh[1..3]?	Query the pass/fail status for the maximum Amplitude value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsPassAmpMinCh[1..3]?	Query the pass/fail status for the minimum Amplitude value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsPassAll?	Query the pass/fail status for all the values resulting from the Luma Levels measurement on all the channels.
NoisePassmVCh[1..3]?	Query the pass/fail status of the Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.
NoisePassdBCh[1..3]?	Query the pass/fail status of the Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.
NoisePassrCh[1..3]?	Query the pass/fail status of the Inj Ratio (in %) value resulting from the Noise Inj Ratio measurement on the specified channel.
NoisePassAll?	Query the pass/fail status for all the values resulting from the Noise Inj Ratio measurement on all the channels.
VSynPassPolarity?	Query the pass/fail status for the Polarity value resulting from the V Sync measurement.
VSynPassPulseWidth?	Query the pass/fail status for the Pulse Width value resulting from the V Sync measurement.
VSynPassSyncPeriod?	Query the pass/fail status for the Sync Period value resulting from the V Sync measurement.
VSynPassFrequency?	Query the pass/fail status for the Frequency value resulting from the V Sync measurement.
VSynPassRiseTime?	Query the pass/fail status for the Rise Time value resulting from the V Sync measurement.
VSynPassFallTime?	Query the pass/fail status for the Fall Time value resulting from the V Sync measurement.
VSynPassOvershoot?	Query the pass/fail status for the Overshoot value resulting from the V Sync measurement.
VSynPassUndershoot?	Query the pass/fail status for the Undershoot value resulting from the V Sync measurement.
VSynPassOvershootSettlingTime?	Query the pass/fail status for the Overshoot Settling Time value resulting from the V Sync measurement.
VSynPassUndershootSettlingTime?	Query the pass/fail status for the Undershoot Settling Time value resulting from the V Sync measurement.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
VSyncPassMonotonicRise?	Query the pass/fail status for the Monotonic Rise value resulting from the V Sync measurement.
VSyncPassMonotonicFall?	Query the pass/fail status for the Monotonic Fall value resulting from the V Sync measurement.
VSyncPassLogicLevel1Value1?	Query the pass/fail status for the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSyncPassLogicLevel0Value1?	Query the pass/fail status for the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSyncPassLogicLevel1Value2?	Query the pass/fail status for the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSyncPassLogicLevel0Value2?	Query the pass/fail status for the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSyncPassAll?	Query the pass/fail status for all the values resulting from the V Sync measurement.
VTimingPassBackPorchCh[1..3]?	Query the pass/fail status for the Back Porch value resulting from the V Timing measurement on the specified channel.
VTimingPassTopBorderCh[1..3]?	Query the pass/fail status for the Top Border value resulting from the V Timing measurement on the specified channel.
VTimingPassAddressableLinesCh[1..3]?	Query the pass/fail status for the Addressable Lines value resulting from the V Timing measurement on the specified channel.
VTimingPassBottomBorderCh[1..3]?	Query the pass/fail status for the Bottom Border value resulting from the V Timing measurement on the specified channel.
VTimingPassFrontPorchCh[1..3]?	Query the pass/fail status for the Front Porch value resulting from the V Timing measurement on the specified channel.
VTimingPassSyncPulseWidth?	Query the pass/fail status for the Sync Pulse Width value resulting from the V Timing measurement.
VTimingPassAll?	Query the pass/fail status for all the values resulting from the V Timing measurement on all the channels.
VideoTransientPassVideoRiseTimeCh[1..3]?	Query the pass/fail status for the Video Rise Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassVideoFallTimeCh[1..3]?	Query the pass/fail status for the Video Fall Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassVideoRiseTimePercentageCh[1..3]?	Query the pass/fail status for the Video Rise Time (%) resulting from the Video Transient measurement on the specified channel.
VideoTransientPassVideoFallTimePercentageCh[1..3]?	Query the pass/fail status for the Video Fall Time (%) resulting from the Video Transient measurement on the specified channel.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
VideoTransientPassOvershootCh[1..3]?	Query the pass/fail status for the Overshoot resulting from the Video Transient measurement on the specified channel.
VideoTransientPassUndershootCh[1..3]?	Query the pass/fail status for the Undershoot resulting from the Video Transient measurement on the specified channel.
VideoTransientPassOvershootSettling TimeCh[1..3]?	Query the pass/fail status for the Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassUndershootSettling TimeCh[1..3]?	Query pass/fail status for the Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassAll?	Query the pass/fail status for all the values resulting from the Video Transient measurement on all the channels.

Table 3-8: Results Summary Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchStatus?	Query the status of the Ch-Ch Mismatch measurement.
ChChSkewStatus?	Query the status of the Ch-Ch Skew measurement.
ColorBarsStatus?	Query the status of the Color Bars measurement.
HSyncStatus?	Query the status of the H Sync measurement.
HSyncJitterStatus?	Query the status of the H Sync Jitter measurement.
HTimingStatus?	Query the status of the H Timing measurement.
LinearityStatus?	Query the status of the Linearity measurement.
LumaLevelsStatus?	Query the status of the Luma Levels measurement.
NoiseStatus?	Query the status of the Noise Inj Ratio measurement.
VSynStatus?	Query the status of the V Sync measurement.
VTimingStatus?	Query the status of the V Timing measurement.
VideoTransientStatus?	Query the status of the Video Transient measurement.

Table 3-9: Measured Results Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue:	
ChChMismatchCh1Ch2?	Query the measured Ch1Ch2 voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
ChChMismatchCh1Ch3?	Query the measured Ch1Ch3 voltage amplitude Mismatch resulting from for the Ch-Ch Mismatch measurement.
ChChMismatchCh2Ch3?	Query the measured Ch2Ch3 voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchPeakToPeakCh1Ch2?	Query the measured Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchPeakToPeakCh1Ch3?	Query the measured Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchPeakToPeakCh2Ch3?	Query the measured Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchAll?	Query the measured values of all the Ch-Ch Mismatch measurements.
ChChSkewCh1Ch2?	Query the measured Ch1Ch2 Skew resulting from the Ch-Ch Skew measurement.
ChChSkewCh1Ch3?	Query the measured Ch1Ch3 Skew resulting from the Ch-Ch Skew measurement.
ChChSkewCh2Ch3?	Query the measured Ch2Ch3 Skew resulting from the Ch-Ch Skew measurement.
ChChSkewPixelClockCh1Ch2?	Query the measured Ch1Ch2 (%) Pixel Clock resulting from the Ch-Ch Skew measurement.
ChChSkewPixelClockCh1Ch3?	Query the measured Ch1Ch3 (%) Pixel Clock resulting from the Ch-Ch Skew measurement.
ChChSkewPixelClockCh2Ch3?	Query the measured Ch2Ch3 (%) Pixel Clock resulting from the Ch-Ch Skew measurement.
ChChSkewAll?	Query the measured values of all the Ch-Ch Skew measurements.
ColorBarsCh[1..3]?	Query the values of all the eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val1?	Query the value for the White color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val2?	Query the value for the Yellow color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val3?	Query the value for the Cyan color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val4?	Query the value for the Green color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val5?	Query the value for the Magenta color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val6?	Query the value for the Red color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val7?	Query the value for the Blue color bar resulting from the Color Bars measurement on the specified channel.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
ColorBarsCh[1..3]Val8?	Query the value for the Black color bar resulting from the Color Bars measurement on the specified channel.
HSyncPolarity?	Query the measured Polarity resulting from the H Sync measurement.
HSyncPulseWidth?	Query the measured Pulse Width resulting from the H Sync measurement.
HSyncSyncPeriod?	Query the measured Sync Period resulting from the H Sync measurement.
HSyncFrequency?	Query the measured Frequency resulting from the H Sync measurement.
HSyncRiseTime?	Query the measured Rise Time resulting from the H Sync measurement.
HSyncFallTime?	Query the measured Fall Time resulting from the H Sync measurement.
HSyncOvershoot?	Query the measured Overshoot resulting from the H Sync measurement.
HSyncUndershoot?	Query the measured Undershoot resulting from the H Sync measurement.
HSyncOvershootSettlingTime?	Query the measured Overshoot Settling Time resulting from the H Sync measurement.
HSyncUndershootSettlingTime?	Query the measured Undershoot Settling Time resulting from the H Sync measurement.
HSyncMonotonicRise?	Query the measured Monotonic Rise value resulting from the H Sync measurement.
HSyncMonotonicFall?	Query the measured Monotonic Fall value resulting from the H Sync measurement.
HSyncLogicLevel1Value1?	Query the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncLogicLevel0Value1?	Query the measured Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncLogicLevel1Value2?	Query the measured Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncLogicLevel0Value2?	Query the measured Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncAll?	Query the measured values of all the H Sync measurements.
HSyncJitterTime?	Query the measured Time period resulting from the H Sync Jitter measurement.
HSyncJitterPixelClock?	Query the measured (%) Pixel Clock resulting from the H Sync Jitter measurement.
HSyncJitterAll?	Query the measured values of all the H Sync Jitter measurements.
HTimingBackPorchCh[1..3]?	Query the measured Back Porch resulting from the H Timing measurement on the specified channel.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
HTimingLeftBorderCh[1..3]?	Query the measured Left Border resulting from the H Timing measurement on the specified channel.
HTimingAddressableVideoCh[1..3]?	Query the measured Addressable Video resulting from the H Timing measurement on the specified channel.
HTimingRightBorderCh[1..3]?	Query the measured Right Border resulting from the H Timing measurement on the specified channel.
HTimingFrontPorchCh[1..3]?	Query the measured Front Porch resulting from the H Timing measurement on the specified channel.
HTimingSyncPulseWidth?	Query the measured Sync Pulse Width resulting from the H Timing measurement.
HTimingPixelClock?	Query the measured Pixel Clock resulting from the H Timing measurement.
HTimingAll?	Query the measured values of all the H Timing measurements on all the channels.
LinearityResolutionCh[1..3]?	Query the measured Resolution resulting from the Linearity measurement on the specified channel.
LinearityMaxINLCh[1..3]?	Query the measured Max INL resulting from the Linearity measurement on the specified channel.
LinearityMaxINLAtStepNumberCh[1..3]?	Query the step number at which the MaxINL occurs for the Linearity measurement on the specified channel.
LinearityMaxDNLCh[1..3]?	Query the measured Max DNL resulting from the Linearity measurement on the specified channel.
LinearityMaxDNLAtStepNumberCh[1..3]?	Query the step number at which the MaxDNL occurs for the Linearity measurement on the specified channel.
LinearityMonotonicCh[1..3]?	Query the measured Monotonic value resulting from the Linearity measurement on the specified channel.
LinearityMonotonicAtStepNumberCh[1..3]?	Query at which step number the maximum Monotonic value resulting from the Linearity measurement on the specified channel.
LumaLevelsAmpMaxCh[1..3]?	Query the measured maximum Amplitude resulting from the Luma Levels measurement on the specified channel.
LumaLevelsAmpMinCh[1..3]?	Query the measured minimum Amplitude resulting from the Luma Levels measurement on the specified channel.
LumaLevelsAll?	Query the measured values of all the Luma Levels measurements for all the channels.
NoisemVCh[1..3]?	Query the measured Noise value (in mV) resulting from the Noise Inj Ratio measurement on the specified channel.
NoisedBCh[1..3]?	Query the measured Noise value (in dB) resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseIrcCh[1..3]?	Query the measured Inj Ratio (in %) resulting from the Noise Inj Ratio measurement on the specified channel.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
NoiseAll?	Query the measured values of all the Noise Inj Ratio measurements on all the channels.
VSynCPolarity?	Query the measured Polarity resulting from the V Sync measurement.
VSynCPulseWidth?	Query the measured Pulse Width resulting from the V Sync measurement.
VSynCSyncPeriod?	Query the measured Sync Period resulting from the V Sync measurement.
VSynCFrequency?	Query the measured Frequency resulting from the V Sync measurement.
VSynCRiseTime?	Query the measured Rise Time resulting from the V Sync measurement.
VSynCFallTime?	Query the measured Fall Time resulting from the V Sync measurement.
VSynCOvershoot?	Query the measured Overshoot resulting from the V Sync measurement.
VSynCUndershoot?	Query the measured Undershoot resulting from the V Sync measurement.
VSynCOvershootSettlingTime?	Query the measured Overshoot Settling Time resulting from the V Sync measurement.
VSynCUndershootSettlingTime?	Query the measured Undershoot Settling Time resulting from the V Sync measurement.
VSynCMonotonicRise?	Query the measured Monotonic Rise value resulting from the V Sync measurement.
VSynCMonotonicFall?	Query the measured Monotonic Fall value resulting from the V Sync measurement.
VSynCLogicLevel1Value1?	Query the measured Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSynCLogicLevel0Value1?	Query the measured Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSynCLogicLevel1Value2?	Query the measured Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSynCLogicLevel0Value2?	Query the measured Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSynCAll?	Query the measured values of all the V Sync measurements.
VTimingBackPorchCh[1..3]?	Query the measured Back Porch resulting from the V Timing measurement on the specified channel.
VTimingTopBorderCh[1..3]?	Query the measured Top Border resulting from the V Timing measurement on the specified channel.
VTimingAddressableLinesCh[1..3]?	Query the measured Addressable Lines resulting from the V Timing measurement on the specified channel.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
VTimingBottomBorderCh[1..3]?	Query the measured Bottom Border resulting from the V Timing measurement for specified channel.
VTimingFrontPorchCh[1..3]?	Query the measured Front Porch resulting from the V Timing measurement on the specified channel.
VTimingSyncPulseWidth?	Query the measured Sync Pulse Width resulting from the V Timing measurement.
VTimingAll?	Query all the measured values resulting from the V Timing measurements on all the channels.
VideoTransientVideoRiseTimeCh[1..3]?	Query the measured Video Rise Time resulting from the Video Transient measurement on the specified channel.
VideoTransientVideoFallTimeCh[1..3]?	Query the measured Video Fall Time resulting from the Video Transient measurement on the specified channel.
VideoTransientVideoRiseTimePercentageCh[1..3]?	Query the measured Video Rise Time percentage resulting from the Video Transient measurement on the specified channel.
VideoTransientVideoFallTimePercentageCh[1..3]?	Query the measured Video Fall Time percentage resulting from the Video Transient measurement on the specified channel.
VideoTransientOvershootCh[1..3]?	Query the measured Overshoot resulting from the Video Transient measurement on the specified channel.
VideoTransientUndershootCh[1..3]?	Query the measured Undershoot resulting from the Video Transient measurement on the specified channel.
VideoTransientOvershootSettlingTimeCh[1..3]?	Query the measured Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.
VideoTransientUndershootSettlingTimeCh[1..3]?	Query the measured Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.

Table 3-10: Relative Results Query Commands (Option VGA)

Header	Description
:VARible:VALue	
ChChMismatchRelCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Table 3-10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
ChChMismatchRelPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelAll?	Query the Ch-Ch Mismatch measurement for all of its relative results.
ChChSkewRelCh1Ch2?	Query the Ch1Ch2 Skew relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelCh1Ch3?	Query the Ch1Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelCh2Ch3?	Query the Ch2Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelPixelClockCh1Ch2?	Query the Ch1Ch2 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelPixelClockCh1Ch3?	Query the Ch1Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelPixelClockCh2Ch3?	Query the Ch2Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelAll?	Query the Ch-Ch Skew measurement for all of its relative results.
ColorBarsRelCh[1..3]?	Query the relative values of all eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val1?	Query the White color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val2?	Query the Yellow color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val3?	Query the Cyan color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val4?	Query the Green color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val5?	Query the Magenta color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val6?	Query the Red color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val7?	Query the Blue color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val8?	Query the Black color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]?	Query the relative percentage values of all eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val1?	Query the relative percentage White color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val2?	Query the relative percentage Yellow color bar value resulting from the Color Bars measurement on the specified channel.

Table 3- 10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
ColorBarsRelPctCh[1..3]Val3?	Query the relative percentage Cyan color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val4?	Query the relative percentage Green color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val5?	Query the relative percentage Magenta color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val6?	Query the relative percentage Red color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val7?	Query the relative percentage Blue color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val8?	Query the relative percentage Black color bar value resulting from the Color Bars measurement on the specified channel.
HSyncRelPolarity?	Query the Polarity relative value resulting from the H Sync measurement.
HSyncRelPulseWidth?	Query the Pulse Width relative value resulting from the H Sync measurement.
HSyncRelSyncPeriod?	Query the Sync Period relative value resulting from the H Sync measurement.
HSyncRelFrequency?	Query the Frequency relative value resulting from the H Sync measurement.
HSyncRelRiseTime?	Query the Rise Time relative value resulting from the H Sync measurement.
HSyncRelFallTime?	Query the Fall Time relative value resulting from the H Sync measurement.
HSyncRelOvershoot?	Query the Overshoot relative value resulting from the H Sync measurement.
HSyncRelUndershoot?	Query the Undershoot relative value resulting from the H Sync measurement.
HSyncRelOvershootSettlingTime?	Query the Overshoot Settling Time relative value resulting from the H Sync measurement.
HSyncRelUndershootSettlingTime?	Query the Undershoot Settling Time relative value resulting from the H Sync measurement.
HSyncRelMonotonicRise?	Query the Monotonic Rise relative value resulting from the H Sync measurement.
HSyncRelMonotonicFall?	Query the Monotonic Fall relative value resulting from the H Sync measurement.
HSyncRelLogicLevel1Value1?	Query the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) relative value resulting from H Sync measurement.
HSyncRelLogicLevel0Value1?	Query the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.
HSyncRelLogicLevel1Value2?	Query the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from H Sync measurement.
HSyncRelLogicLevel0Value2?	Query the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.

Table 3-10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
HSyncRelAll?	Query all the relative values resulting from the H Sync measurement.
HSyncJitterRelTime?	Query the relative Time period resulting from the H Sync Jitter measurement.
HSyncJitterRelPixelClock?	Query the (%) Pixel Clock relative value resulting from the H Sync Jitter measurement.
HSyncJitterRelAll?	Query the H Sync Jitter measurement for all of its relative values.
HTimingRelBackPorchCh[1..3]?	Query the Back Porch relative value resulting from the H Timing measurement on the specified channel.
HTimingRelLeftBorderCh[1..3]?	Query the Left Border relative value resulting from the H Timing measurement on the specified channel.
HTimingRelAddressableVideoCh[1..3]?	Query the Active Video relative value resulting from the H Timing measurement on the specified channel.
HTimingRelRightBorderCh[1..3]?	Query the Right Border relative value resulting from the H Timing measurement on the specified channel.
HTimingRelFrontPorchCh[1..3]?	Query the Front Porch relative value resulting from the H Timing measurement on the specified channel.
HTimingRelSyncPulseWidth?	Query the Sync Pulse Width relative value resulting from the H Timing measurement.
HTimingRelPixelClock?	Query the Pixel Clock relative value resulting from the H Timing measurement.
HTimingRelAll?	Query all the relative values resulting from the H Timing measurement.
LinearityRelResolutionCh[1..3]?	Query the Resolution relative value resulting from the Linearity measurement on the specified channel.
LinearityRelMaxINLCh[1..3]?	Query the Max INL relative value resulting from the Linearity measurement on the specified channel.
LinearityRelMaxDNLCh[1..3]?	Query the Max DNL relative value resulting from the Linearity measurement on the specified channel.
LinearityRelMonotonicCh[1..3]?	Query the Monotonic relative value resulting from the Linearity measurement on the specified channel.
LumaLevelsRelAmpMaxCh[1..3]?	Query the Maximum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelAmpMinCh[1..3]?	Query the Minimum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelAll?	Query all the relative values resulting from the Luma Levels measurement for all channels.
LumaLevelsRelPctAmpMaxCh[1..3]?	Query the Maximum Amplitude relative percentage value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelPctAmpMinCh[1..3]?	Query the Minimum Amplitude relative percentage value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelPctAll?	Query all the relative percentage values resulting from the Luma Levels measurement on all the channels.

Table 3- 10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
NoiseRelmVCh[1..3]?	Query the Noise Inj Ratio (in mV) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseReldBCh[1..3]?	Query the Noise Inj Ratio (in dB) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseRelrCh[1..3]?	Query the Inj Ratio (in %) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseRelAll?	Query all the relative values resulting from the Noise measurement on all the channels.
VSynRelPolarity?	Query the Polarity relative value resulting from the V Sync measurement.
VSynRelPulseWidth?	Query the Pulse Width relative value resulting from the V Sync measurement.
VSynRelSyncPeriod?	Query the Sync Period relative value resulting from the V Sync measurement.
VSynRelFrequency?	Query the Frequency relative value resulting from the V Sync measurement.
VSynRelRiseTime?	Query the Rise Time relative value resulting from the V Sync measurement.
VSynRelFallTime?	Query the Fall Time relative value resulting from the V Sync measurement.
VSynRelOvershoot?	Query the Overshoot relative value resulting from the V Sync measurement.
VSynRelUndershoot?	Query the Undershoot relative value resulting from the V Sync measurement.
VSynRelOvershootSettlingTime?	Query the Overshoot Settling Time relative value resulting from the V Sync measurement.
VSynRelUndershootSettlingTime?	Query the Undershoot Settling Time relative value resulting from the V Sync measurement.
VSynRelMonotonicRise?	Query the Monotonic Rise relative value resulting from the V Sync measurement.
VSynRelMonotonicFall?	Query the Monotonic Fall relative value resulting from the V Sync measurement.
VSynRelLogicLevel1Value1?	Query the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) relative value resulting from V Sync measurement.
VSynRelLogicLevel0Value1?	Query the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) relative value resulting from V Sync measurement.
VSynRelLogicLevel1Value2?	Query the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from V Sync measurement.
VSynRelLogicLevel0Value2?	Query the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from V Sync measurement.
VSynRelAll?	Query all the relative values resulting from the V Sync measurement.
VTimingRelBackPorchCh[1..3]?	Query the Back Porch relative value resulting from the V Timing measurement on the specified channel.

Table 3-10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
VTimingRelTopBorderCh[1..3]?	Query the Top Border relative value resulting from the V Timing measurement on the specified channel.
VTimingRelAddressableLinesCh[1..3]?	Query the Addressable Lines relative value resulting from the V Timing measurement on the specified channel.
VTimingRelBottomBorderCh[1..3]?	Query the Bottom Border relative value resulting from the V Timing measurement on the specified channel.
VTimingRelFrontPorchCh[1..3]?	Query the Front Porch relative value resulting from the V Timing measurement on the specified channel.
VTimingRelSyncPulseWidth?	Query the Sync Pulse Width relative value resulting from the V Timing measurement.
VTimingRelAll?	Query the V Timing measurement for all of its relative values.
VideoTransientRelVideoRiseTimeCh[1..3]?	Query the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelVideoFallTimeCh[1..3]?	Query the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelVideoRiseTimePercentageCh[1..3]?	Query the Video Rise Time Percentage relative value resulting from Video Transient measurement on the specified channel.
VideoTransientRelVideoFallTimePercentageCh[1..3]?	Query the Video Fall Time Percentage relative value resulting from Video Transient measurement on the specified channel.
VideoTransientRelOvershootCh[1..3]?	Query the Overshoot relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelUndershootCh[1..3]?	Query the Undershoot relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelOvershootSettlingTimeCh[1..3]?	Query the Overshoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelUndershootSettlingTimeCh[1..3]?	Query the Undershoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.

Table 3-11: Reference Values Query Commands (Option VGA)

Header	Description
:VARiable:VALue	
ChChMismatchRefCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch reference value specified in the Reference file.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
ChChMismatchRefCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefAll?	Query all the Ch-Ch Mismatch reference values specified in the Reference file.
ChChSkewRefCh1Ch2?	Query the Ch1Ch2 Skew reference value specified in the Reference file.
ChChSkewRefCh1Ch3?	Query the Ch1Ch3 Skew reference value specified in the Reference file.
ChChSkewRefCh2Ch3?	Query the Ch2Ch3 Skew reference value specified in the Reference file.
ChChSkewRefPixelClockCh1Ch2?	Query the Ch1Ch2 (%) Pixel Clock reference value specified in the Reference file.
ChChSkewRefPixelClockCh1Ch3?	Query the Ch1Ch3 (%) Pixel Clock reference value specified in the Reference file.
ChChSkewRefPixelClockCh2Ch3?	Query the Ch2Ch3 (%) Pixel Clock reference value specified in the Reference file.
ChChSkewRefAll?	Query all the Ch-Ch Skew reference values specified in the Reference file.
ColorBarsRefCh[1..3]?	Query all the Color Bars reference values specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val1?	Query the Color Bars reference value for the White color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val2?	Query the Color Bars reference value for the Yellow color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val3?	Query the Color Bars reference value for the Cyan color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val4?	Query the Color Bars reference value for the Green color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val5?	Query the Color Bars reference value for the Magenta color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val6?	Query the Color Bars reference value for the Red color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val7?	Query the Color Bars reference value for the Blue color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val8?	Query the Color Bars reference value for the Black color bar specified in the Reference file on the specified channel.
HSyncRefPolarity?	Query the H Sync Polarity reference value specified in the Reference file.
HSyncRefPulseWidth?	Query the H Sync Pulse Width reference value specified in the Reference file.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
HSyncRefSyncPeriod?	Query the H Sync Sync Period reference value specified in the Reference file.
HSyncRefFrequency?	Query the H Sync Frequency reference value specified in the Reference file.
HSyncRefRiseTime?	Query the H Sync Rise Time reference value specified in the Reference file.
HSyncRefFallTime?	Query the H Sync Fall Time reference value specified in the Reference file.
HSyncRefOvershoot?	Query the H Sync Overshoot reference value specified in the Reference file.
HSyncRefUndershoot?	Query the H Sync Undershoot reference value specified in the Reference file.
HSyncRefOvershootSettlingTime?	Query the H Sync Overshoot Settling Time reference value specified in the Reference file.
HSyncRefUndershootSettlingTime?	Query the H Sync Undershoot Settling Time reference value specified in the Reference file.
HSyncRefMonotonicRise?	Query the H Sync Monotonic Rise reference value specified in the Reference file.
HSyncRefMonotonicFall?	Query the H Sync Monotonic Fall reference value specified in the Reference file.
HSyncRefLogicLevel1Value1?	Query the H Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) reference value specified in the Reference file.
HSyncRefLogicLevel0Value1?	Query the H Sync Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) reference value specified in the Reference file.
HSyncRefLogicLevel1Value2?	Query the H Sync Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
HSyncRefLogicLevel0Value2?	Query the H Sync Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
HSyncRefAll?	Query all the H Sync reference values specified in the Reference file.
HSyncJitterRefTime?	Query the H Sync Jitter reference Time period specified in the Reference file.
HSyncJitterRefPixelClock?	Query the H Sync Jitter (%) Pixel Clock reference value specified in the Reference file.
HSyncJitterRefAll?	Query all the H Sync Jitter reference values specified in the Reference file.
HTimingRefBackPorchCh[1..3]?	Query the H Timing Back Porch reference value specified in the Reference file on the specified channel.
HTimingRefLeftBorderCh[1..3]?	Query the H Timing Left Border reference value specified in the Reference file on the specified channel.
HTimingRefAddressableVideoCh[1..3]?	Query the H Timing Addressable Video reference value specified in the Reference file on the specified channel.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
HTimingRefRightBorderCh[1..3]?	Query the H Timing Right Border reference value specified in the Reference file on the specified channel.
HTimingRefFrontPorchCh[1..3]?	Query the H Timing Front Porch reference value specified in the Reference file on the specified channel.
HTimingRefSyncPulseWidth?	Query the H Timing Sync Pulse Width reference value specified in the Reference file.
HTimingRefPixelClock?	Query the H Timing Pixel Clock reference value specified in the Reference file.
HTimingRefAll?	Query all the H Timing reference values specified in the Reference file.
LinearityRefResolutionCh[1..3]?	Query the Linearity Resolution reference value specified in the Reference file on the specified channel.
LinearityRefMaxINLCh[1..3]?	Query the Linearity Max INL reference value specified in the Reference file on the specified channel.
LinearityRefMaxDNLCh[1..3]?	Query the Linearity Max DNL reference value specified in the Reference file on the specified channel.
LinearityRefMonotonicCh[1..3]?	Query the Linearity Monotonic reference value specified in the Reference file on the specified channel.
LumaLevelsRefAmpMaxCh[1..3]?	Query the Luma Levels Amplitude Maximum reference value specified in the Reference file on the specified channel.
LumaLevelsRefAmpMinCh[1..3]?	Query the Luma Levels Amplitude Minimum reference value specified in the Reference file on the specified channel.
LumaLevelsRefAll?	Query all the Luma Levels reference values specified in the Reference file on all the channels.
NoiseRefmVCh[1..3]?	Query the Noise Inj Ratio (in mV) reference value specified in the Reference file on the specified channel.
NoiseRefdBCh[1..3]?	Query the Noise Inj Ratio (in dB) reference value specified in the Reference file on the specified channel.
NoiseRefICh[1..3]?	Query the Noise Inj Ratio reference value specified in the Reference file on the specified channel.
NoiseRefAll?	Query all the Noise Inj Ratio reference values specified in the Reference file on all the channels.
VSynRefAll?	Query all the V Sync reference values specified in the Reference file.
VSynRefFallTime?	Query the V Sync Fall Time reference value specified in the Reference file.
VSynRefFrequency?	Query the V Sync Frequency reference value specified in the Reference file.
VSynRefLogicLevel0Value1?	Query the V Sync Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) reference value specified in the Reference file.
VSynRefLogicLevel0Value2?	Query the V Sync Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
VSyncRefLogicLevel1Value1?	Query the V Sync Logic Level “1” at Value1 (Value1 represents the Logic Level “1” at 2.21 k Ω termination resistance) reference value specified in the Reference file.
VSyncRefLogicLevel1Value2?	Query the V Sync Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
VSyncRefMonotonicFall?	Query the V Sync Monotonic Fall reference value specified in the Reference file.
VSyncRefMonotonicRise?	Query the V Sync Monotonic Rise reference value specified in the Reference file.
VSyncRefOvershoot?	Query the V Sync Overshoot reference value specified in the Reference file.
VSyncRefOvershootSettlingTime?	Query the V Sync Overshoot Settling Time reference value specified in the Reference file.
VSyncRefPolarity?	Query the V Sync Polarity reference value specified in the Reference file.
VSyncRefPulseWidth?	Query the V Sync Pulse Width reference value specified in the Reference file.
VSyncRefRiseTime?	Query the V Sync Rise Time reference value specified in the Reference file.
VSyncRefSyncPeriod?	Query the V Sync Sync Period reference value specified in the Reference file.
VSyncRefUndershoot?	Query the V Sync Undershoot reference value specified in the Reference file.
VSyncRefUndershootSettlingTime?	Query the V Sync Undershoot Settling Time reference value specified in the Reference file.
VTimingRefBackPorchCh[1..3]?	Query the V Timing Back Porch reference value specified in the Reference file on the specified channel.
VTimingRefTopBorderCh[1..3]?	Query the V Timing Top Border reference value specified in the Reference file on the specified channel.
VTimingRefAddressableLinesCh[1..3]?	Query the V Timing Addressable Lines reference value specified in the Reference file on the specified channel.
VTimingRefBottomBorderCh[1..3]?	Query the V Timing Bottom Border reference value specified in the Reference file on the specified channel.
VTimingRefFrontPorchCh[1..3]?	Query the V Timing Front Porch reference value specified in the Reference file on the specified channel.
VTimingRefSyncPulseWidth?	Query the V Timing Sync Pulse Width reference value specified in the Reference file on the specified channel.
VTimingRefAll?	Query all the V Timing reference values specified in the Reference file on all the channels.
VideoTransientRefVideoRiseTimeCh[1..3]?	Query the Video Transient Video Rise Time reference value specified in the Reference file on the specified channel.
VideoTransientRefVideoFallTimeCh[1..3]?	Query the Video Transient Video Fall Time reference value specified in the Reference file on the specified channel.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
VideoTransientRefVideoRiseTimePercentageCh[1..3]?	Query the Video Transient Video Rise Time reference value (in percent) specified in the Reference file on the specified channel.
VideoTransientRefVideoFallTimePercentageCh[1..3]?	Query the Video Transient Video Fall Time reference value (in percent) specified in the Reference file on the specified channel.
VideoTransientRefOvershootCh[1..3]?	Query the Video Transient Overshoot reference value specified in the Reference file on the specified channel.
VideoTransientRefUndershootCh[1..3]?	Query the Video Transient Undershoot reference value specified in the Reference file on the specified channel.
VideoTransientRefOvershootSettlingTimeCh[1..3]?	Query the Video Transient Overshoot Settling Time reference value specified in the Reference file on the specified channel.
VideoTransientRefUndershootSettlingTimeCh[1..3]?	Query the Video Transient Undershoot Settling Time reference value specified in the Reference file on the specified channel.

Table 3- 12: Maximum Limits Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchMaxCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxAll?	Query all the Ch-Ch Mismatch maximum limit values specified in the Limits file.
ChChSkewMaxCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 maximum limit value specified in the Limits file.
ChChSkewMaxCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 maximum limit value specified in the Limits file.
ChChSkewMaxCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 maximum limit value specified in the Limits file.
ChChSkewMaxPixelClockCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock maximum limit value specified in the Limits file.

Table 3-12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
ChChSkewMaxPixelClockCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
ChChSkewMaxPixelClockCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
ChChSkewMaxAll?	Query all the Ch-Ch Skew maximum limit values specified in the Limits file.
ColorBarsMaxCh[1..3]?	Query all the Color Bars maximum limit values specified in the Limits file.
ColorBarsMaxCh[1..3]Val1?	Query the Color Bars White color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val2?	Query the Color Bars Yellow color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val3?	Query the Color Bars Cyan color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val4?	Query the Color Bars Green color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val5?	Query the Color Bars Magenta color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val6?	Query the Color Bars Red color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val7?	Query the Color Bars Blue color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val8?	Query the Color Bars Black color bar maximum limit value specified in the Limits file on the specified channel.
HSyncMaxPolarity?	Query the H Sync Polarity maximum limit value specified in the Limits file.
HSyncMaxPulseWidth?	Query the H Sync Pulse Width maximum limit value specified in the Limits file.
HSyncMaxSyncPeriod?	Query the H Sync Sync Period maximum limit value specified in the Limits file.
HSyncMaxFrequency?	Query the H Sync Frequency maximum limit value specified in the Limits file.
HSyncMaxRiseTime?	Query the H Sync Rise Time maximum limit value specified in the Limits file.
HSyncMaxFallTime?	Query the H Sync Fall Time maximum limit value specified in the Limits file.
HSyncMaxOvershoot?	Query the H Sync Overshoot maximum limit value specified in the Limits file.
HSyncMaxUndershoot?	Query the H Sync Undershoot maximum limit value specified in the Limits file.
HSyncMaxOvershootSettlingTime?	Query the H Sync Overshoot Settling Time maximum limit value specified in the Limits file.
HSyncMaxUndershootSettlingTime?	Query the H Sync Undershoot Settling Time maximum limit value specified in the Limits file.
HSyncMaxMonotonicRise?	Query the H Sync Monotonic Rise maximum limit value specified in the Limits file.
HSyncMaxMonotonicFall?	Query the H Sync Monotonic Fall maximum limit value specified in the Limits file.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
HSyncMaxLogicLevel1Value1?	Query the H Sync Logic Level “1” at Value1 (Value1 represents the Logic Level “1” at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
HSyncMaxLogicLevel0Value1?	Query the maximum Logic Level “0” at Value1 (Value1 represents the Logic Level “0” at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
HSyncMaxLogicLevel1Value2?	Query the maximum Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
HSyncMaxLogicLevel0Value2?	Query the maximum Logic Level “0” at Value2 (Value2 represents the Logic Level “0” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
HSyncMaxAll?	Query all the H Sync maximum limit values specified in the Limits file.
HSyncJitterMaxTime?	Query the H Sync Jitter Time period maximum limit value specified in the Limits file.
HSyncJitterMaxPixelClock?	Query the H Sync Jitter (%) Pixel Clock maximum limit value specified in the Limits file.
HSyncJitterMaxAll?	Query all the H Sync Jitter maximum limit values specified in the Limits file.
HTimingMaxBackPorchCh[1..3]?	Query the H Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
HTimingMaxLeftBorderCh[1..3]?	Query the H Timing Left Border maximum limit value specified in the Limits file on the specified channel.
HTimingMaxAddressableVideoCh[1..3]?	Query the H Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.
HTimingMaxRightBorderCh[1..3]?	Query the H Timing Right Border maximum limit value specified in the Limits file on the specified channel.
HTimingMaxFrontPorchCh[1..3]?	Query the H Timing Front Porch maximum limit value specified in the Limits file on the specified channel.
HTimingMaxSyncPulseWidth?	Query the H Timing Sync Pulse Width maximum limit value specified in the Limits file.
HTimingMaxPixelClock?	Query the H Timing Pixel Clock maximum limit value specified in the Limits file.
HTimingMaxAll?	Query all the H Timing maximum limit values specified in the Limits file on all the channels.
LinearityMaxResolutionCh[1..3]?	Query the Linearity Resolution maximum limit value specified in the Limits file on the specified channel.
LinearityMaxMaxINLCh[1..3]?	Query the Linearity Max INL maximum limit value specified in the Limits file on the specified channel.
LinearityMaxMaxDNLCh[1..3]?	Query the Linearity Max DNL maximum limit value specified in the Limits file on the specified channel.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
LinearityMaxMonotonicCh[1..3]?	Query the Linearity Monotonic maximum limit value specified in the Limits file on the specified channel.
LumaLevelsMaxAmpMaxCh[1..3]?	Query the Luma Levels Maximum Amplitude maximum limit value specified in the Limits file on the specified channel.
LumaLevelsMaxAmpMinCh[1..3]?	Query the Luma Levels Minimum Amplitude maximum limit value specified in the Limits file on the specified channel.
LumaLevelsMaxAll?	Query all the Luma Levels maximum limit values specified in the Limits file on all the channels.
NoiseMaxmVCh[1..3]?	Query the Noise Inj Ratio (in mV) maximum limit value specified in the Limits file on the specified channel.
NoiseMaxdBCh[1..3]?	Query the Noise Inj Ratio (in dB) maximum limit value specified in the Limits file on the specified channel.
NoiseMaxIrrCh[1..3]?	Query the Inj Ratio maximum limit value specified in the Limits file on the specified channel.
NoiseMaxAll?	Query all the Noise Inj Ratio maximum limit values specified in the Limits file on all the channels.
VSyncMaxPolarity?	Query the V Sync Polarity maximum limit value specified in the Limits file.
VSyncMaxPulseWidth?	Query the V Sync Pulse Width maximum limit value specified in the Limits file.
VSyncMaxSyncPeriod?	Query the V Sync Sync Period maximum limit value specified in the Limits file.
VSyncMaxFrequency?	Query the V Sync Frequency maximum limit value specified in the Limits file.
VSyncMaxRiseTime?	Query the V Sync Rise Time maximum limit value specified in the Limits file.
VSyncMaxFallTime?	Query the V Sync Fall Time maximum limit value specified in the Limits file.
VSyncMaxOvershoot?	Query the V Sync Overshoot maximum limit value specified in the Limits file.
VSyncMaxUndershoot?	Query the V Sync Undershoot maximum limit value specified in the Limits file.
VSyncMaxOvershootSettlingTime?	Query the V Sync Overshoot Settling Time maximum limit value specified in the Limits file.
VSyncMaxUndershootSettlingTime?	Query the V Sync Undershoot Settling Time maximum limit value specified in the Limits file.
VSyncMaxMonotonicRise?	Query the V Sync Monotonic Rise maximum limit value specified in the Limits file.
VSyncMaxMonotonicFall?	Query the V Sync Monotonic Fall maximum limit value specified in the Limits file.
VSyncMaxLogicLevel1Value1?	Query the V Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
VSyncMaxLogicLevel0Value1?	Query the maximum Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VSyncMaxLogicLevel1Value2?	Query the maximum Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
VSyncMaxLogicLevel0Value2?	Query the maximum Logic Level “0” at Value2 (Value2 represents the Logic Level “0” at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
VSyncMaxAll?	Query all the V Sync maximum limit values specified in the Limits file.
VTimingMaxBackPorchCh[1..3]?	Query the V Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
VTimingMaxTopBorderCh[1..3]?	Query the V Timing Top Border maximum limit value specified in the Limits file on the specified channel.
VTimingMaxAddressableLinesCh[1..3]?	Query the V Timing Addressable Lines maximum limit value specified in the Limits file on the specified channel.
VTimingMaxBottomBorderCh[1..3]?	Query the V Timing Bottom Border maximum limit value specified in the Limits file on the specified channel.
VTimingMaxFrontPorchCh[1..3]?	Query the V Timing Front Porch maximum limit value specified in the Limits file on the specified channel.
VTimingMaxSyncPulseWidth?	Query the V Timing Sync Pulse Width maximum limit value specified in the Limits file on the specified channel.
VTimingMaxAll?	Query all the V Timing maximum limit values specified in the Limits file on all the channels.
VideoTransientMaxVideoRiseTimeCh[1..3]?	Query the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxVideoFallTimeCh[1..3]?	Query the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxVideoRiseTime PercentageCh[1..3]?	Query the Video Transient Video Rise Time maximum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMaxVideoFallTime PercentageCh[1..3]?	Query the Video Transient Video Fall Time maximum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMaxOvershootCh[1..3]?	Query the Video Transient Overshoot maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxUndershootCh[1..3]?	Query the Video Transient Undershoot maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxOvershootSettling TimeCh[1..3]?	Query the Video Transient Overshoot Settling Time maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxUndershootSettling TimeCh[1..3]?	Query the Video Transient Undershoot Settling Time maximum limit value specified in the Limits file on the specified channel.

Table 3-13: Minimum Limits Query Commands (Option VGA)

Header	Description
:VARiable:VALue	
ChChMismatchMinCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinAll?	Query all the Ch-Ch Mismatch minimum limit values specified in the Limits file.
ChChSkewMinCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 channel skew minimum limit value specified in the Limits file.
ChChSkewMinCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 channel skew minimum limit value specified in the Limits file.
ChChSkewMinCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 skew minimum limit value specified in the Limits file.
ChChSkewMinPixelClockCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 (%) pixel clock minimum limit value specified in the Limits file.
ChChSkewMinPixelClockCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 (%) pixel clock minimum limit value specified in the Limits file.
ChChSkewMinPixelClockCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 (%) pixel clock minimum limit value specified in the Limits file.
ChChSkewMinAll?	Query all the Ch-Ch Skew minimum limit values specified in the Limits file.
ColorBarsMinCh[1..3]?	Query all the Color Bars minimum limit values specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val1?	Query the Color Bars White color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val2?	Query the Color Bars Yellow color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val3?	Query the Color Bars Cyan color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val4?	Query the Color Bars Green color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val5?	Query the Color Bars Magenta color bar minimum limit value specified in the Limits file on the specified channel.

Table 3- 13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
ColorBarsMinCh[1..3]Val6?	Query the Color Bars Red color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val7?	Query the Color Bars Blue color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val8?	Query the Color Bars Black color bar minimum limit value specified in the Limits file on the specified channel.
HSyncMinPolarity?	Query the H Sync Polarity minimum limit value specified in the Limits file.
HSyncMinPulseWidth?	Query the H Sync Pulse Width minimum limit value specified in the Limits file.
HSyncMinSyncPeriod?	Query the H Sync Sync Period minimum limit value specified in the Limits file.
HSyncMinFrequency?	Query the H Sync Frequency minimum limit value specified in the Limits file.
HSyncMinRiseTime?	Query the H Sync Rise Time minimum limit value specified in the Limits file.
HSyncMinFallTime?	Query the H Sync Fall Time minimum limit value specified in the Limits file.
HSyncMinOvershoot?	Query the H Sync Overshoot minimum limit value specified in the Limits file.
HSyncMinUndershoot?	Query the H Sync Undershoot minimum limit value specified in the Limits file.
HSyncMinOvershootSettlingTime?	Query the H Sync Overshoot Settling Time minimum limit value specified in the Limits file.
HSyncMinUndershootSettlingTime?	Query the H Sync Undershoot Settling Time minimum limit value specified in the Limits file.
HSyncMinMonotonicRise?	Query the H Sync Monotonic Rise minimum limit value specified in the Limits file.
HSyncMinMonotonicFall?	Query the H Sync Monotonic Fall minimum limit value specified in the Limits file.
HSyncMinLogicLevel1Value1?	Query the H Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
HSyncMinLogicLevel0Value1?	Query the minimum logic level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
HSyncMinLogicLevel1Value2?	Query the minimum logic level "1" at Value2 (Value2 represents the Logic Level "1" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
HSyncMinLogicLevel0Value2?	Query the minimum logic level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
HSyncMinAll?	Query all the H Sync minimum limit values specified in the Limits file.
HSyncJitterMinTime?	Query the H Sync Jitter Time period minimum limit value specified in the Limits file.

Table 3-13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
HSyncJitterMinPixelClock?	Query the H Sync Jitter (%) Pixel Clock minimum limit value specified in the Limits file.
HSyncJitterMinAll?	Query all the H Sync Jitter minimum limit values specified in the Limits file.
HTimingMinBackPorchCh[1..3]?	Query the H Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
HTimingMinLeftBorderCh[1..3]?	Query the H Timing Left Border minimum limit value specified in the Limits file on the specified channel.
HTimingMinAddressableVideoCh[1..3]?	Query the H Timing Addressable Video minimum limit value specified in the Limits file on the specified channel.
HTimingMinRightBorderCh[1..3]?	Query the H Timing Right Border minimum limit value specified in the Limits file on the specified channel.
HTimingMinFrontPorchCh[1..3]?	Query the H Timing Front Porch minimum limit value specified in the Limits file on the specified channel.
HTimingMinSyncPulseWidth?	Query the H Timing Sync Pulse Width minimum limit value specified in the Limits file.
HTimingMinPixelClock?	Query the H Timing Pixel Clock minimum limit value specified in the Limits file.
HTimingMinAll?	Query all the H Timing minimum limit values specified in the Limits file.
LinearityMinResolutionCh[1..3]?	Query the Linearity Resolution minimum limit value specified in the Limits file on the specified channel.
LinearityMinMaxINLCh[1..3]?	Query the Linearity Max INL minimum limit value specified in the Limits file on the specified channel.
LinearityMinMaxDNLCh[1..3]?	Query the Linearity Max DNL minimum limit value specified in the Limits file on the specified channel.
LinearityMinMonotonicCh[1..3]?	Query the Linearity Monotonic minimum limit value specified in the Limits file on the specified channel.
LumaLevelsMinAmpMaxCh[1..3]?	Query the Luma Levels Maximum Amplitude minimum limit value specified in the Limits file on the specified channel.
LumaLevelsMinAmpMinCh[1..3]?	Query the Luma Levels Minimum Amplitude minimum limit value specified in the Limits file on the specified channel.
LumaLevelsMinAll?	Query all the Luma Levels minimum limit values specified in the Limits file on all the channels.
NoiseMinmVCh[1..3]?	Query the Noise Inj Ratio (in mV) minimum limit value specified in the Limits file on the specified channel.
NoiseMindBCh[1..3]?	Query the Noise Inj Ratio (in dB) minimum limit value specified in the Limits file on the specified channel.
NoiseMinInrCh[1..3]?	Query the Inj Ratio minimum limit value specified in the Limits file on the specified channel.
NoiseMinAll?	Query all the Noise Inj Ratio minimum limit values specified in the Limits file on all the channels.
VSyncMinPolarity?	Query the V Sync Polarity minimum limit value specified in the Limits file.

Table 3-13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VSyncMinPulseWidth?	Query the V Sync Pulse Width minimum limit value specified in the Limits file.
VSyncMinSyncPeriod?	Query the V Sync Period minimum limit value specified in the Limits file.
VSyncMinFrequency?	Query the V Sync Frequency minimum limit value specified in the Limits file.
VSyncMinRiseTime?	Query the V Sync Rise Time minimum limit value specified in the Limits file.
VSyncMinFallTime?	Query the V Sync Fall Time minimum limit value specified in the Limits file.
VSyncMinOvershoot?	Query the V Sync Overshoot minimum limit value specified in the Limits file.
VSyncMinUndershoot?	Query the V Sync Undershoot minimum limit value specified in the Limits file.
VSyncMinOvershootSettlingTime?	Query the V Sync Overshoot Settling Time minimum limit value specified in the Limits file.
VSyncMinUndershootSettlingTime?	Query the V Sync Undershoot Settling Time minimum limit value specified in the Limits file.
VSyncMinMonotonicRise?	Query the V Sync Monotonic Rise minimum limit value specified in the Limits file.
VSyncMinMonotonicFall?	Query the V Sync Monotonic Fall minimum limit value specified in the Limits file.
VSyncMinLogicLevel1Value1?	Query the V Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
VSyncMinLogicLevel0Value1?	Query the V Sync Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
VSyncMinLogicLevel1Value2?	Query the V Sync Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
VSyncMinLogicLevel0Value2?	Query the V Sync Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
VSyncMinAll?	Query all the V Sync minimum limit values specified in the Limits file.
VTimingMinBackPorchCh[1..3]?	Query the V Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
VTimingMinTopBorderCh[1..3]?	Query the V Timing Top Border minimum limit value specified in the Limits file on the specified channel.
VTimingMinAddressableLinesCh[1..3]?	Query the V Timing Addressable Lines minimum limit value specified in the Limits file on the specified channel.
VTimingMinBottomBorderCh[1..3]?	Query the V Timing Bottom Border minimum limit value specified in the Limits file on the specified channel.
VTimingMinFrontPorchCh[1..3]?	Query the V Timing Front Porch minimum limit value specified in the Limits file on the specified channel.

Table 3-13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VTimingMinSyncPulseWidth?	Query the V Timing Sync Pulse Width minimum limit value specified in the Limits file.
VTimingMinAll?	Query all the V Timing minimum limit values specified in the Limits file on all the channels.
VideoTransientMinVideoRiseTimeCh[1..3]?	Query the Video Transient Video Rise Time minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinVideoFallTimeCh[1..3]?	Query the Video Transient Video Fall Time minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinVideoRiseTimePercentageCh[1..3]?	Query the Video Transient Video Rise Time minimum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMinVideoFallTimePercentageCh[1..3]?	Query the Video Transient Video Fall Time minimum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMinOvershootCh[1..3]?	Query the Video Transient Overshoot minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinUndershootCh[1..3]?	Query the Video Transient Undershoot minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinOvershootSettlingTimeCh[1..3]?	Query the Video Transient Overshoot Settling Time minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinUndershootSettlingTimeCh[1..3]?	Query the Video Transient Undershoot Settling Time minimum limit value specified in the Limits file on the specified channel.

Commands

The following remote commands are listed in alphabetical order.

AppStatus?

Query whether the Application Status is: Configure, Measuring, Done, Reported.

Syntax VARIABLE:VALue? "AppStatus"

Group Global

Input Arguments None

Returns Query returns the application status as Configure, Measuring, Done, Reported.

Examples VARIABLE:VALue? "AppStatus"
Query may return: "AppStatus Configure"

AutoScale <setting>

Set or query whether to use auto scale during measurement.

Syntax VARIable:VALue "AutoScale", "<setting>"

VARIable:VALue? "AutoScale"

Group Configuration

Arguments <setting> specifies auto scale setting that is to be used.
Valid settings are: OFF (0), ON (1).

Returns Query returns the currently specified setting.

Examples VARIable:VALue "AutoScale", "ON"

VARIable:VALue? "AutoScale"

Query may return: "AutoScale 0"

AutoScaleInit <setting>

AutoScaleInit specifies the starting values used by the AutoScale command. Loading specific starting values can speed up the process of taking measurements.

Syntax VARIABLE:VALue “AutoScaleInit”, “[LastMeas | PreStored | Default]”
VARIABLE:VALue? “AutoScaleInit”

Group Configuration

Arguments “LastMeas” loads the values set at the end of the last measurement taken.

“PreStored” loads the values specified by the last loaded .vmset, that is the values that were last recalled by loading the settings (xxx.vmset) file. If no .vmset has been loaded since the software was started, then “PreStored” loads the values saved the last time the software was exited.

“Default” loads the factory default settings.

Returns Query returns the currently specified setting.

Examples VARIABLE:VALue “AutoScaleInit”, “LastMeas”

VARIABLE:VALue? “AutoScaleInit”
Query may return: “AutoScaleInit LastMeas”

ChChMismatchAll?

Query the measured values of all the Ch-Ch Mismatch measurements.

Syntax VARIable:VALue? "ChChMismatchAll"

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the Ch-Ch Mismatch measurements. The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchAll"
Query may return: "ChChMismatchAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchAverage <samples>

Set or query the number of samples over which to average the Ch-Ch Mismatch measurement.

Syntax VARIABLE:VALue “ChChMismatchAverage”, “<samples>”
 VARIABLE:VALue? “ChChMismatchAverage”

Group Measurement Setup

Related Commands ChChMismatchLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned number of samples for the Ch-Ch Mismatch measurement.

Examples VARIABLE:VALue “ChChMismatchAverage”, “1”

 VARIABLE:VALue? “ChChMismatchAverage”
 Query may return: “ChChMismatchAverage 8”

ChChMismatchCh1Ch2?

Query the measured Ch1Ch2 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchCh1Ch2"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Ch1Ch2 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchCh1Ch2" Query may return: "ChChMismatchCh1Ch2 -1.44"

ChChMismatchCh1Ch3?

Query the measured Ch1Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIABLE:VALue? "ChChMismatchCh1Ch3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch1Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "ChChMismatchCh1Ch3"
Query may return: "ChChMismatchCh1Ch3 73.97"

ChChMismatchCh2Ch3?

Query the measured Ch2Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchCh2Ch3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Ch2Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchCh2Ch3" Query may return: "ChChMismatchCh2Ch3 73.97"

ChChMismatchLine<line number>

Set or query the line number used to perform the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue “ChChMismatchLine”, “<line number>”
VARIable:VALue? “ChChMismatchLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Related Commands ChChMismatchAverage

Returns Query returns the currently assigned line number used to perform the Ch-Ch Mismatch measurement.

Examples VARIable:VALue “ChChMismatchLine”, “200”

VARIable:VALue? “ChChMismatchLine”
Query may return: “ChChMismatchLine 325”

ChChMismatchMaxAll?

Query all the Ch-Ch Mismatch maximum limit values specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMaxAll"

Group Maximum Limits Query

Arguments None

Returns Query returns all the Ch-Ch Mismatch maximum limit values specified in the Limits file.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%).

Returns "---" if no value in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMaxAll"
Query may return: "ChChMismatchMaxAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchMaxCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARiable:VALue? "ChChMismatchMaxCh1Ch2"

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch1Ch2 voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no maximum channel mismatch in the limits file is specified.

Examples VARiable:VALue? "ChChMismatchMaxCh1Ch2"
Query may return: "ChChMismatchMaxCh1Ch2 -1.44"

ChChMismatchMaxCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChMismatchMaxCh1Ch3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Ch1Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no maximum channel mismatch in the limits file is specified.
Examples	VARIABLE:VALUE? "ChChMismatchMaxCh1Ch3" Query may return: "ChChMismatchMaxCh1Ch3 73.97"

ChChMismatchMaxCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChMismatchMaxCh2Ch3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch2Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no maximum channel mismatch in the limits file is specified.

Examples VARIABLE:VALUE? "ChChMismatchMaxCh2Ch3"
Query may return: "ChChMismatchMaxCh2Ch3 73.97"

ChChMismatchMaxPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMaxPeakToPeakCh1Ch2"

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMaxPeakToPeakCh1Ch2"
Query may return: "ChChMismatchMaxPeakToPeakCh1Ch2 -104.72"

ChChMismatchMaxPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChMismatchMaxPeakToPeakCh1Ch3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? “ChChMismatchMaxPeakToPeakCh1Ch3”
Query may return: “ChChMismatchMaxPeakToPeakCh1Ch3 42.19”

ChChMismatchMaxPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChMismatchMaxPeakToPeakCh2Ch3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file. The returned value is in percent (%). Returns "---" if no maximum channel mismatch in the limits file is specified.
Examples	VARIABLE:VALUE? "ChChMismatchMaxPeakToPeakCh2Ch3" Query may return: "ChChMismatchMaxPeakToPeakCh2Ch3 30.23"

ChChMismatchMinAll?

Query all the Ch-Ch Mismatch minimum limit values specified in the Limits file.

Syntax VARIable:VALue? “ChChMismatchMinAll”

Group Minimum Limits Query

Arguments None

Returns Query returns all the Ch-Ch Mismatch minimum limit values specified in the Limits file.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%).

Returns “---” if no value in the limits file is specified.

Examples VARIable:VALue? “ChChMismatchMinAll”
Query may return: “ChChMismatchMinAll -1.44 73.97 73.97 -104.72 42.19 30.23”

ChChMismatchMinCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChMismatchMinCh1Ch2"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Ch1Ch2 voltage amplitude mismatch minimum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no minimum channel mismatch in the limits file is specified.
Examples	VARIABLE:VALUE? "ChChMismatchMinCh1Ch2" Query may return: "ChChMismatchMinCh1Ch2 -1.44"

ChChMismatchMinCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARiable:VALue? “ChChMismatchMinCh1Ch3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch1Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns “---” if no maximum channel mismatch in the limits file is specified.

Examples VARiable:VALue? “ChChMismatchMinCh1Ch3”
Query may return: “ChChMismatchMinCh1Ch3 73.97”

ChChMismatchMinCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChMismatchMinCh2Ch3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Ch2Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no minimum channel mismatch in the limits file is specified.
Examples	VARIABLE:VALUE? "ChChMismatchMinCh2Ch3" Query may return: "ChChMismatchMinCh2Ch3 73.97"

ChChMismatchMinPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh1Ch2"

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no minimum channel mismatch in the limits file is specified.

Examples VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh1Ch2"
Query may return: "ChChMismatchMinPeakToPeakCh1Ch2 -104.72"

ChChMismatchMinPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh1Ch3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file. The returned value is in percent (%). Returns "---" if no minimum channel mismatch in the limits file is specified.
Examples	VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh1Ch3" Query may return: "ChChMismatchMinPeakToPeakCh1Ch3 42.19"

ChChMismatchMinPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh2Ch3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no minimum channel mismatch in the limits file is specified.

Examples VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh2Ch3"
Query may return: "ChChMismatchMinPeakToPeakCh2Ch3 30.23"

ChChMismatchMultiLineEnd<line number>

Set or query the ending line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Syntax VARIable:VALue “ChChMismatchMultiLineEnd”, “<line number>”

VARIable:VALue? “ChChMismatchMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Examples VARIable:VALue “ChChMismatchMultiLineEnd”, “200”

VARIable:VALue? “ChChMismatchMultiLineEnd”

Query may return: “ChChMismatchMultiLineEnd 325”

ChChMismatchMultiLineStart<line number>

Set or query the starting line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Syntax VARIable:VALue “ChChMismatchMultiLineStart”, “<line number>”

VARIable:VALue? “ChChMismatchMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Examples VARIable:VALue “ChChMismatchMultiLineStart”, “200”

VARIable:VALue? “ChChMismatchMultiLineStart”

Query may return: “ChChMismatchMultiLineStart 325”

ChChMismatchPassAll?

Query the pass/fail status for all the values of the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchPassAll"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values of the Ch-Ch Mismatch measurement.

A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPassAll"
Query may return: "ChChMismatchPassAll 1 1 1 0 0 1 "

ChChMismatchPassCh1Ch2?

Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 measurement.

Syntax VARIable:VALue? “ChChMismatchPassCh1Ch2”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “ChChMismatchPassCh1Ch2”
Query may return: “ChChMismatchPassCh1Ch2 1”

ChChMismatchPassCh1Ch3?

Query the the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 measurement.

Syntax VARIable:VALue? “ChChMismatchPassCh1Ch3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “ChChMismatchPassCh1Ch3”
Query may return: “ChChMismatchPassCh1Ch3 1”

ChChMismatchPassCh2Ch3?

Query the the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 measurement.

Syntax VARiable:VALue? “ChChMismatchPassCh2Ch3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “ChChMismatchPassCh2Ch3”
Query may return: “ChChMismatchPassCh2Ch3 1”

ChChMismatchPassPeakToPeakCh1Ch2?

Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 (%) Peak-Peak measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchPassPeakToPeakCh1Ch2"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status of the Ch-Ch Mismatch (%) Ch1Ch2 Peak-Peak measurement. A returned value of 1 means pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchPassPeakToPeakCh1Ch2" Query may return: "ChChMismatchPassPeakToPeakCh1Ch2 1"

ChChMismatchPassPeakToPeakCh1Ch3?

Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 (%) Peak-Peak measurement.

Syntax VARIABLE:VALUE? "ChChMismatchPassPeakToPeakCh1Ch3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Mismatch (%) Ch1Ch3 Peak-Peak measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChMismatchPassPeakToPeakCh1Ch3"
Query may return: "ChChMismatchPassPeakToPeakCh1Ch3 1"

ChChMismatchPassPeakToPeakCh2Ch3?

Query the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 (%) Peak-Peak measurement.

Syntax VARIable:VALue? "ChChMismatchPassPeakToPeakCh2Ch3"

Group Pass/Fail Query Status

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Mismatch (%) Ch2Ch3 Peak-Peak measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPassPeakToPeakCh2Ch3"
Query may return: "ChChMismatchPassPeakToPeakCh2Ch3 1"

ChChMismatchPeakToPeakCh1Ch2?

Query the measured Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIABLE:VALUE? "ChChMismatchPeakToPeakCh1Ch2"

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in percent (%). Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChMismatchPeakToPeakCh1Ch2"
Query may return: "ChChMismatchPeakToPeakCh1Ch2 -104.72"

ChChMismatchPeakToPeakCh1Ch3?

Query the measured Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchPeakToPeakCh1Ch3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in percent (%). Returns "--" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchPeakToPeakCh1Ch3" Query may return: "ChChMismatchPeakToPeakCh1Ch3 42.19"

ChChMismatchPeakToPeakCh2Ch3?

Query the measured Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? “ChChMismatchPeakToPeakCh2Ch3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in percent (%). Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChMismatchPeakToPeakCh2Ch3”
Query may return: “ChChMismatchPeakToPeakCh2Ch3 30.23”

ChChMismatchRefAll?

Query all the Ch-Ch Mismatch reference values specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefAll"

Group Reference Values Query

Arguments None

Returns Query returns all the Ch-Ch Mismatch reference values specified in the Reference file.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%) Peak-Peak.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRefAll"
Query may return: "ChChMismatchRefAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchRefCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "ChChMismatchRefCh1Ch2"

Group Reference Values Query

Arguments None

Returns Query returns the Ch1Ch2 voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "----" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChChMismatchRefCh1Ch2"
Query may return: "ChChMismatchRefCh1Ch2 -1.44"

ChChMismatchRefCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefCh1Ch3"

Group Reference Values Query

Arguments None

Returns Query returns the Ch1Ch3 voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchRefCh1Ch3"
Query may return: "ChChMismatchRefCh1Ch3 73.97"

ChChMismatchRefCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIable:VALue? “ChChMismatchRefCh2Ch3”

Group Reference Values Query

Arguments None

Returns Query returns the Ch2Ch3 voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “ChChMismatchRefCh2Ch3”
Query may return: “ChChMismatchRefCh2Ch3 73.97”

ChChMismatchRefPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.

Syntax	VARIABLE:VALUE? "ChChMismatchRefPeakToPeakCh1Ch2"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file. The returned value is in percent (%). Returns "---" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchRefPeakToPeakCh1Ch2" Query may return: "ChChMismatchRefPeakToPeakCh1Ch2 -104.72"

ChChMismatchRefPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "ChChMismatchRefPeakToPeakCh1Ch3"

Group Reference Values Query

Arguments None

Returns Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChChMismatchRefPeakToPeakCh1Ch3"
Query may return: "ChChMismatchRefPeakToPeakCh1Ch3 42.19"

ChChMismatchRefPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.

Syntax	VARIABLE:VALUE? "ChChMismatchRefPeakToPeakCh2Ch3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file. The returned value is in millivolts (mV). Returns "---" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchRefPeakToPeakCh2Ch3" Query may return: "ChChMismatchRefPeakToPeakCh2Ch3 30.23"

ChChMismatchRelAll?

Query all the relative values resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelAll"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the Ch-Ch Mismatch measurement.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV),
Ch1Ch2 (%) Peak-Peak, Ch1Ch3 (%) Peak-Peak, and Ch2Ch3 (%) Peak-Peak.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelAll"
Query may return: "ChChMismatchRelAll -1.44 73.97 73.97 -104.72 42.19
30.23"

ChChMismatchRelCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchRelCh1Ch2"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Ch1Ch2 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchRelCh1Ch2" Query may return: "ChChMismatchRelCh1Ch2 -1.44"

ChChMismatchRelCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelCh1Ch3"

Group Relative Results Query

Arguments None

Returns Query returns the Ch1Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelCh1Ch3"
Query may return: "ChChMismatchRelCh1Ch3 73.97"

ChChMismatchRelCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchRelCh2Ch3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Ch1Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchRelCh2Ch3" Query may return: "ChChMismatchRelCh2Ch3 73.97"

ChChMismatchRelPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelPeakToPeakCh1Ch2"

Group Relative Results Query

Arguments None

Returns Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelPeakToPeakCh1Ch2"
Query may return: "ChChMismatchRelPeakToPeakCh1Ch2 -104.72"

ChChMismatchRelPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax	VARIABLE:VALUE? "ChChMismatchRelPeakToPeakCh1Ch3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChMismatchRelPeakToPeakCh1Ch3" Query may return: "ChChMismatchRelPeakToPeakCh1Ch3 42.19"

ChChMismatchRelPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelPeakToPeakCh2Ch3"

Group Relative Results Query

Arguments None

Returns Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelPeakToPeakCh2Ch3"
Query may return: "ChChMismatchRelPeakToPeakCh2Ch3 30.23"

ChChMismatchSet

Set or query whether to perform the Ch-Ch Mismatch measurement upon Execute.

Syntax VARIable:VALue “ChChMismatchSet”, “<setting>”

VARIable:VALue? “ChChMismatchSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Ch-Ch Mismatch measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the Ch-Ch Mismatch measurement is not selected.
Query returns “1” if the Ch-Ch Mismatch measurement is selected.

Examples VARIable:VALue “ChChMismatchSet”, “ON”

VARIable:VALue? “ChChMismatchSet”

Query may return: “ChChMismatchSet 1”

ChChMismatchStatus?

Query the status of the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? “ChChMismatchStatus”

Group Results Summary Query

Arguments None

Returns Query may return one of these values: “Done”, “Stopped”, “Pass”, “Fail”
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when measurement is halted before completion.
Returns “---” if no valid value are currently available.

Examples VARIable:VALue? “ChChMismatchStatus”
Query may return: “ChChMismatchStatus Pass”

ChChSkewAll?

Query the measured values of all the Ch-Ch Skew measurements.

Syntax	VARIABLE:VALUE? "ChChSkewAll"
Group	Measured Results Query
Arguments	None
Returns	<p>Query returns the measured values of all the Ch-Ch Skew measurements.</p> <p>The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns), Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and Ch2Ch3 (%) Pixel Clock.</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "ChChSkewAll"</p> <p>Query may return: "ChChSkewAll 1.18 0.43 0.21 7.67 2.81 1.38"</p>

ChChSkewAverage <setting>

Set or query the number of samples over which to average the Ch-Ch Skew measurement.

Syntax VARIable:VALue “ChChSkewAverage”, “<setting>”

VARIable:VALue? “ChChSkewAverage”

Group Measurement Setup

Related Commands ChChSkewLine

Arguments <setting> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the current assigned total number of samples for the Ch-Ch Skew measurement.

Examples VARIable:VALue “ChChSkewAverage”, “1”

VARIable:VALue? “ChChSkewAverage”
Query may return: “ChChSkewAverage 8”

ChChSkewCh1Ch2?

Query the measured Ch1Ch2 Skew value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? “ChChSkewCh1Ch2”

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch1Ch2 Skew value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewCh1Ch2”
Query may return: “ChChSkewCh1Ch2 1.18”

ChChSkewCh1Ch3?

Query the measured Ch1Ch3 Skew value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALue? "ChChSkewCh1Ch3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch1Ch3 Skew value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "ChChSkewCh1Ch3"
Query may return: "ChChSkewCh1Ch3 0.43"

ChChSkewCh2Ch3?

Query the measured Ch2Ch3 Skew value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? “ChChSkewCh2Ch3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch2Ch3 Skew value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewCh2Ch3”
Query may return: “ChChSkewCh2Ch3 0.21”

ChChSkewLine

Set or query the line number used to perform the Ch-Ch Skew measurement.

Syntax VARIable:VALue “ChChSkewLine”, “<line number>”

VARIable:VALue? “ChChSkewLine”

Group Measurement Setup

Arguments <line number> can only be an integer. Fractional numbers will return errors.
Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number used to perform the
Ch-Ch Skew measurement.

Examples VARIable:VALue “ChChSkewLine”, “200”

VARIable:VALue? “ChChSkewLine”
Query may return: “ChChSkewLine 325”

ChChSkewPixelClockCh1Ch2?

Query the measured Ch1Ch2 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.

Syntax	VARIABLE:VALUE? "ChChSkewPixelClockCh1Ch2"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Ch1Ch2 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChSkewPixelClockCh1Ch2" Query may return: "ChChSkewPixelClockCh1Ch2 7.67"

ChChSkewPixelClockCh1Ch3?

Query the measured Ch1Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALUE? "ChChSkewPixelClockCh1Ch3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Ch1Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewPixelClockCh1Ch3"
Query may return: "ChChSkewPixelClockCh1Ch3 2.81"

ChChSkewPixelClockCh2Ch3?

Query the measured Ch2Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.

Syntax	VARIABLE:VALUE? "ChChSkewPixelClockCh2Ch3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Ch2Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChSkewPixelClockCh2Ch3" Query may return: "ChChSkewPixelClockCh2Ch3 1.38"

ChChSkewMaxAll?

Query all the Ch-Ch Skew maximum limit values specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxAll”

Group Maximum Limits Query

Arguments None

Returns Query returns all the Ch-Ch Skew maximum limit values specified in the Limits file.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxAll”
Query may return: “ChChSkewMaxAll 1.18 0.43 0.21 7.67 2.81 1.38”

ChChSkewMaxCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxCh1Ch2”

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch2 maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxCh1Ch2”
Query may return: “ChChSkewMaxCh1Ch2 1.18”

ChChSkewMaxCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMaxCh1Ch3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch3 maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMaxCh1Ch3"
Query may return: "ChChSkewMaxCh1Ch3 0.43"

ChChSkewMaxCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxCh2Ch3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch2Ch3 maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxCh2Ch3”
Query may return: “ChChSkewMaxCh2Ch3 0.21”

ChChSkewMaxPixelClockCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxPixelClockCh1Ch2”

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxPixelClockCh1Ch2”
Query may return: “ChChSkewMaxPixelClockCh1Ch2 7.67”

ChChSkewMaxPixelClockCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxPixelClockCh1Ch3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxPixelClockCh1Ch3”
Query may return: “ChChSkewMaxPixelClockCh1Ch3 2.81”

ChChSkewMaxPixelClockCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxPixelClockCh2Ch3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxPixelClockCh2Ch3”
Query may return: “ChChSkewMaxPixelClockCh2Ch3 1.38”

ChChSkewMinAll?

Query all the Ch-Ch Skew minimum limit values specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChSkewMinAll"
Group	Minimum Limits Query
Arguments	None
Returns	<p>Query returns all the Ch-Ch Skew minimum limit values specified in the Limits file.</p> <p>The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns), Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and Ch2Ch3 (%) Pixel Clock.</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "ChChSkewMinAll"</p> <p>Query may return: "ChChSkewMinAll 1.18 0.43 0.21 7.67 2.81 1.38"</p>

ChChSkewMinCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMinCh1Ch2"

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch2 minimum limit value specified in the Limits file.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMinCh1Ch2"
Query may return: "ChChSkewMinCh1Ch2 1.18"

ChChSkewMinCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMinCh1Ch3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch3 minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMinCh1Ch3”
Query may return: “ChChSkewMinCh1Ch3 0.43”

ChChSkewMinCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMinCh2Ch3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch2Ch3 minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMinCh2Ch3"
Query may return: "ChChSkewMinCh2Ch3 0.21"

ChChSkewMinPixelClockCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChSkewMinPixelClockCh1Ch2"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock minimum limit value specified in the Limits file. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChSkewMinPixelClockCh1Ch2" Query may return: "ChChSkewMinPixelClockCh1Ch2 7.67"

ChChSkewMinPixelClockCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMinPixelClockCh1Ch3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMinPixelClockCh1Ch3”
Query may return: “ChChSkewMinPixelClockCh1Ch3 2.81”

ChChSkewMinPixelClockCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChSkewMinPixelClockCh2Ch3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock minimum limit value specified in the Limits file. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChSkewMinPixelClockCh2Ch3" Query may return: "ChChSkewMinPixelClockCh2Ch3 1.38"

ChChSkewMultiLineEnd

Set or query the ending line number used to perform the Ch-Ch Skew measurement on multiple lines.

Syntax VARIable:VALue “ChChSkewMultiLineEnd”, “<line number>”
VARIable:VALue? “ChChSkewMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the Ch-Ch Skew measurement on multiple lines.

Examples VARIable:VALue “ChChSkewMultiLineEnd”, “200”

VARIable:VALue? “ChChSkewMultiLineEnd”
Query may return: “ChChSkewMultiLineEnd 325”

ChChSkewMultiLineStart

Set or query the starting line number used to perform the Ch-Ch Skew measurement on multiple lines.

Syntax VARIable:VALue “ChChSkewMultiLineStart”, “<line number>”
 VARIable:VALue? “ChChSkewMultiLineStart”

Group Measurement Setup

Arguments <line number> should be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the Ch-Ch Skew measurement on multiple lines.

Examples VARIable:VALue “ChChSkewMultiLineStart”, “200”

 VARIable:VALue? “ChChSkewMultiLineStart”
 Query may return: “ChChSkewMultiLineStart 325”

ChChSkewPassAll?

Query the pass/fail status for all the values of the Ch-Ch Skew measurement.

Syntax VARiable:VALue? “ChChSkewPassAll”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values of the Ch-Ch Skew measurement.

A returned value of 1 means pass, a returned value of 0 means Fail.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “ChChSkewPassAll”
Query may return: “ChChSkewPassAll 1 1 0 1 1 0”

ChChSkewPassCh1Ch2?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 measurement.

Syntax VARIable:VALue? “ChChSkewPassCh1Ch2”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the the pass/fail status of the Ch-Ch Skew Ch1Ch2 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewPassCh1Ch2”
Query may return: “ChChSkewPassCh1Ch2 1”

ChChSkewPassCh1Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch3 measurement.

Syntax VARIABLE:VALue? “ChChSkewPassCh1Ch3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Skew Ch1Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “ChChSkewPassCh1Ch3”
Query may return: “ChChSkewPassCh1Ch3 1”

ChChSkewPassCh2Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 measurement.

Syntax VARIable:VALue? "ChChSkewPassCh2Ch3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Skew Ch2Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPassCh2Ch3"
Query may return: "ChChSkewPassCh2Ch3 1"

ChChSkewPassPixelClockCh1Ch2?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock measurement.

Syntax VARIABLE:VALUE? "ChChSkewPassPixelClockCh1Ch2"

Group Pass/Fail Status Query

Arguments None

Returns Query returns pass/fail status of the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewPassPixelClockCh1Ch2"
Query may return: "ChChSkewPassPixelClockCh1Ch2 1"

ChChSkewPassPixelClockCh1Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock measurement.

Syntax VARIable:VALue? "ChChSkewPassPixelClockCh1Ch3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPassPixelClockCh1Ch3"
Query may return: "ChChSkewPassPixelClockCh1Ch3 1"

ChChSkewPassPixelClockCh2Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock measurement.

Syntax VARIABLE:VALUE? "ChChSkewPassPixelClockCh2Ch3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewPassPixelClockCh2Ch3"
Query may return: "ChChSkewPassPixelClockCh2Ch3 1"

ChChSkewRefAll?

Query all the Ch-Ch Skew reference values specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewRefAll"

Group Reference Values Query

Arguments None

Returns Query returns all the Ch-Ch Skew reference values specified in the Limits file.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRefAll"
Query may return: "ChChSkewRefAll 1.18 0.43 0.21 7.67 2.81 1.38"

ChChSkewRefCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefCh1Ch2”

Group Reference Values Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch2 reference value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefCh1Ch2”
Query may return: “ChChSkewRefCh1Ch2 1.18”

ChChSkewRefCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefCh1Ch3”

Group Reference Values Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch3 reference value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefCh1Ch3”
Query may return: “ChChSkewRefCh1Ch3 0.43”

ChChSkewRefCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefCh2Ch3”

Group Reference Values Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch2Ch3 reference value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefCh2Ch3”
Query may return: “ChChSkewRefCh2Ch3 0.21”

ChChSkewRefPixelClockCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefPixelClockCh1Ch2”

Group Reference Values Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock reference value specified in the Limits file.
The returned value is in percent (%).
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefPixelClockCh1Ch2”
Query may return: “ChChSkewRefPixelClockCh1Ch2 7.67”

ChChSkewRefPixelClockCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefPixelClockCh1Ch3”

Group Reference Values Query

Arguments None

Returns Query returns the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock reference value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefPixelClockCh1Ch3”
Query may return: “ChChSkewRefPixelClockCh1Ch3 2.81”

ChChSkewRefPixelClockCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock reference value specified in the Limits file.

Syntax	VARIABLE:VALUE? "ChChSkewRefPixelClockCh2Ch3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock reference value specified in the Limits file. The returned value is in percent (%). Returns "--" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChSkewRefPixelClockCh2Ch3" Query may return: "ChChSkewRefPixelClockCh2Ch3 1.38"

ChChSkewRelAll?

Query all the relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? “ChChSkewRelAll”

Group Relative Results Query

Arguments None

Returns Query returns all the relative value resulting from the Ch-Ch Skew measurement.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRelAll”
Query may return: “ChChSkewRelAll 1.18 0.43 0.21 7.67 2.81 1.38”

ChChSkewRelCh1Ch2?

Query the Ch1Ch2 Skew relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewRelCh1Ch2"

Group Relative Results Query

Arguments None

Returns Query returns the Ch1Ch2 Skew relative value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRelCh1Ch2"
Query may return: "ChChSkewRelCh1Ch2 1.18"

ChChSkewRelCh1Ch3?

Query the Ch1Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALUE? "ChChSkewRelCh1Ch3"

Group Relative Results Query

Arguments None

Returns Query returns the Ch1Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewRelCh1Ch3"
Query may return: "ChChSkewRelCh1Ch3 0.43"

ChChSkewRelCh2Ch3?

Query the Ch2Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewRelCh2Ch3"

Group Relative Results Query

Arguments None

Returns Query returns the Ch2Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRelCh2Ch3"
Query may return: "ChChSkewRelCh2Ch3 0.21"

ChChSkewRelPixelClockCh1Ch2?

Query the Ch1Ch2 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? “ChChSkewRelPixelClockCh1Ch2”

Group Relative Results Query

Arguments None

Returns Query returns the Ch1Ch2 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRelPixelClockCh1Ch2”
Query may return: “ChChSkewRelPixelClockCh1Ch2 7.67”

ChChSkewRelPixelClockCh1Ch3?

Query the Ch1Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.

Syntax	VARIABLE:VALUE? "ChChSkewRelPixelClockCh1Ch3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Ch1Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "ChChSkewRelPixelClockCh1Ch3" Query may return: "ChChSkewRelPixelClockCh1Ch3 2.81"

ChChSkewRelPixelClockCh2Ch3?

Query the Ch2Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALUE? "ChChSkewRelPixelClockCh2Ch3"

Group Relative Results Query

Arguments None

Returns Query returns the Ch2Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewRelPixelClockCh2Ch3"
Query may return: "ChChSkewRelPixelClockCh2Ch3 1.38"

ChChSkewSet <setting>

Set or query whether to perform the Ch-Ch Skew measurements upon Execute.

Syntax VARIable:VALue “ChChSkewSet”, “<setting>”

VARIable:VALue? “ChChSkewSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Ch-Ch Skew measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the Ch-Ch Skew measurement is not selected.
Query returns “1” if the Ch-Ch Skew measurement is selected.

Examples VARIable:VALue “ChChSkewSet”, “ON”

VARIable:VALue? “ChChSkewSet”

Query may return: “ChChSkewSet 1”

ChChSkewStatus?

Query the status of the Ch-Ch Skew measurement.

Syntax VARIable:VALue? “ChChSkewStatus”

Group Results Summary Query

Arguments None

Returns Query may return one of these values: “Done”, “Stopped”, “Pass”, “Fail”
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when measurement is halted before completion.
Returns “---” if no valid value are currently available.

Examples VARIable:VALue? “ChChSkewStatus”
Query may return: “ChChSkewStatus Pass”

ColorBarsAverage <samples>

Set or query the number of samples over which to average results from the Color Bars measurement.

Syntax VARIable:VALue “ColorBarsAverage”, “<samples>”

VARIable:VALue? “ColorBarsAverage”

Group Measurement Setup

Related Commands ColorBarsLine

Arguments <samples> should be an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples over which to average results from the Color Bars measurement.

Examples VARIable:VALue “ColorBarsAverage”, “1”

VARIable:VALue? “ColorBarsAverage”

Query may return: “ColorBarsAverage 8”

ColorBarsCh[1..3]?

Query all the eight color bars level values resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1"
 VARIable:VALue? "ColorBarsCh2"
 VARIable:VALue? "ColorBarsCh3"

Group Measured Results Query

Arguments None

Returns Query returns all the eight color bars level values resulting from the Color Bars measurement on the specified channel, in this order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in millivolts (mV).

The order is: White(Ch1) Yellow(Ch1) Cyan(Ch1) Green(Ch1) Magenta(Ch1) Red(Ch1) Blue(Ch1) Black(Ch1) White(Ch2) Yellow(Ch2) Cyan(Ch2) Green(Ch2) Magenta(Ch2) Red(Ch2) Blue(Ch2) Black(Ch2) White(Ch3) Yellow(Ch3) Cyan(Ch3) Green(Ch3) Magenta(Ch3) Red(Ch3) Blue(Ch3) Black(Ch3).

Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1"
 Query may return: "ColorBarsCh1 700 700 700 700 0 0 0 0"

ColorBarsCh[1..3]Val1?

Query the measured White color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val1"
 VARIable:VALue? "ColorBarsCh2Val1"
 VARIable:VALue? "ColorBarsCh3Val1"

Group Measured Results Query

Arguments None

Returns Query returns the measured White color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val1"
 Query may return: "ColorBarsCh1Val1 700"

ColorBarsCh[1..3]Val2?

Query the measured Yellow color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? “ColorBarsCh1Val2”
 VARIable:VALue? “ColorBarsCh2Val2”
 VARIable:VALue? “ColorBarsCh3Val2”

Group Measured Results Query

Arguments None

Returns Query returns the measured Yellow color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsCh1Val2”
 Query may return: “ColorBarsCh1Val2 700”

ColorBarsCh[1..3]Val3?

Query the measured Cyan color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val3"
 VARIable:VALue? "ColorBarsCh2Val3"
 VARIable:VALue? "ColorBarsCh3Val3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Cyan color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val3"
 Query may return: "ColorBarsCh1Val3 700"

ColorBarsCh[1..3]Val4?

Query the measured Green color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val4"
 VARIable:VALue? "ColorBarsCh2Val4"
 VARIable:VALue? "ColorBarsCh3Val4"

Group Measured Results Query

Arguments None

Returns Query returns the measured Green color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val4"
 Query may return: "ColorBarsCh1Val4 700"

ColorBarsCh[1..3]Val5?

Query the measured Magenta color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val5"
 VARIable:VALue? "ColorBarsCh2Val5"
 VARIable:VALue? "ColorBarsCh3Val5"

Group Measured Results Query

Arguments None

Returns Query returns the measured Magenta color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val5"
 Query may return: "ColorBarsCh1Val5 0"

ColorBarsCh[1..3]Val6?

Query the measured Red color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsCh1Val6"
 VARIABLE:VALue? "ColorBarsCh2Val6"
 VARIABLE:VALue? "ColorBarsCh3Val6"

Group Measured Results Query

Arguments None

Returns Query returns the measured Red color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsCh1Val6"
 Query may return: "ColorBarsCh1Val6 0"

ColorBarsCh[1..3]Val7?

Query the measured Blue color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val7"
 VARIable:VALue? "ColorBarsCh2Val7"
 VARIable:VALue? "ColorBarsCh3Val7"

Group Measured Results Query

Arguments None

Returns Query returns the measured Blue color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val7"
 Query may return: "ColorBarsCh1Val7 0"

ColorBarsCh[1..3]Val8?

Query the measured Black color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val8"
 VARIable:VALue? "ColorBarsCh2Val8"
 VARIable:VALue? "ColorBarsCh3Val8"

Group Measured Results Query

Arguments None

Returns Query returns the measured Black color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val8"
 Query may return: "ColorBarsCh1Val8 0"

ColorBarsLine <line number>

Set or query the line number used to perform the Color Bars measurement.

Syntax VARIable:VALue “ColorBarsLine”, “<line number>”
 VARIable:VALue? “ColorBarsLine”

Group Measurement Setup

Related Commands ColorBarsAverage

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number used to perform the Color Bars measurement.

Examples VARIable:VALue “ColorBarsLine”, “200”

 VARIable:VALue? “ColorBarsLine”
 Query may return: “ColorBarsLine 325”

ColorBarsMaxCh[1..3]?

Query all the Color Bars maximum limit values specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1"
 VARIable:VALue? "ColorBarsMaxCh2"
 VARIable:VALue? "ColorBarsMaxCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns all the Color Bars maximum limit values specified in the Limits file on the specified channel.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1"
 Query may return: "ColorBarsMaxCh1 700 700 700 700 0 0 0 0"

ColorBarsMaxCh[1..3]Val1?

Query the Color Bars White color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val1"
 VARIable:VALue? "ColorBarsMaxCh2Val1"
 VARIable:VALue? "ColorBarsMaxCh3Val1"

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars White color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val1"
 Query may return: "ColorBarsMaxCh1Val1 700"

ColorBarsMaxCh[1..3]Val2?

Query the Color Bars Yellow color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “ColorBarsMaxCh1Val2”
 VARIable:VALue? “ColorBarsMaxCh2Val2”
 VARIable:VALue? “ColorBarsMaxCh3Val2”

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars Yellow color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsMaxCh1Val2”
 Query may return: “ColorBarsMaxCh1Val2 700”

ColorBarsMaxCh[1..3]Val3?

Query the Color Bars Cyan color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val3"
 VARIable:VALue? "ColorBarsMaxCh2Val3"
 VARIable:VALue? "ColorBarsMaxCh3Val3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars Cyan color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val3"
 Query may return: "ColorBarsMaxCh1Val3 700"

ColorBarsMaxCh[1..3]Val4?

Query the Color Bars Green color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “ColorBarsMaxCh1Val4”
 VARIable:VALue? “ColorBarsMaxCh2Val4”
 VARIable:VALue? “ColorBarsMaxCh3Val4”

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars Green color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsMaxCh1Val4”
 Query may return: “ColorBarsMaxCh1Val4 700”

ColorBarsMaxCh[1..3]Val5?

Query the Color Bars Magenta color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val5"
 VARIable:VALue? "ColorBarsMaxCh2Val5"
 VARIable:VALue? "ColorBarsMaxCh3Val5"

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars Magenta color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val5"
 Query may return: "ColorBarsMaxCh1Val5 0"

ColorBarsMaxCh[1..3]Val6?

Query the Color Bars Red color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “ColorBarsMaxCh1Val6”
 VARIable:VALue? “ColorBarsMaxCh2Val6”
 VARIable:VALue? “ColorBarsMaxCh3Val6”

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars Red color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsMaxCh1Val6”
 Query may return: “ColorBarsMaxCh1Val6 0”

ColorBarsMaxCh[1..3]Val7?

Query the Color Bars Blue color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val7"
 VARIable:VALue? "ColorBarsMaxCh2Val7"
 VARIable:VALue? "ColorBarsMaxCh3Val7"

Group Maximum Limits Query

Arguments None

Returns Query returns the Color Bars Blue color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val7"
 Query may return: "ColorBarsMaxCh1Val7 0"

ColorBarsMaxCh[1..3]Val8?

Query the Color Bars Black color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “ColorBarsMaxCh1Val8”
 VARIable:VALue? “ColorBarsMaxCh2Val8”
 VARIable:VALue? “ColorBarsMaxCh3Val8”

Group Maximum Limits Query

Arguments None

Returns Returns the Color Bars Black color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsMaxCh1Val8”
 Query may return: “ColorBarsMaxCh1Val8 0”

ColorBarsMinCh[1..3]?

Query all the Color Bars minimum limit values specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1"
 VARIable:VALue? "ColorBarsMinCh2"
 VARIable:VALue? "ColorBarsMinCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns all the Color Bars minimum limit values specified in the Limits file on the specified channel.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1"
 Query may return: "ColorBarsMinCh1 700 700 700 700 0 0 0 0"

ColorBarsMinCh[1..3]Val1?

Query the Color Bars White color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsMinCh1Val1”
 VARIABLE:VALue? “ColorBarsMinCh2Val1”
 VARIABLE:VALue? “ColorBarsMinCh3Val1”

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars White color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid value is currently available.

Examples VARIABLE:VALue? “ColorBarsMinCh1Val1”
 Query may return: “ColorBarsMinCh1Val1 700”

ColorBarsMinCh[1..3]Val2?

Query the Color Bars Yellow color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val2"
 VARIable:VALue? "ColorBarsMinCh2Val2"
 VARIable:VALue? "ColorBarsMinCh3Val2"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Yellow color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val2"
 Query may return: "ColorBarsMinCh1Val2 700"

ColorBarsMinCh[1..3]Val3?

Query the Color Bars Cyan color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val3"
 VARIable:VALue? "ColorBarsMinCh2Val3"
 VARIable:VALue? "ColorBarsMinCh3Val3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Cyan color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val3"
 Query may return: "ColorBarsMinCh1Val3 700"

ColorBarsMinCh[1..3]Val4?

Query the Color Bars Green color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val4"
 VARIable:VALue? "ColorBarsMinCh2Val4"
 VARIable:VALue? "ColorBarsMinCh3Val4"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Green color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val4"
 Query may return: "ColorBarsMinCh1Val4 700"

ColorBarsMinCh[1..3]Val5?

Query the Color Bars Magenta color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsMinCh1Val5"
 VARIABLE:VALue? "ColorBarsMinCh2Val5"
 VARIABLE:VALue? "ColorBarsMinCh3Val5"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Magenta color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIABLE:VALue? "ColorBarsMinCh1Val5"
 Query may return: "ColorBarsMinCh1Val5 0"

ColorBarsMinCh[1..3]Val6?

Query the Color Bars Red color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val6"
 VARIable:VALue? "ColorBarsMinCh2Val6"
 VARIable:VALue? "ColorBarsMinCh3Val6"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Red color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val6"
 Query may return: "ColorBarsMinCh1Val6 0"

ColorBarsMinCh[1..3]Val7?

Query the Color Bars Blue color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsMinCh1Val7"
 VARIABLE:VALue? "ColorBarsMinCh2Val7"
 VARIABLE:VALue? "ColorBarsMinCh3Val7"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Blue color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIABLE:VALue? "ColorBarsMinCh1Val7"
 Query may return: "ColorBarsMinCh1Val7 0"

ColorBarsMinCh[1..3]Val8?

Query the Color Bars Black color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val8"
 VARIable:VALue? "ColorBarsMinCh2Val8"
 VARIable:VALue? "ColorBarsMinCh3Val8"

Group Minimum Limits Query

Arguments None

Returns Query returns the Color Bars Black color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val8"
 Query may return: "ColorBarsMinCh1Val8 0"

ColorBarsMultiLineEnd

Set or query the ending line number used to perform the Color Bars measurement on multiple lines.

Syntax VARIable:VALue “ColorBarsMultiLineEnd”, “<line number>”
VARIable:VALue? “ColorBarsMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the Color Bars measurement on multiple lines.

Examples VARIable:VALue “ColorBarsMultiLineEnd”, “200”

VARIable:VALue? “ColorBarsMultiLineEnd”
Query may return: “ColorBarsMultiLineEnd 325”

ColorBarsMultiLineStart

Set or query the starting line number used to perform the Color Bars measurement on multiple lines.

Syntax VARIable:VALue “ColorBarsMultiLineStart”, “<line number>”
VARIable:VALue? “ColorBarsMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the Color Bars measurement on multiple lines.

Examples VARIable:VALue “ColorBarsMultiLineStart”, “200”

VARIable:VALue? “ColorBarsMultiLineStart”
Query may return: “ColorBarsMultiLineStart 325”

ColorBarsPassAll?

Query the pass/fail status for all the color bars resulting from the Color Bars measurement on all the channels.

Syntax VARIable:VALue? “ColorBarsPassAll”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the color bars resulting from the Color Bars measurement on all the channels.

A returned value of 1 means Pass, a returned value of 0 means Fail.

The order is: White (Ch1), Yellow (Ch1), Cyan (Ch1) , Green (Ch1), Magenta (Ch1), Red (Ch1), Blue (Ch1), Black (Ch1), White (Ch2), Yellow (Ch2), Cyan (Ch2), Green (Ch2), Magenta (Ch2), Red (Ch2), Blue (Ch2), Black (Ch2), White (Ch3), Yellow (Ch3), Cyan (Ch3), Green (Ch3), Magenta (Ch3), Red (Ch3), Blue (Ch3), and Black (Ch3).

Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsPassAll”
Query may return: “ColorBarsPassAll 1 0 0 0 1 0 1 1 1 0 0 0 1 0 1 1 1 0 0 0 1 0 1 1 1 0 0 0 1 0 1 1”

ColorBarsPassCh[1..3]?

Query the pass/fail status for all the eight color bars resulting from the Color Bars measurement on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsPassCh1" VARIABLE:VALUE? "ColorBarsPassCh2" VARIABLE:VALUE? "ColorBarsPassCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for all the eight color bars resulting from the Color Bars measurement. In this order: White Yellow Cyan Green Magenta Red Blue Black. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsPassCh1" Query may return: "ColorBarsPassCh1 1 1 1 0 0 1 1 1"

ColorBarsPassCh[1..3]Val1?

Query the pass/fail status for the White color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsPassCh1Val1”
 VARIABLE:VALue? “ColorBarsPassCh2Val1”
 VARIABLE:VALue? “ColorBarsPassCh3Val1”

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the White color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsPassCh1Val1”
 Query may return: “ColorBarsPassCh1Val1 1”

ColorBarsPassCh[1..3]Val2?

Query the pass/fail status for the Yellow color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val2"
 VARIable:VALue? "ColorBarsPassCh2Val2"
 VARIable:VALue? "ColorBarsPassCh3Val2"

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Yellow color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val2"
 Query may return: "ColorBarsPassCh1Val2 1"

ColorBarsPassCh[1..3]Val3?

Query the pass/fail status for the Cyan color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsPassCh1Val3”
 VARIABLE:VALue? “ColorBarsPassCh2Val3”
 VARIABLE:VALue? “ColorBarsPassCh3Val3”

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Cyan color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsPassCh1Val3”
 Query may return: “ColorBarsPassCh1Val3 1”

ColorBarsPassCh[1..3]Val4?

Query the pass/fail status for the Green color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val4"
 VARIable:VALue? "ColorBarsPassCh2Val4"
 VARIable:VALue? "ColorBarsPassCh3Val4"

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Green color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val4"
 Query may return: "ColorBarsPassCh1Val4 1"

ColorBarsPassCh[1..3]Val5?

Query the pass/fail status for the Magenta color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsPassCh1Val5”
 VARIABLE:VALue? “ColorBarsPassCh2Val5”
 VARIABLE:VALue? “ColorBarsPassCh3Val5”

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Magenta color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsPassCh1Val5”
 Query may return: “ColorBarsPassCh1Val5 1”

ColorBarsPassCh[1..3]Val6?

Query the pass/fail status for the Red color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val6"
 VARIable:VALue? "ColorBarsPassCh2Val6"
 VARIable:VALue? "ColorBarsPassCh3Val6"

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Red color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val6"
 Query may return: "ColorBarsPassCh1Val6 1"

ColorBarsPassCh[1..3]Val7?

Query the pass/fail status for the Blue color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsPassCh1Val7"
 VARIABLE:VALue? "ColorBarsPassCh2Val7"
 VARIABLE:VALue? "ColorBarsPassCh3Val7"

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Blue color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsPassCh1Val7"
 Query may return: "ColorBarsPassCh1Val7 1"

ColorBarsPassCh[1..3]Val8?

Query the pass/fail status for the Black color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val8"
 VARIable:VALue? "ColorBarsPassCh2Val8"
 VARIable:VALue? "ColorBarsPassCh3Val8"

Group Pass/Fail Status Query

Arguments None

Returns Returns the pass/fail status for the Black color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val8"
 Query may return: "ColorBarsPassCh1Val8 1"

ColorBarsRefCh[1..3]?

Query all the Color Bars reference values specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “ColorBarsRefCh1”
 VARIable:VALue? “ColorBarsRefCh2”
 VARIable:VALue? “ColorBarsRefCh3”

Group Reference Values Query

Arguments None

Returns Query returns all the Color Bars reference values specified in the Reference file on the specified channel.

The order: White Yellow Cyan Green Magenta Red Blue Black.

The returned value is in millivolts (mV).

Returns “-----” if no valid value is currently available.

Examples VARIable:VALue? “ColorBarsRefCh1”
 Query may return: “ColorBarsRefCh1 700 700 700 700 0 0 0 0”

ColorBarsRefCh[1..3]Val1?

Query the Color Bars reference value for the White color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val1"
 VARIable:VALue? "ColorBarsRefCh2Val1"
 VARIable:VALue? "ColorBarsRefCh3Val1"

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the White color bar specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val1"
 Query may return: "ColorBarsRefCh1Val1 700"

ColorBarsRefCh[1..3]Val2?

Query the Color Bars reference value for the Yellow color bar specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsRefCh1Val2”
 VARIABLE:VALue? “ColorBarsRefCh2Val2”
 VARIABLE:VALue? “ColorBarsRefCh3Val2”

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Yellow color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRefCh1Val2”
 Query may return: “ColorBarsRefCh1Val2 700”

ColorBarsRefCh[1..3]Val3?

Query the Color Bars reference value for the Cyan color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val3"
 VARIable:VALue? "ColorBarsRefCh2Val3"
 VARIable:VALue? "ColorBarsRefCh3Val3"

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Cyan color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val3"
 Query may return: "ColorBarsRefCh1Val3 700"

ColorBarsRefCh[1..3]Val4?

Query the Color Bars reference value for the Green color bar specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsRefCh1Val4"
 VARIABLE:VALue? "ColorBarsRefCh2Val4"
 VARIABLE:VALue? "ColorBarsRefCh3Val4"

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Green color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsRefCh1Val4"
 Query may return: "ColorBarsRefCh1Val4 700"

ColorBarsRefCh[1..3]Val5?

Query the Color Bars reference value for the Magenta color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val5"
 VARIable:VALue? "ColorBarsRefCh2Val5"
 VARIable:VALue? "ColorBarsRefCh3Val5"

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Magenta color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val5"
 Query may return: "ColorBarsRefCh1Val5 0"

ColorBarsRefCh[1..3]Val6?

Query the Color Bars reference value for the Red color bar specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsRefCh1Val6"
 VARIABLE:VALue? "ColorBarsRefCh2Val6"
 VARIABLE:VALue? "ColorBarsRefCh3Val6"

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Red color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsRefCh1Val6"
 Query may return: "ColorBarsRefCh1Val6 0"

ColorBarsRefCh[1..3]Val7?

Query the Color Bars reference value for the Blue color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val7"
 VARIable:VALue? "ColorBarsRefCh2Val7"
 VARIable:VALue? "ColorBarsRefCh3Val7"

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Blue color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val7"
 Query may return: "ColorBarsRefCh1Val7 0"

ColorBarsRefCh[1..3]Val8?

Query the Color Bars reference value for the Black color bar specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsRefCh1Val8”
 VARIABLE:VALue? “ColorBarsRefCh2Val8”
 VARIABLE:VALue? “ColorBarsRefCh3Val8”

Group Reference Values Query

Arguments None

Returns Query returns the Color Bars reference value for the Black color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRefCh1Val8”
 Query may return: “ColorBarsRefCh1Val8 0”

ColorBarsRelCh[1..3]?

Query all the relative values resulting from the Color Bars measurement on all the channels.

Syntax VARIable:VALue? "ColorBarsRelCh1"
 VARIable:VALue? "ColorBarsRelCh2"
 VARIable:VALue? "ColorBarsRelCh3"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the Color Bars measurement on all the channels.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned values are in millivolts (mV)
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1"
 Query may return: "ColorBarsRelCh1 700 700 700 700 0 0 0 0"

ColorBarsRelCh[1..3]Val1?

Query the relative value resulting from the Color Bars measurement for the White color bar on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsRelCh1Val1”
 VARIABLE:VALue? “ColorBarsRelCh2Val1”
 VARIABLE:VALue? “ColorBarsRelCh3Val1”

Group Relative Results Query

Arguments None

Returns Returns the relative value resulting from the Color Bars measurement for the White color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelCh1Val1”
 Query may return: “ColorBarsRelCh1Val1 700”

ColorBarsRelCh[1..3]Val2?

Query the relative value resulting from the Color Bars measurement for the Yellow color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelCh1Val2" VARIABLE:VALUE? "ColorBarsRelCh2Val2" VARIABLE:VALUE? "ColorBarsRelCh3Val2"
Group	Relative Results Query
Arguments	None
Returns	Query returns the relative value resulting from the Color Bars measurement for the Yellow color bar on the specified channel. The returned value is in millivolts (mV). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelCh1Val2" Query may return: "ColorBarsRelCh1Val2 700"

ColorBarsRelCh[1..3]Val3?

Query the relative value resulting from the Color Bars measurement for the Cyan color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelCh1Val3”
 VARIable:VALue? “ColorBarsRelCh2Val3”
 VARIable:VALue? “ColorBarsRelCh3Val3”

Group Relative Results Query

Arguments None

Returns Query returns the relative value resulting from the Color Bars measurement for the Cyan color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelCh1Val3”
 Query may return: “ColorBarsRelCh1Val3 700”

ColorBarsRelCh[1..3]Val4?

Query the relative value resulting from the Color Bars measurement for the Green color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelCh1Val4" VARIABLE:VALUE? "ColorBarsRelCh2Val4" VARIABLE:VALUE? "ColorBarsRelCh3Val4"
Group	Relative Results Query
Arguments	None
Returns	Returns the relative value resulting from the Color Bars measurement for the Green color bar on the specified channel. The returned value is in millivolts (mV). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelCh1Val4" Query may return: "ColorBarsRelCh1Val4 700"

ColorBarsRelCh[1..3]Val5?

Query the relative value resulting from the Color Bars measurement for the Magenta color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelCh1Val5”
 VARIable:VALue? “ColorBarsRelCh2Val5”
 VARIable:VALue? “ColorBarsRelCh3Val5”

Group Relative Results Query

Arguments None

Returns Returns the relative value resulting from the Color Bars measurement for the Magenta color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelCh1Val5”
 Query may return: “ColorBarsRelCh1Val5 0”

ColorBarsRelCh[1..3]Val6?

Query the relative value resulting from the Color Bars measurement for the Red color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelCh1Val6" VARIABLE:VALUE? "ColorBarsRelCh2Val6" VARIABLE:VALUE? "ColorBarsRelCh3Val6"
Group	Relative Results Query
Arguments	None
Returns	Returns the the relative value resulting from the Color Bars measurement for the Red color bar on the specified channel. The returned value is in millivolts (mV). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelCh1Val6" Query may return: "ColorBarsRelCh1Val6 0"

ColorBarsRelCh[1..3]Val7?

Query the relative value resulting from the Color Bars measurement for the Blue color bar on the specified channel.

Syntax VARIABLE:VALue? “ColorBarsRelCh1Val7”
 VARIABLE:VALue? “ColorBarsRelCh2Val7”
 VARIABLE:VALue? “ColorBarsRelCh3Val7”

Group Relative Results Query

Arguments None

Returns Returns relative value resulting from the Color Bars measurement for the Blue color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelCh1Val7”
 Query may return: “ColorBarsRelCh1Val7 0”

ColorBarsRelCh[1..3]Val8?

Query the relative value resulting from the Color Bars measurement for the Black color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelCh1Val8" VARIABLE:VALUE? "ColorBarsRelCh2Val8" VARIABLE:VALUE? "ColorBarsRelCh3Val8"
Group	Relative Results Query
Arguments	None
Returns	Returns the relative value resulting from the Color Bars measurement for the Black color bar on the specified channel. The returned value is in millivolts (mV). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelCh1Val8" Query may return: "ColorBarsRelCh1Val8 0"

ColorBarsRelPctCh[1..3]?

Query all the relative values (in percent) resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1”
 VARIable:VALue? “ColorBarsRelPctCh2”
 VARIable:VALue? “ColorBarsRelPctCh3”

Group Relative Results Query

Arguments None

Returns Query returns all the relative values (in percent) resulting from the Color Bars measurement on the specified channel.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1”
 Query may return: “ColorBarsRelPctCh1 97.65 97.65 97.65 97.65 0 0 0 0”

ColorBarsRelPctCh[1..3]Val1?

Query the relative value (in percent) resulting from the Color Bars measurement for the White color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelPctCh1Val1" VARIABLE:VALUE? "ColorBarsRelPctCh2Val1" VARIABLE:VALUE? "ColorBarsRelPctCh3Val1"
Group	Relative Results Query
Arguments	None
Returns	Query returns the relative value (in percent) resulting from the Color Bars measurement for the White color bar on the specified channel. The returned value is in percent (%). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelPctCh1Val1" Query may return: "ColorBarsRelPctCh1Val1 97.65"

ColorBarsRelPctCh[1..3]Val2?

Query the relative value (in percent) resulting from the Color Bars measurement for the Yellow color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val2”
 VARIable:VALue? “ColorBarsRelPctCh2Val2”
 VARIable:VALue? “ColorBarsRelPctCh3Val2”

Group Relative Results Query

Arguments None

Returns Query returns the relative value (in percent) resulting from the Color Bars measurement for the Yellow color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val2”
 Query may return: “ColorBarsRelPctCh1Val2 97.65”

ColorBarsRelPctCh[1..3]Val3?

Query the relative value (in percent) resulting from the Color Bars measurement for the Cyan color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelPctCh1Val3" VARIABLE:VALUE? "ColorBarsRelPctCh2Val3" VARIABLE:VALUE? "ColorBarsRelPctCh3Val3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the relative value (in percent) resulting from the Color Bars measurement for the Cyan color bar on the specified channel. The returned value is in percent (%). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelPctCh1Val3" Query may return: "ColorBarsRelPctCh1Val3 97.65"

ColorBarsRelPctCh[1..3]Val4?

Query the relative value (in percent) resulting from the Color Bars measurement for the Green color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val4”
 VARIable:VALue? “ColorBarsRelPctCh2Val4”
 VARIable:VALue? “ColorBarsRelPctCh3Val4”

Group Relative Results Query

Arguments None

Returns Query returns the relative value (in percent) resulting from the Color Bars measurement for the Green color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val4”
 Query may return: “ColorBarsRelPctCh1Val4 97.65”

ColorBarsRelPctCh[1..3]Val5?

Query the relative value (in percent) resulting from the Color Bars measurement for the Magenta color bar on the specified channel.

Syntax	VARIABLE:VALUE? "ColorBarsRelPctCh1Val5" VARIABLE:VALUE? "ColorBarsRelPctCh2Val5" VARIABLE:VALUE? "ColorBarsRelPctCh3Val5"
Group	Relative Results Query
Arguments	None
Returns	Query returns the relative value (in percent) resulting from the Color Bars measurement for the Magenta color bar on the specified channel. The returned value is in percent (%). Returns "-----" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "ColorBarsRelPctCh1Val5" Query may return: "ColorBarsRelPctCh1Val5 97.65"

ColorBarsRelPctCh[1..3]Val6?

Query the relative value (in percent) resulting from the Color Bars measurement for the Red color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val6”
 VARIable:VALue? “ColorBarsRelPctCh2Val6”
 VARIable:VALue? “ColorBarsRelPctCh3Val6”

Group Relative Results Query

Arguments None

Returns Query returns the relative value (in percent) resulting from the Color Bars measurement for the Red color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val6”
 Query may return: “ColorBarsRelPctCh1Val6 97.65”

ColorBarsRelPctCh[1..3]Val7?

Query the relative value (in percent) resulting from the Color Bars measurement for the Blue color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1Val7"
 VARIable:VALue? "ColorBarsRelPctCh2Val7"
 VARIable:VALue? "ColorBarsRelPctCh3Val7"

Group Relative Results Query

Arguments None

Returns Query returns the relative value (in percent) resulting from the Color Bars measurement for the Blue color bar on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1Val7"
 Query may return: "ColorBarsRelPctCh1Val7 97.65"

ColorBarsRelPctCh[1..3]Val8?

Query the relative value (in percent) resulting from the Color Bars measurement for the Black color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val8”
 VARIable:VALue? “ColorBarsRelPctCh2Val8”
 VARIable:VALue? “ColorBarsRelPctCh3Val8”

Group Relative Results Query

Arguments None

Returns Query returns the relative value (in percent) resulting from the Color Bars measurement for the Black color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val8”
 Query may return: “ColorBarsRelPctCh1Val8 97.65”

ColorBarsSet <setting>

Set or query whether to perform the Color Bars measurement upon Execute.

Syntax VARIable:VALue “ColorBarsSet”, “<setting>”
 VARIable:VALue? “ColorBarsSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Color Bars measurement upon Execute. Valid values are: OFF, ON, 0, 1

Returns Query returns “0” if the Color Bars measurement is not selected.
 Query returns “1” if the Color Bars measurement is selected.

Examples VARIable:VALue “ColorBarsSet”, “ON”

 VARIable:VALue? “ColorBarsSet”
 Query may return: “ColorBarsSet 1”

ColorBarsStatus?

Query the status of the Color Bars measurement.

Syntax VARIable:VALue? “ColorBarsStatus”

Group Results Summary Query

Arguments None

Returns Query may return one of these values: “Done”, “Stopped”, “Pass”, “Fail”
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns “---” if no valid value are currently available.

Examples VARIable:VALue? “ColorBarsStatus”
Query may return: “ColorBarsStatus Pass”

DefaultSettings<setting>

Restores the default (factory) settings.

Syntax VARIable:VALue “DefaultSettings”, “<setting>”
 VARIable:VALue? “DefaultSettings”

Group Global

Arguments <setting> Valid value is 1.

Returns Query returns “OK” unless the command is still being processed, in which case it returns “1”.

Examples VARIable:VALue “DefaultSettings”, “1”

 VARIable:VALue? “DefaultSettings”
 Query may return: “DefaultSettings OK”

Display <None|Picture>

Set or query the Picture display.

Syntax VARIable:VALue “Display”, “[None|Picture]”
 VARIable:VALue? “Display”

Group Configuration

Arguments None selects the normal display. Picture places the Picture display on top of all other displays.

Returns The display on top of all other displays.

Examples VARIable:VALue “Display”, “Picture”
 VARIable:VALue? “Display”

Query may return: “Display None”

EmbedScreenCaptureSet

Set or query whether a screen capture of the instrument display is included in the report file.

Syntax VARIable:VALue “EmbedScreenCaptureSet”, “<setting>”

VARIable:VALue? “EmbedScreenCaptureSet”

Group Reporting

Arguments Valid values for <setting> are: “OFF”, “ON”, “0”, “1”.
EmbedScreenCaptureSet is not available in Continuous mode.
EmbedScreenCaptureSet is available only in RTF format.

Returns Query returns “0” or “1” depending on whether the embed screen capture function is enabled or disabled.

Examples VARIable:VALue “EmbedScreenCaptureSet”, “ON”

VARIable:VALue? “EmbedScreenCaptureSet”

Query may return: “ EmbedScreenCaptureSet 1 ”

Execute <setting>

Execute or stop the current set measurement(s), or query whether or not any measurement is currently being executed. If the measurement is already in the mode specified by the setting, the command has no effect. For example, if a measurement is already running and "VARIABLE:VALUE "Execute", "1" is received, the measurement will continue to run.

Syntax VARIABLE:VALUE "Execute", "<setting>"

VARIABLE:VALUE? "Execute"

Group Global

Arguments <setting> Valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Returns Query returns 1 if any measurement is currently being executed, otherwise it returns 0.

Examples VARIABLE:VALUE "Execute", "1"

VARIABLE:VALUE? "Execute"

Query may return: "Execute 1"

Format <format>

Set or Query the video format to use for measurement.

Syntax VARIable:VALue “Format”, “<format>”

VARIable:VALue? “Format”

Group Configuration

Arguments <format>to set the specified format

Valid format strings for the supported resolution, refresh rate, and timing standard are mentioned in the Table 3-14 as follows:

Table 3-14: Video Format, Refresh Rate, and Timing Standard

Resolution	DMT	CVT	CVT-R	GTF
640x480	640x480_60 640x480_72 640x480_75 640x480_85 640x480_100 640x480_120	640x480_60 640x480_72 640x480_75 640x480_85 640x480_100 640x480_120	640x480_60 640x480_72 640x480_75 640x480_85 640x480_100 640x480_120	640x480_60 640x480_72 640x480_75 640x480_85
800x600	800x600_60 800x600_72 800x600_75 800x600_85 800x600_100 800x600_120	800x600_60 800x600_72 800x600_75 800x600_85 800x600_100 800x600_120	800x600_60 800x600_72 800x600_75 800x600_85 800x600_100 800x600_120	800x600_60 800x600_72 800x600_75 800x600_85
1024x768	1024x768_60 1024x768_70 1024x768_72 1024x768_75 1024x768_85 1024x768_100 1024x768_120	1024x768_60 1024x768_72 1024x768_75 1024x768_85 1024x768_100 1024x768_120	1024x768_60 1024x768_72 1024x768_75 1024x768_85 1024x768_100 1024x768_120	1024x768_60 1024x768_75 1024x768_85
1280x1024	1280x1024_60 1280x1024_70 1280x1024_75 1280x1024_85 1280x1024_100 1280x1024_120	-	-	1280x1024_60 1280x1024_75 1280x1024_85
1600x1024	1600x1024_60 1600x1024_70 1600x1024_75 1600x1024_76 1600x1024_85 1600x1024_100	-	-	-
1920x1080	1920x1080_50 1920x1080_60 1920x1080_75 1920x1080_85 1920x1080_100	-	-	-

Table 3-14: Video Format, Refresh Rate, and Timing Standard (Cont.)

Resolution	DMT	CVT	CVT-R	GTF
1600x1200	1600x1200_60 1600x1200_65 1600x1200_70 1600x1200_75 1600x1200_85 1600x1200_100	1600x1200_60 1600x1200_65 1600x1200_70 1600x1200_75 1600x1200_85 1600x1200_100	1600x1200_60 1600x1200_65 1600x1200_70 1600x1200_75 1600x1200_85 1600x1200_100	1920x1200_60 1920x1200_75 1920x1200_85
1920x1200	1920x1200_60 1920x1200_75 1920x1200_76 1920x1200_85 1920x1200_100	-	-	1600x1200_60 1600x1200_75 1600x1200_85
1920x1440	1920x1440_60 1920x1440_75 1920x1440_85	1920x1440_60 1920x1440_75 1920x1440_85	1920x1440_60 1920x1440_75 1920x1440_85	1920x1440_60 1920x1440_75
2048x1536	2048x1536_60 2048x1536_75 2048x1536_85	2048x1536_60 2048x1536_75 2048x1536_85	2048x1536_60 2048x1536_75 2048x1536_85	-
2048x2048	2048x1536_60	-	-	-

User Defined Format: To create a custom format, select the User Defined Format check box. Select Add and enter the horizontal parameters, vertical parameters that specify your format, set the sync polarity, and a refresh rate. Add a format name and save the new format.
For example: 1280x768_60.

Returns Query returns the current selected format.

Examples VARIABLE:VALue "Format", "640x480_60"

VARIABLE:VALue? "Format"

Query may return: "640x480_60"

HSyncAll?

Query the measured values of all the H Sync measurements.

Syntax VARiable:VALue? "HSyncAll"

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the H Sync measurements.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "HSyncAll"
Query may return: "HSyncAll Pos 1.015 10.97 91.158 5 5 4.106 4.511 0 0 Yes
Yes 3191.7 3000 2820.3 464.8"

HSyncAverage <samples>

Set or query the total number of samples over which to average the H Sync measurement.

Syntax VARIable:VALue “HSyncAverage”, “<samples>”
 VARIable:VALue? “HSyncAverage”

Group Measurement Setup

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples the H Sync measurement.

Examples VARIable:VALue “HSyncAverage”, “1”
 VARIable:VALue? “HSyncAverage”
 Query may return: “HSyncAverage 8”

HSyncFallTime?

Query the measured fall time value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncFallTime”

Group Measured Results Query

Arguments None

Returns Query returns the measured fall time value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncFallTime”
Query may return: “HSyncFallTime 7.1”

HSyncFrequency?

Query the measured frequency value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncFrequency"

Group Measured Results Query

Arguments None

Returns Query returns the measured frequency value resulting from the H Sync measurement.
The returned value is in kilohertz (kHz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncFrequency"
Query may return: "HSyncFrequency 53.6"

HSyncJitterAll?

Query the measured values of all the H Sync Jitter measurements.

Syntax VARIable:VALue? “HSyncJitterAll”

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the H Sync Jitter measurements.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterAll”
Query may return: “HSyncJitterAll 2.33 55.49”

HSyncJitterLine<line number>

Set or query the number of lines used to perform the H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterNoOfLines”, “<line number>”
VARIable:VALue? “HSyncJitterLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the current value of the number of lines used to perform the H Sync Jitter measurement.

Examples VARIable:VALue “HSyncJitterLine”, “200”

VARIable:VALue? “HSyncJitterLine”
Query may return: “HSyncJitterLine 325”

HSyncJitterMaxAll?

Query all the H Sync Jitter maximum limit values specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMaxAll"

Group Maximum Limits Query

Arguments None

Returns Query returns all the H Sync Jitter maximum limit values specified in the Limits file.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMaxAll"
Query may return: "HSyncJitterMaxAll 2.33 55.49"

HSyncJitterMaxPixelClock?

Query the H Sync Jitter (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "HSyncJitterMaxPixelClock"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the H Sync Jitter (%) Pixel Clock maximum limit value specified in the Limits file. The returned value is in percent (%). Returns "--" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncJitterMaxPixelClock" Query may return: "HSyncJitterMaxPixelClock 55.49"

HSyncJitterMaxTime?

Query the H Sync Jitter Time period maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMaxTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Jitter Time period maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMaxTime"
Query may return: "HSyncJitterMaxTime 2.33"

HSyncJitterMinAll?

Query all the H Sync Jitter minimum limit values specified in the Limits file.

Syntax VARIable:VALue? “HSyncJitterMinAll”

Group Minimum Limits Query

Arguments None

Returns Query returns all the H Sync Jitter minimum limit values specified in the Limits file.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterMinAll”
Query may return: “HSyncJitterMinAll 2.33 55.49”

HSyncJitterMinPixelClock?

Query the H Sync Jitter (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMinPixelClock"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Jitter (%) Pixel Clock minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMinPixelClock"
Query may return: "HSyncJitterMinPixelClock 55.49"

HSyncJitterMinTime?

Query the H Sync Jitter Time period minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncJitterMinTime"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Jitter Time period minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterMinTime"
Query may return: "HSyncJitterMinTime 2.33"

HSyncJitterPassAll?

Query the pass/fail status of all the H Sync Jitter measurements.

Syntax VARIABLE:VALUE? "HSyncJitterPassAll"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of all the H Sync Jitter measurements.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) PixelClock.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterPassAll"
Query may return: "HSyncJitterPassAll 1 1"

HSyncJitterPassPixelClock?

Query the pass/fail status for the (%) Pixel Clock resulting from the H Sync Jitter measurement.

Syntax	VARIABLE:VALUE? "HSyncJitterPassPixelClock"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the (%) Pixel Clock resulting from the H Sync Jitter measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncJitterPassPixelClock" Query may return: "HSyncJitterPassPixelClock 1"

HSyncJitterPassTime?

Query the pass/fail status for the Time period resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALue? "HSyncJitterPassTime"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Time period resulting from the H Sync Jitter measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncJitterPassTime"
Query may return: "HSyncJitterPassTime 1"

HSyncJitterPixelClock?

Query the measured (%) Pixel Clock resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPixelClock"

Group Measured Results Query

Arguments None

Returns Query returns the measured (%) Pixel Clock resulting from the H Sync Jitter measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterPixelClock"
Query may return: "HSyncJitterPixelClock 55.49"

HSyncJitterRefAll?

Query all the H Sync Jitter reference values specified in the Reference file.

Syntax VARIABLE:VALue? "HSyncJitterRefAll"

Group Reference Values Query

Arguments None

Returns Query returns all the H Sync Jitter reference values specified in the Reference file.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) PixelClock.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncJitterRefAll"
Query may return: "HSyncJitterRefAll 2.33 55.49"

HSyncJitterRefPixelClock?

Query the H Sync Jitter (%) Pixel Clock reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncJitterRefPixelClock"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Jitter (%) Pixel Clock reference value specified in the Reference file.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRefPixelClock"
Query may return: "HSyncJitterRefPixelClock 55.49"

HSyncJitterRefTime?

Query the H Sync Jitter Time period reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncJitterRefTime"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Jitter Time period reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRefTime"
Query may return: "HSyncJitterRefTime 2.33"

HSyncJitterRelAll?

Query the relative values of all the H Sync Jitter measurements.

Syntax VARIable:VALue? “HSyncJitterRelAll”

Group Relative Results Query

Arguments None

Returns Query returns the relative values of all the H Sync Jitter measurements.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) PixelClock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterRelAll”
Query may return: “HSyncJitterRelAll 2.33 55.49”

HSyncJitterRelPixelClock?

Query the (%) Pixel Clock relative value resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALUE? "HSyncJitterRelPixelClock"

Group Relative Results Query

Arguments None

Returns Query returns the (%) Pixel Clock relative value resulting from the H Sync Jitter measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRelPixelClock"
Query may return: "HSyncJitterRelPixelClock 55.49"

HSyncJitterRelTime?

Query the relative Time period resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterRelTime"

Group Relative Results Query

Arguments None

Returns Query returns the relative Time period resulting from the H Sync Jitter measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRelTime"
Query may return: "HSyncJitterRelTime 2.33"

HSyncJitterSet <setting>

Set or query whether to perform the H Sync Jitter measurements on multiple lines upon Execute.

Syntax VARIABLE:VALue “HSyncJitterSet”,“<setting>”

VARIABLE:VALue? “HSyncJitterSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Sync Jitter measurements on multiple lines upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the H Sync Jitter measurement on multiple lines is not selected.

Query returns “1” if the H Sync Jitter measurement on multiple lines is selected.

Examples VARIABLE:VALue “HSyncJitterSet”,“ON”

VARIABLE:VALue? “HSyncJitterSet”

Query may return: “HSyncJitterSet 1”

HSyncJitterStatus?

Query the status of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", or "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "HSyncJitterStatus"
Query may return: "HSyncJitterStatus Pass"

HSyncJitterTime?

Query the measured Time period resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterTime”

Group Measured Results Query

Arguments None

Returns Query returns the measured Time period resulting from the H Sync Jitter measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterTime”
Query may return: “HSyncJitterTime 2.33”

HSyncLine

Set or query the line number used to perform the H Sync measurement.

Syntax VARIable:VALue “HSyncLine”, “<line number>”
 VARIable:VALue? “HSyncLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number used to perform the H Sync measurement.

Examples VARIable:VALue “HSyncLine”, “200”
 VARIable:VALue? “HSyncLine”
 Query may return: “HSyncLine 325”

HSyncLogicLevel0Value1?

Query the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncLogicLevel0Value1"

Group Measured Results Query

Arguments None

Returns Query returns the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncLogicLevel0Value1"
Query may return: "HSyncLogicLevel0Value1 1"

HSyncLogicLevel0Value2?

Query the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.

Syntax	VARIABLE:VALUE? "HSyncLogicLevel0Value2"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncLogicLevel0Value2" Query may return: "HSyncLogicLevel0Value2 1"

HSyncLogicLevel1Value1?

Query the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncLogicLevel1Value1"

Group Measured Results Query

Arguments None

Returns Query returns the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncLogicLevel1Value1"
Query may return: "HSyncLogicLevel1Value1 1"

HSyncLogicLevel1Value2?

Query the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.

Syntax	VARIABLE:VALUE? "HSyncLogicLevel1Value2"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncLogicLevel1Value2" Query may return: "HSyncLogicLevel1Value2 1"

HSyncMaxAll?

Query all the H Sync maximum limit values specified in the Limits file.

Syntax VARiable:VALue? “HSyncMaxAll”

Group Maximum Limits Query

Arguments None

Returns Query returns all the H Sync maximum limit values specified in the Limits file.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “HSyncMaxAll”
Query may return: “HSyncMaxAll Pos 1.853 12.949 93.37 5.37 5.37 30.0 30.0 304.8 304.8 Yes Yes 5500 500 5500 500”

HSyncMaxFallTime?

Query the H Sync Fall Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxFallTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Fall Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxFallTime"
Query may return: "HSyncMaxFallTime 7.1"

HSyncMaxFrequency?

Query the H Sync Frequency maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxFrequency”

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Frequency maximum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxFrequency”
Query may return: “HSyncMaxFrequency 53674”

HSyncMaxLogicLevel0Value1?

Query the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 termination resistance) maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxLogicLevel0Value1"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxLogicLevel0Value1"
Query may return: "HSyncMaxLogicLevel0Value1 1"

HSyncMaxLogicLevel0Value2?

Query the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxLogicLevel0Value2"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxLogicLevel0Value2"
Query may return: "HSyncMaxLogicLevel0Value2 1"

HSyncMaxLogicLevel1Value1?

Query the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "HSyncMaxLogicLevel1Value1"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncMaxLogicLevel1Value1" Query may return: "HSyncMaxLogicLevel1Value1 1"

HSyncMaxLogicLevel1Value2?

Query the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxLogicLevel1Value2"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

The returned value is in millivolts (mV).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxLogicLevel1Value2"
Query may return: "HSyncMaxLogicLevel1Value2 1"

HSyncMaxMonotonicFall?

Query the H Sync Monotonic Fall maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxMonotonicFall”

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Monotonic Fall maximum limit value specified in the Limits file.
The returned value is 1 which is represented by “Yes”.
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxMonotonicFall”
Query may return: “HSyncMaxMonotonicFall Yes”

HSyncMaxMonotonicRise?

Query the H Sync Monotonic Rise maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? “HSyncMaxMonotonicRise”

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Monotonic Rise maximum limit value specified in the Limits file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HSyncMaxMonotonicRise”
Query may return: “HSyncMaxMonotonicRise Yes”

HSyncMaxOvershoot?

Query the H Sync Overshoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxOvershoot"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Overshoot maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxOvershoot"
Query may return: "HSyncMaxOvershoot 15"

HSyncMaxOvershootSettlingTime?

Query the H Sync Overshoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxOvershootSettlingTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Overshoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxOvershootSettlingTime"
Query may return: "HSyncMaxOvershootSettlingTime 7.1"

HSyncMaxPolarity?

Query the H Sync Polarity maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxPolarity"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Polarity maximum limit value specified in the Limits file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxPolarity"
Query may return: "HSyncMaxPolarity Pos"

HSyncMaxPulseWidth?

Query the H Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxPulseWidth”

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxPulseWidth”
Query may return: “HSyncMaxPulseWidth 1.13”

HSyncMaxRiseTime?

Query the H Sync Rise Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxRiseTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Rise Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxRiseTime"
Query may return: "HSyncMaxRiseTime 7.1"

HSyncMaxSyncPeriod?

Query the H Sync Sync Period maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxSyncPeriod”

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Sync Period maximum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxSyncPeriod”
Query may return: “HSyncMaxSyncPeriod 18.63”

HSyncMaxUndershoot?

Query the H Sync Undershoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxUndershoot"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Undershoot maximum limit value specified in the Limits file.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxUndershoot"
Query may return: "HSyncMaxUndershoot 15"

HSyncMaxUndershootSettlingTime?

Query the H Sync Undershoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxUndershootSettlingTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Sync Undershoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxUndershootSettlingTime"
Query may return: "HSyncMaxUndershootSettlingTime 7.1"

HSyncMinAll?

Query all the H Sync minimum limit values specified in the Limits file.

Syntax	VARIABLE:VALUE? "HSyncMinAll"
Group	Minimum Limits Query
Arguments	None
Returns	<p>Query returns all the H Sync minimum limit values specified in the Limits file.</p> <p>The order is: Polarity (Pos/Neg), Pulse Width (μs), Sync Period (μs), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HSyncMinAll"</p> <p>Query may return: "HSyncMinAll Neg 0.0 8.9 89.37 0.35 0.35 0.0 0.0 0.0 0.0 Yes Yes 2400 0 2400 0"</p>

HSyncMinFallTime?

Query the H Sync Fall Time minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "HSyncMinFallTime"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Fall Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncMinFallTime"
Query may return: "HSyncMinFallTime 7.1"

HSyncMinFrequency?

Query the H Sync Frequency minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinFrequency"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Frequency minimum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinFrequency"
Query may return: "HSyncMinFrequency 53674"

HSyncMinLogicLevel0Value1?

Query the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinLogicLevel0Value1"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinLogicLevel0Value1"
Query may return: "HSyncMinLogicLevel0Value1 1"

HSyncMinLogicLevel0Value2?

Query the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "HSyncMinLogicLevel0Value2"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncMinLogicLevel0Value2" Query may return: "HSyncMinLogicLevel0Value2 1"

HSyncMinLogicLevel1Value1?

Query the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinLogicLevel1Value1"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinLogicLevel1Value1"
Query may return: "HSyncMinLogicLevel1Value1 1"

HSyncMinLogicLevel1Value2?

Query the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "HSyncMinLogicLevel1Value2"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncMinLogicLevel1Value2" Query may return: "HSyncMinLogicLevel1Value2 1"

HSyncMinMonotonicFall?

Query the H Sync Monotonic Fall minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? “HSyncMinMonotonicFall”

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Monotonic Fall minimum limit value specified in the Limits file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HSyncMinMonotonicFall”
Query may return: “HSyncMinMonotonicFall Yes”

HSyncMinMonotonicRise?

Query the H Sync Monotonic Rise minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinMonotonicRise"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Monotonic Rise minimum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinMonotonicRise"
Query may return: "HSyncMinMonotonicRise Yes"

HSyncMinOvershoot?

Query the H Sync Overshoot minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "HSyncMinOvershoot"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Overshoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncMinOvershoot"
Query may return: "HSyncMinOvershoot 15"

HSyncMinOvershootSettlingTime?

Query the H Sync Overshoot Settling Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinOvershootSettlingTime"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Overshoot Settling Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinOvershootSettlingTime"
Query may return: "HSyncMinOvershootSettlingTime 7.1"

HSyncMinPolarity?

Query the H Sync Polarity minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMinPolarity”

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Polarity minimum limit value specified in the Limits file.
The returned value can be either “Pos” or “Neg”.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMinPolarity”
Query may return: “HSyncMinPolarity Pos”

HSyncMinPulseWidth?

Query the H Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinPulseWidth"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinPulseWidth"
Query may return: "HSyncMinPulseWidth 1.13"

HSyncMinRiseTime?

Query the H Sync Rise Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMinRiseTime”

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Rise Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMinRiseTime”
Query may return: “HSyncMinRiseTime 7.1”

HSyncMinSyncPeriod?

Query the H Sync Sync Period minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinSyncPeriod"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Sync Period minimum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinSyncPeriod"
Query may return: "HSyncMinSyncPeriod 18.63"

HSyncMinUndershoot?

Query the H Sync Undershoot minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMinUndershoot”

Group Minimum Limits Query

Arguments None

Returns Query returns the H Sync Undershoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMinUndershoot”
Query may return: “HSyncMinUndershoot 15”

HSyncMinUndershootSettlingTime?

Query the H Sync Undershoot Settling Time minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "HSyncMinUndershootSettlingTime"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the H Sync Undershoot Settling Time minimum limit value specified in the Limits file. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncMinUndershootSettlingTime" Query may return: "HSyncMinUndershootSettlingTime 7.1"

HSyncMonotonicFall?

Query the measured Monotonic Fall value resulting from the H Sync measurement.

Syntax VARIABLE:VALue? “HSyncMonotonicFall”

Group Measured Results Query

Arguments None

Returns Query returns the measured Monotonic Fall value resulting from the H Sync measurement.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HSyncMonotonicFall”
Query may return: “HSyncMonotonicFall 1”

HSyncMonotonicRise?

Query the measured Monotonic Rise value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncMonotonicRise"

Group Measured Results Query

Arguments None

Returns Query returns the measured Monotonic Rise value resulting from the H Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMonotonicRise"
Query may return: "HSyncMonotonicRise Yes"

HSyncMultiLineEnd <line number>

Set or query the ending line number used to perform the H Sync measurement on multiple lines upon Execute.

Syntax VARIABLE:VALue “HSyncMultiLineEnd”,“<line number>”

VARIABLE:VALue? “HSyncMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the H Sync measurement on multiple lines.

Examples VARIABLE:VALue “HSyncMultiLineEnd”, “200”

VARIABLE:VALue? “HSyncMultiLineEnd”

Query may return: “HSyncMultiLineEnd 325”

HSyncMultiLineStart <line number>

Set or query the starting line number used to perform the H Sync measurement on multiple lines upon Execute.

Syntax VARIable:VALue “HSyncMultiLineStart”,“<line number>”

VARIable:VALue? “HSyncMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the H Sync measurement on multiple lines.

Examples VARIable:VALue “HSyncMultiLineStart”, “200”

VARIable:VALue? “HSyncMultiLineStart”

Query may return: “HSyncMultiLineStart 325”

HSyncOvershoot?

Query the measured Overshoot value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncOvershoot”

Group Measured Results Query

Arguments None

Returns Query returns the measured Overshoot value resulting from the H Sync measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncOvershoot”
Query may return: “HSyncOvershoot 15”

HSyncOvershootSettlingTime?

Query the measured Overshoot Settling Time value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncOvershootSettlingTime"

Group Measured Results Query

Arguments None

Returns Query returns the measured Overshoot Settling Time value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncOvershootSettlingTime"
Query may return: "HSyncOvershootSettlingTime 7.1"

HSyncPassAll?

Query the pass/fail status of all H Sync measurements.

Syntax VARIable:VALue? “HSyncPassAll”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of all H Sync measurements.

The order is: Polarity, Pulse Width, Sync Period, Frequency, Rise Time, Fall Time, Overshoot, Undershoot, Overshoot S T, Undershoot S T, Monotonic Rise, Monotonic Fall, Logic Level 1 At Value1, Logic Level 0 At Value1, Logic Level 1 At Value2, and Logic Level 0 At Value2.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncPassAll”
Query may return: “HSyncPassAll 1 1 1 0 0 0 1 0 0 1 1 1 0 1”

HSyncPassFallTime?

Query the pass/fail status for the Fall Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassFallTime"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Fall Time resulting from the H Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncPassFallTime" Query may return: "HSyncPassFallTime 1"

HSyncPassFrequency?

Query the pass/fail status for the Frequency resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassFrequency"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Frequency resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassFrequency"
Query may return: "HSyncPassFrequency 1"

HSyncPassLogicLevel0Value1?

Query the pass/fail status for the Logic Level “0” at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? “HSyncPassLogicLevel0Value1”
Group	Pass/Fail Status Query
Arguments	None
Returns	<p>Query returns the pass/fail status for the Logic Level “0” at Value1 (Value1 represents the Logic Level 0 at 2.21 kΩ termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.</p> <p>A returned value of 1 means Pass, a returned value of 0 means Fail.</p> <p>Returns “---” if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? “HSyncPassLogicLevel0Value1”</p> <p>Query may return: “HSyncPassLogicLevel0Value1 1”</p>

HSyncPassLogicLevel0Value2?

Query the pass/fail status for the Logic Level “0” at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARiable:VALue? “HSyncPassLogicLevel0Value2”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Logic Level “0” at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “HSyncPassLogicLevel0Value2”
Query may return: “HSyncPassLogicLevel0Value2 1”

HSyncPassLogicLevel1Value1?

Query the pass/fail status for the Logic Level “1” at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassLogicLevel1Value1"
Group	Pass/Fail Status Query
Arguments	None
Returns	<p>Query returns the pass/fail status for the Logic Level “1” at Value1 (Value1 represents the Logic Level 1 at 2.21 kΩ termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.</p> <p>A returned value of 1 means Pass, a returned value of 0 means Fail.</p> <p>Returns “---” if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HSyncPassLogicLevel1Value1"</p> <p>Query may return: "HSyncPassLogicLevel1Value1 Pos"</p>

HSyncPassLogicLevel1Value2?

Query the pass/fail status for the Logic Level “1” at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARiable:VALue? “HSyncPassLogicLevel1Value2”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Logic Level “1” at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

A returned value of 1 means Pass, a returned value of 0 means Fail.

Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “HSyncPassLogicLevel1Value2”
Query may return: “HSyncPassLogicLevel1Value2 1”

HSyncPassMonotonicFall?

Query the pass/fail status for the Monotonic Fall value resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassMonotonicFall"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Monotonic Fall value resulting from the H Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncPassMonotonicFall" Query may return: "HSyncPassMonotonicFall 1"

HSyncPassMonotonicRise?

Query the pass/fail status for the Monotonic Rise value resulting from the H Sync measurement.

Syntax VARIABLE:VALue? "HSyncPassMonotonicRise"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Monotonic Rise value resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassMonotonicRise"
Query may return: "HSyncPassMonotonicRise 1"

HSyncPassOvershoot?

Query the pass/fail status for the Overshoot resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassOvershoot"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Overshoot resulting from the H Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncPassOvershoot" Query may return: "HSyncPassOvershoot 1"

HSyncPassOvershootSettlingTime?

Query the pass/fail status for the Overshoot Settling Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALUE? "HSyncPassOvershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Overshoot Settling Time resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncPassOvershootSettlingTime"
Query may return: "HSyncPassOvershootSettlingTime 1"

HSyncPassPolarity?

Query the pass/fail status for the Polarity resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassPolarity"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Polarity resulting from the H Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncPassPolarity" Query may return: "HSyncPassPolarity 1"

HSyncPassPulseWidth?

Query the pass/fail status for the sync Pulse Width resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassPulseWidth"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the sync Pulse Width resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassPulseWidth"
Query may return: "HSyncPassPulseWidth 1"

HSyncPassRiseTime?

Query the pass/fail status for the Rise Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassRiseTime"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Rise Time resulting from the H Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncPassRiseTime" Query may return: "HSyncPassRiseTime 1"

HSyncPassSyncPeriod?

Query the pass/fail status for the Sync Period resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassSyncPeriod"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Sync Period resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassSyncPeriod"
Query may return: "HSyncPassSyncPeriod 1"

HSyncPassUndershoot?

Query the pass/fail status for the Undershoot resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HSyncPassUndershoot"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Undershoot resulting from the H Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncPassUndershoot" Query may return: "HSyncPassUndershoot 1"

HSyncPassUndershootSettlingTime?

Query the pass/fail status for the Undershoot Settling Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALUE? "HSyncPassUndershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Undershoot Settling Time resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncPassUndershootSettlingTime"
Query may return: "HSyncPassUndershootSettlingTime 1"

HSyncPolarity?

Query the measured Polarity value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncPolarity"

Group Measured Results Query

Arguments None

Returns Query returns the measured Polarity value resulting from the H Sync measurement.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPolarity"
Query may return: "HSyncPolarity Pos"

HSyncPulseWidth?

Query the measured Pulse Width value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncPulseWidth”

Group Measured Results Query

Arguments None

Returns Query returns the measured Pulse Width value resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncPulseWidth”
Query may return: “HSyncPulseWidth 1.13”

HSyncRefAll?

Query all the H Sync reference values specified in the Reference file.

Syntax	VARIABLE:VALUE? "HSyncRefAll"
Group	Reference Values Query
Arguments	None
Returns	<p>Query returns all the H Sync reference values specified in the Reference file.</p> <p>The order is: Polarity (Pos/Neg), Pulse Width (μs), Sync Period (μs), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HSyncRefAll"</p> <p>Query may return: "HSyncRefAll Pos 0.85 10.9 91.37 2.5 2.5 0 0 0 0 Yes Yes 3950 0 3950 0"</p>

HSyncRefFallTime?

Query the H Sync Fall Time reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefFallTime”

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Fall Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefFallTime”
Query may return: “HSyncRefFallTime 7.1”

HSyncRefFrequency?

Query the H Sync Frequency reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefFrequency"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Frequency reference value specified in the Reference file.
The returned value is in kilohertz (kHz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefFrequency"
Query the may return: "HSyncRefFrequency 53.6"

HSyncRefLogicLevel0Value1?

Query the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncRefLogicLevel0Value1"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRefLogicLevel0Value1"
Query may return: "HSyncRefLogicLevel0Value1 1"

HSyncRefLogicLevel0Value2?

Query the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax	VARIABLE:VALUE? "HSyncRefLogicLevel0Value2"
Group	Reference Values Query
Arguments	None
Returns	<p>Query returns the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.</p> <p>The returned value is in millivolts (mV).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HSyncRefLogicLevel0Value2"</p> <p>Query may return: "HSyncRefLogicLevel0Value2 1"</p>

HSyncRefLogicLevel1Value1?

Query the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefLogicLevel1Value1"

Group Reference Values Query

Arguments None

Returns Query returns H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefLogicLevel1Value1"
Query may return: "HSyncRefLogicLevel1Value1 1"

HSyncRefLogicLevel1Value2?

Query the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax	VARIABLE:VALUE? "HSyncRefLogicLevel1Value2"
Group	Reference Values Query
Arguments	None
Returns	Query returns the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncRefLogicLevel1Value2" Query may return: "HSyncRefLogicLevel1Value2 1"

HSyncRefMonotonicFall?

Query the H Sync Monotonic Fall reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefMonotonicFall”

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Monotonic Fall reference value specified in the Reference file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefMonotonicFall”
Query may return: “HSyncRefMonotonicFall Yes”

HSyncRefMonotonicRise?

Query the H Sync Monotonic Rise reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefMonotonicRise"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Monotonic Rise reference value specified in the Reference file.
The returned value is either "Yes" or "No".
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefMonotonicRise"
Query may return: "HSyncRefMonotonicRise Yes"

HSyncRefOvershoot?

Query the H Sync Overshoot reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncRefOvershoot"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Overshoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRefOvershoot"
Query may return: "HSyncRefOvershoot 15"

HSyncRefOvershootSettlingTime?

Query the H Sync Overshoot Settling Time reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefOvershootSettlingTime"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Overshoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefOvershootSettlingTime"
Query may return: "HSyncRefOvershootSettlingTime 7.1"

HSyncRefPolarity?

Query the H Sync Polarity reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefPolarity”

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Polarity reference value specified in the Reference file.
The returned value can be either “Pos” or “Neg”.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefPolarity”
Query may return: “HSyncRefPolarity Pos”

HSyncRefPulseWidth?

Query the H Sync Pulse Width reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefPulseWidth"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Pulse Width reference value specified in the Reference file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefPulseWidth"
Query may return: "HSyncRefPulseWidth 1.13"

HSyncRefSyncPeriod?

Query the H Sync Sync Period reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefSyncPeriod”

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Sync Period reference value specified in the Reference file.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefSyncPeriod”
Query may return: “HSyncRefSyncPeriod 18.63”

HSyncRefRiseTime?

Query the H Sync Rise Time reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefRiseTime"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Rise Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefRiseTime"
Query may return: "HSyncRefRiseTime 7.1"

HSyncRefUndershoot?

Query the H Sync Undershoot reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefUndershoot”

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Undershoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefUndershoot”
Query may return: “HSyncRefUndershoot 15”

HSyncRefUndershootSettlingTime?

Query the H Sync Undershoot Settling Time reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefUndershootSettlingTime"

Group Reference Values Query

Arguments None

Returns Query returns the H Sync Undershoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefUndershootSettlingTime"
Query may return: "HSyncRefUndershootSettlingTime 7.1"

HSyncRelAll?

Query all the relative values resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelAll"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the H Sync measurement.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelAll"
Query may return: "HSyncRelAll Pos 0.162 0.026 -0.217 5 5 4.1 4.5 0 0 Yes
Yes -758.29 400 1129.65 464.8"

HSyncRelFallTime?

Query the Fall Time relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelFallTime"

Group Relative Results Query

Arguments None

Returns Query returns the Fall Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelFallTime"
Query may return: "HSyncRelFallTime 7.1"

HSyncRelFrequency?

Query the Frequency relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncRelFrequency”

Group Relative Results Query

Arguments None

Returns Query returns the Frequency relative value resulting from the H Sync measurement.
The returned value is in kilohertz (kHz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRelFrequency”
Query may return: “HSyncRelFrequency 53.6”

HSyncRelLogicLevel0Value1?

Query the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.

Syntax	VARIABLE:VALUE? "HSyncRelLogicLevel0Value1"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncRelLogicLevel0Value1" Query may return: "HSyncRelLogicLevel0Value1 1"

HSyncRelLogicLevel0Value2?

Query the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelLogicLevel0Value2"

Group Relative Results Query

Arguments None

Returns Query returns the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelLogicLevel0Value2"
Query may return: "HSyncRelLogicLevel0Value2 1"

HSyncRelLogicLevel1Value1?

Query the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.

Syntax	VARIABLE:VALUE? "HSyncRelLogicLevel1Value1"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HSyncRelLogicLevel1Value1" Query may return: "HSyncRelLogicLevel1Value1 1"

HSyncRelLogicLevel1Value2?

Query the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelLogicLevel1Value2"

Group Relative Results Query

Arguments None

Returns Query returns the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelLogicLevel1Value2"
Query may return: "HSyncRelLogicLevel1Value2 1"

HSyncRelMonotonicFall?

Query the Monotonic Fall relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelMonotonicFall"

Group Relative Results Query

Arguments None

Returns Query returns the Monotonic Fall relative value resulting from the H Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelMonotonicFall"
Query may return: "HSyncRelMonotonicFall Yes"

HSyncRelMonotonicRise?

Query the Monotonic Rise relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALue? “HSyncRelMonotonicRise”

Group Relative Results Query

Arguments None

Returns Query returns the Monotonic Rise relative value resulting from the H Sync measurement.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HSyncRelMonotonicRise”
Query may return: “HSyncRelMonotonicRise Yes”

HSyncRelOvershoot?

Query the Overshoot relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelOvershoot"

Group Relative Results Query

Arguments None

Returns Query returns the Overshoot relative value resulting from the H Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelOvershoot"
Query may return: "HSyncRelOvershoot 15"

HSyncRelOvershootSettlingTime?

Query the Overshoot Settling Time relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelOvershootSettlingTime"

Group Relative Results Query

Arguments None

Returns Query returns the Overshoot Settling Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelOvershootSettlingTime"
Query may return: "HSyncRelOvershootSettlingTime 7.1"

HSyncRelPolarity?

Query the Polarity relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelPolarity"

Group Relative Results Query

Arguments None

Returns Query returns the Polarity relative value resulting from the H Sync measurement.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelPolarity"
Query may return: "HSyncRelPolarity Pos"

HSyncRelPulseWidth?

Query the Pulse Width relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncRelPulseWidth”

Group Relative Results Query

Arguments None

Returns Query returns the Pulse Width relative value resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRelPulseWidth”
Query may return: “HSyncRelPulseWidth 1.13”

HSyncRelRiseTime?

Query the Rise Time relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelRiseTime"

Group Relative Results Query

Arguments None

Returns Query returns the Rise Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelRiseTime"
Query may return: "HSyncRelRiseTime 7.1"

HSyncRelSyncPeriod?

Query the Sync Period relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncRelSyncPeriod”

Group Relative Results Query

Arguments None

Returns Query returns the Sync Period relative value resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRelSyncPeriod”
Query may return: “HSyncRelSyncPeriod 18.63”

HSyncRelUndershoot?

Query the Undershoot relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncRelUndershoot”

Group Relative Results Query

Arguments None

Returns Query returns the Undershoot relative value resulting from the H Sync measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRelUndershoot”
Query may return: “HSyncRelUndershoot 15”

HSyncRelUndershootSettlingTime?

Query the Undershoot Settling Time relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelUndershootSettlingTime"

Group Relative Results Query

Arguments None

Returns Query returns the Undershoot Settling Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelUndershootSettlingTime"
Query may return: "HSyncRelUndershootSettlingTime 7.1"

HSyncRiseTime?

Query the measured Rise Time resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRiseTime"

Group Measured Results Query

Arguments None

Returns Query returns the measured Rise Time resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRiseTime"
Query may return: "HSyncRiseTime 7.1"

HSyncSet <setting>

Set or query whether to perform the H Sync measurement upon Execute.

Syntax VARIABLE:VALue “HSyncSet“, “<setting>”

VARIABLE:VALue? “HSyncSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Sync measurements upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the H Sync measurement is not selected.
Query returns “1” if the H Sync measurement is selected.

Examples VARIABLE:VALue “HSyncSet”, “ON”

VARIABLE:VALue? “HSyncSet”
Query may return: “HSyncSet 1”

HSyncStatus?

Query the status of the H Sync measurement.

Syntax	VARIABLE:VALUE? "HSyncStatus"
Group	Results Summary Query
Arguments	None
Returns	Query may return one of these values: "Done", "Stopped", "Pass", or "Fail". Query returns Done when the measurement is completed without limit testing. Query returns Stopped when the measurement is halted before completion. Returns "---" if no valid value are currently available.
Examples	VARIABLE:VALUE? "HSyncStatus" Query may return: "HSyncStatus Pass"

HSyncSyncPeriod?

Query the measured Sync Period resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncSyncPeriod”

Group Measured Results Query

Arguments None

Returns Query returns the measured Sync Period resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncSyncPeriod”
Query may return: “HSyncSyncPeriod 18.63”

HSyncUndershoot?

Query the measured Undershoot resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncUndershoot"

Group Measured Results Query

Arguments None

Returns Query returns the measured Undershoot resulting from the H Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncUndershoot"
Query may return: "HSyncUndershoot 15"

HSyncUndershootSettlingTime?

Query the measured Undershoot Settling Time resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncUndershootSettlingTime"

Group Measured Results Query

Arguments None

Returns Query returns the measured Undershoot Settling Time resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncUndershootSettlingTime"
Query may return: "HSyncUndershootSettlingTime 7.1"

HTimingAll?

Query the measured values of all the H Timing measurements on all the channels.

Syntax VARIABLE:VALUE? "HTimingAll"

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the H Timing measurements on all the channels.

The order is: Back Porch (Ch1) in μs , Left Border (Ch1) in μs , Addressable Video (Ch1) in μs , Right Border (Ch1) in μs , Front Porch (Ch1) in μs , Back Porch (Ch2) in μs , Left Border (Ch2) in μs , Addressable Video (Ch2) in μs , Right Border (Ch2) in μs , Front Porch (Ch2) in μs , Back Porch (Ch3) in μs , Left Border (Ch3) in μs , Addressable Video (Ch3) in μs , Right Border (Ch3) in μs , Front Porch (Ch3) in μs , Sync Pulse Width in μs , and Pixel Clock (MHz).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingAll"

Query may return: "HTimingAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingAddressableVideoCh[1..3]?

Query the measured Addressable Video resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? “HTimingAddressableVideoCh1”
 VARIable:VALue? “HTimingAddressableVideoCh2”
 VARIable:VALue? “HTimingAddressableVideoCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Addressable Video resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HTimingAddressableVideoCh1”
 Query may return: “HTimingAddressableVideoCh1 14.22”

HTimingAverage <samples>

Set or query the number of samples over which to average the H Timing measurement.

Syntax VARIable:VALue “HTimingAverage”, “<samples>”

VARIable:VALue? “HTimingAverage”

Group Measurement Setup

Related Commands HTimingLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples the H Timing measurement.

Examples VARIable:VALue “HTimingAverage”, “1”

VARIable:VALue? “HTimingAverage”

Query may return: “HTimingAverage 8”

HTimingBackPorchCh[1..3]?

Query the measured Back Porch resulting from the H Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "HTimingBackPorchCh1"
 VARIABLE:VALUE? "HTimingBackPorchCh2"
 VARIABLE:VALUE? "HTimingBackPorchCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Back Porch resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingBackPorchCh1"
 Query may return: "HTimingBackPorchCh1 2.70"

HTimingFrontPorchCh[1..3]?

Query the measured Front Porch resulting from the H Timing measurement on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingFrontPorchCh1" VARIABLE:VALUE? "HTimingFrontPorchCh2" VARIABLE:VALUE? "HTimingFrontPorchCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Front Porch resulting from the H Timing measurement on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingFrontPorchCh1" Query may return: "HTimingFrontPorchCh1 0.56"

HTimingLeftBorderCh[1..3]?

Query the measured Left Border resulting from the H Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "HTimingLeftBorderCh1"
 VARIABLE:VALUE? "HTimingLeftBorderCh2"
 VARIABLE:VALUE? "HTimingLeftBorderCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Left Border resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingLeftBorderCh1"
 Query may return: "HTimingLeftBorderCh1 0"

HTimingLine<line number>

Set or query the line number used to perform the H Timing measurement.

Syntax VARIable:VALue “HTimingLine”, “<line number>”
 VARIable:VALue? “HTimingLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number used to perform the H Timing measurement.

Examples VARIable:VALue “HTimingLine”, “200”

 VARIable:VALue? “HTimingLine”
 Query may return: “HTimingLine 325”

HTimingMaxAll?

Query all the H Timing maximum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALUE? "HTimingMaxAll"

Group Maximum Limits Query

Arguments None

Returns Query returns all the H Timing maximum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) in μ s, Left Border (Ch1) in μ s, Addressable Video (Ch1) in μ s, Right Border (Ch1) in μ s, Front Porch (Ch1) in μ s, Back Porch (Ch2) in μ s, Left Border (Ch2) in μ s, Addressable Video (Ch2) in μ s, Right Border (Ch2) in μ s, Front Porch (Ch2) in μ s, Back Porch (Ch3) in μ s, Left Border (Ch3) in μ s, Addressable Video (Ch3) in μ s, Right Border (Ch3) in μ s, Front Porch (Ch3) in μ s, Sync Pulse Width (in μ s), and Pixel Clock (in MHz).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxAll"
Query may return: "HTimingMaxAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingMaxAddressableVideoCh[1..3]?

Query the H Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingMaxAddressableVideoCh1" VARIABLE:VALUE? "HTimingMaxAddressableVideoCh2" VARIABLE:VALUE? "HTimingMaxAddressableVideoCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the H Timing Addressable Video maximum limit value specified in the Limits file on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingMaxAddressableVideoCh1" Query may return: "HTimingMaxAddressableVideoCh1 14.22"

HTimingMaxBackPorchCh[1..3]?

Query the H Timing Back Porch maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMaxBackPorchCh1"
 VARIABLE:VALUE? "HTimingMaxBackPorchCh2"
 VARIABLE:VALUE? "HTimingMaxBackPorchCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxBackPorchCh1"
 Query may return: "HTimingMaxBackPorchCh1 2.70"

HTimingMaxFrontPorchCh[1..3]?

Query the H Timing Front Porch maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingMaxFrontPorchCh1" VARIABLE:VALUE? "HTimingMaxFrontPorchCh2" VARIABLE:VALUE? "HTimingMaxFrontPorchCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the H Timing Front Porch maximum limit value specified in the Limits file on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingMaxFrontPorchCh1" Query may return: "HTimingMaxFrontPorchCh1 0.56"

HTimingMaxLeftBorderCh[1..3]?

Query the H Timing Left Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMaxLeftBorderCh1"
 VARIABLE:VALUE? "HTimingMaxLeftBorderCh2"
 VARIABLE:VALUE? "HTimingMaxLeftBorderCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Timing Left Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxLeftBorderCh1"
 Query may return: "HTimingMaxLeftBorderCh1 0"

HTimingMaxPixelClock?

Query the H Timing Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HTimingMaxPixelClock"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Timing Pixel Clock maximum limit value specified in the Limits file.
The returned value is in megahertz (MHz).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMaxPixelClock"
Query may return: "HTimingMaxPixelClock 56.25"

HTimingMaxRightBorderCh[1..3]?

Query the H Timing Right Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMaxRightBorderCh1"
 VARIABLE:VALUE? "HTimingMaxRightBorderCh2"
 VARIABLE:VALUE? "HTimingMaxRightBorderCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the H Timing Right Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxRightBorderCh1"
 Query may return: "HTimingMaxRightBorderCh1 0"

HTimingMaxSyncPulseWidth?

Query the H Timing Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HTimingMaxSyncPulseWidth”

Group Maximum Limits Query

Arguments None

Returns Query returns the H Timing Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “HTimingMaxSyncPulseWidth”
Query may return: “HTimingMaxSyncPulseWidth 1.13”

HTimingMinAll?

Query all the H Timing minimum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALUE? "HTimingMinAll"

Group Minimum Limits Query

Arguments None

Returns Query returns all the H Timing minimum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) in μs , Left Border (Ch1) in μs , Addressable Video (Ch1) in μs , Right Border (Ch1) in μs , Front Porch (Ch1) in μs , Back Porch (Ch2) in μs , Left Border (Ch2) in μs , Addressable Video (Ch2) in μs , Right Border (Ch2) in μs , Front Porch (Ch2) in μs , Back Porch (Ch3) in μs , Left Border (Ch3) in μs , Addressable Video (Ch3) in μs , Right Border (Ch3) in μs , Front Porch (Ch3) in μs , Sync Pulse Width (in μs), and Pixel Clock (in MHz).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMinAll"
Query may return: "HTimingMinAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingMinAddressableVideoCh[1..3]?

Query the H Timing Addressable Video minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingMinAddressableVideoCh1" VARIABLE:VALUE? "HTimingMinAddressableVideoCh2" VARIABLE:VALUE? "HTimingMinAddressableVideoCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the H Timing Addressable Video minimum limit value specified in the Limits file on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingMinAddressableVideoCh1" Query may return: "HTimingMinAddressableVideoCh1 14.22"

HTimingMinBackPorchCh[1..3]?

Query the H Timing Back Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “HTimingMinBackPorchCh1”
 VARIABLE:VALue? “HTimingMinBackPorchCh2”
 VARIABLE:VALue? “HTimingMinBackPorchCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the H Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingMinBackPorchCh1”
 Query may return: “HTimingMinBackPorchCh1 2.70”

HTimingMinFrontPorchCh[1..3]?

Query the H Timing Front Porch minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingMinFrontPorchCh1" VARIABLE:VALUE? "HTimingMinFrontPorchCh2" VARIABLE:VALUE? "HTimingMinFrontPorchCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the H Timing Front Porch minimum limit value specified in the Limits file on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingMinFrontPorchCh1" Query may return: "HTimingMinFrontPorchCh1 0.56"

HTimingMinLeftBorderCh[1..3]?

Query the H Timing Left Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMinLeftBorderCh1"
 VARIABLE:VALUE? "HTimingMinLeftBorderCh2"
 VARIABLE:VALUE? "HTimingMinLeftBorderCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Timing Left Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMinLeftBorderCh1"
 Query may return: "HTimingMinLeftBorderCh1 0"

HTimingMinPixelClock?

Query the H Timing Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HTimingMinPixelClock"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Timing Pixel Clock minimum limit value specified in the Limits file.
The returned value is in megahertz (MHz).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMinPixelClock"
Query may return: "HTimingMinPixelClock 56.25"

HTimingMinRightBorderCh[1..3]?

Query the H Timing Right Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMinRightBorderCh1"
 VARIABLE:VALUE? "HTimingMinRightBorderCh2"
 VARIABLE:VALUE? "HTimingMinRightBorderCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Timing Right Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMinRightBorderCh1"
 Query may return: "HTimingMinRightBorderCh1 0"

HTimingMinSyncPulseWidth?

Query the H Timing Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HTimingMinSyncPulseWidth"

Group Minimum Limits Query

Arguments None

Returns Query returns the H Timing Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMinSyncPulseWidth"
Query may return: "HTimingMinSyncPulseWidth 1.13"

HTimingMultiLineEnd <line number>

Set or query returns the currently assigned ending line number used to perform the H Timing measurement on multiple lines.

Syntax VARIABLE:VALue “HTimingMultiLineEnd”, “<line number>”

VARIABLE:VALue? “HTimingMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the H Timing measurement on multiple lines.

Examples VARIABLE:VALue “HTimingMultiLineEnd”, “200”

VARIABLE:VALue? “HTimingMultiLineEnd”

Query may return: “HTimingMultiLineEnd 325”

HTimingMultiLineStart <line number>

Set or query returns the currently assigned starting line number used to perform the H Timing measurement on multiple lines.

Syntax VARIable:VALue “HTimingMultiLineStart”, “<line number>”
VARIable:VALue? “HTimingMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the H Timing measurement on multiple lines.

Examples VARIable:VALue “HTimingMultiLineStart”, “200”

VARIable:VALue? “HTimingMultiLineStart”
Query may return: “HTimingMultiLineStart 325”

HTimingPassAll?

Query the pass/fail status for all the values resulting from the H Timing measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassAll”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values resulting from the H Timing measurement on all the channels.

The order is: Back Porch (Ch1), Left Border (Ch1), Addressable Video (Ch1), Right Border (Ch1), Front Porch (Ch1), Back Porch (Ch2), Left Border (Ch2), Addressable Video (Ch2), Right Border (Ch2), Front Porch (Ch2), Back Porch (Ch3), Left Border (Ch3), Addressable Video (Ch3), Right Border (Ch3), Front Porch (Ch3), Sync Pulse Width, and Pixel Clock.

A returned value of 1 means Pass, a returned value of 0 means Fail. Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassAll”
Query may return: “HTimingPassAll 1 0 0 0 1 1 1 0 1 0 1 1 1 1 1 1 1”

HTimingPassAddressableVideoCh[1..3]?

Query the pass/fail status for the Addressable Video resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HTimingPassAddressableVideoCh1" VARIABLE:VALUE? "HTimingPassAddressableVideoCh2" VARIABLE:VALUE? "HTimingPassAddressableVideoCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Addressable Video resulting from the H Timing measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingPassAddressableVideoCh1" Query may return: "HTimingPassAddressableVideoCh1 1"

HTimingPassBackPorchCh[1..3]?

Query the pass/fail status for the Back Porch resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassBackPorchCh1”
 VARIABLE:VALue? “HTimingPassBackPorchCh2”
 VARIABLE:VALue? “HTimingPassBackPorchCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Back Porch resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassBackPorchCh1”
 Query may return: “HTimingPassBackPorchCh1 1”

HTimingPassFrontPorchCh[1..3]?

Query the pass/fail status for the Front Porch resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HTimingPassRightBorderCh1" VARIABLE:VALUE? "HTimingPassRightBorderCh2" VARIABLE:VALUE? "HTimingPassRightBorderCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Front Porch resulting from the H Timing measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingPassFrontPorchCh1" Query may return: "HTimingPassFrontPorchCh1 1"

HTimingPassLeftBorderCh[1..3]?

Query the pass/fail status for the Left Border resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassLeftBorderCh1”
 VARIABLE:VALue? “HTimingPassLeftBorderCh2”
 VARIABLE:VALue? “HTimingPassLeftBorderCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Left Border resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassLeftBorderCh1”
 Query may return: “HTimingPassLeftBorderCh1 1”

HTimingPassPixelClock?

Query the pass/fail status for the Pixel Clock resulting from the H Timing measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HTimingPassPixelClock"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Pixel Clock resulting from the H Timing measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingPassPixelClock" Query may return: "HTimingPassPixelClock 1"

HTimingPassRightBorderCh[1..3]?

Query the pass/fail status for the Right Border resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassRightBorderCh1”
 VARIABLE:VALue? “HTimingPassRightBorderCh2”
 VARIABLE:VALue? “HTimingPassRightBorderCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Right Border resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassRightBorderCh1”
 Query may return: “HTimingPassRightBorderCh1 1”

HTimingPassSyncPulseWidth?

Query the pass/fail status for the Sync Pulse Width resulting from the H Timing measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "HTimingPassSyncPulseWidth"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Sync Pulse Width resulting from the H Timing measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingPassSyncPulseWidth" Query may return: "HTimingPassSyncPulseWidth 1"

HTimingPixelClock?

Query the measured Pixel Clock resulting from the H Timing measurement.

Syntax VARIable:VALue? “HTimingPixelClock”

Group Measured Results Query

Arguments None

Returns Query returns the measured Pixel Clock resulting from the H Timing measurement.
The returned value is in megahertz (MHz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HTimingPixelClock”
Query may return: “HTimingPixelClock 56.25”

HTimingRefAll?

Query all the H Timing reference values specified in the Reference file.

Syntax	VARIABLE:VALUE? "HTimingRefAll"
Group	Reference Values Query
Arguments	None
Returns	<p>Query returns all the H Timing reference values specified in the Reference file.</p> <p>The order is: Back Porch (Ch1) in μs, Left Border (Ch1) in μs, Addressable Video (Ch1) in μs, Right Border (Ch1) in μs, Front Porch (Ch1) in μs, Back Porch (Ch2) in μs, Left Border (Ch2) in μs, Addressable Video (Ch2) in μs, Right Border (Ch2) in μs, Front Porch (Ch2) in μs, Back Porch (Ch3) in μs, Left Border (Ch3) in μs, Addressable Video (Ch3) in μs, Right Border (Ch3) in μs, Front Porch (Ch3) in μs, Sync Pulse Width (in μs), and Pixel Clock (in MHz).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HTimingRefAll"</p> <p>Query may return: "HTimingRefAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"</p>

HTimingRefAddressableVideoCh[1..3]?

Query the H Timing Addressable Video reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingRefAddressableVideoCh1"
 VARIABLE:VALUE? "HTimingRefAddressableVideoCh2"
 VARIABLE:VALUE? "HTimingRefAddressableVideoCh3"

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Addressable Video reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRefAddressableVideoCh1"
 Query may return: "HTimingRefAddressableVideoCh1 14.22"

HTimingRefBackPorchCh[1..3]?

Query the H Timing Back Porch reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “HTimingRefBackPorchCh1”
 VARIable:VALue? “HTimingRefBackPorchCh2”
 VARIable:VALue? “HTimingRefBackPorchCh3”

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Back Porch reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HTimingRefBackPorchCh1”
 Query may return: “HTimingRefBackPorchCh1 2.70”

HTimingRefFrontPorchCh[1..3]?

Query the H Timing Front Porch reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “HTimingRefFrontPorchCh1”
 VARIABLE:VALue? “HTimingRefFrontPorchCh2”
 VARIABLE:VALue? “HTimingRefFrontPorchCh3”

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Front Porch reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingRefFrontPorchCh1”
 Query may return: “HTimingRefFrontPorchCh1 0.56”

HTimingRefLeftBorderCh[1..3]?

Query the H Timing Left Border reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "HTimingRefLeftBorderCh1"
 VARIable:VALue? "HTimingRefLeftBorderCh2"
 VARIable:VALue? "HTimingRefLeftBorderCh3"

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Left Border reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRefLeftBorderCh1"
 Query may return: "HTimingRefLeftBorderCh1 0"

HTimingRefPixelClock?

Query the H Timing Pixel Clock reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HTimingRefPixelClock"

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Pixel Clock reference value specified in the Reference file.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRefPixelClock"
Query may return: "HTimingRefPixelClock 56.25"

HTimingRefRightBorderCh[1..3]?

Query the H Timing Right Border reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “HTimingRefRightBorderCh1”
 VARIable:VALue? “HTimingRefRightBorderCh2”
 VARIable:VALue? “HTimingRefRightBorderCh3”

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Right Border reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HTimingRefRightBorderCh1”
 Query may return: “HTimingRefRightBorderCh1 0”

HTimingRefSyncPulseWidth?

Query the H Timing Sync Pulse Width reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HTimingRefSyncPulseWidth"

Group Reference Values Query

Arguments None

Returns Query returns the H Timing Sync Pulse Width reference value specified in the Reference file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRefSyncPulseWidth"
Query may return: "HTimingRefSyncPulseWidth 1.13"

HTimingRelAll?

Query all the relative values resulting from the H Timing measurement on all the channels.

Syntax	VARIABLE:VALUE? "HTimingRelAll"
Group	Relative Results Query
Arguments	None
Returns	<p>Query returns all the relative values resulting from the H Timing measurement on all the channels.</p> <p>The order is: Back Porch (Ch1) in μs, Left Border (Ch1) in μs, Addressable Video (Ch1) in μs, Right Border (Ch1) in μs, Front Porch (Ch1) in μs, Back Porch (Ch2) in μs, Left Border (Ch2) in μs, Addressable Video (Ch2) in μs, Right Border (Ch2) in μs, Front Porch (Ch2) in μs, Back Porch (Ch3) in μs, Left Border (Ch3) in μs, Addressable Video (Ch3) in μs, Right Border (Ch3) in μs, Front Porch (Ch3) in μs, Sync Pulse Width (in μs), and Pixel Clock (in MHz).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "HTimingRelAll"</p> <p>Query may return: "HTimingRelAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"</p>

HTimingRelAddressableVideoCh[1..3]?

Query the Addressable Video relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? “HTimingRelAddressableVideoCh1”
 VARIable:VALue? “HTimingRelAddressableVideoCh2”
 VARIable:VALue? “HTimingRelAddressableVideoCh3”

Group Relative Results Query

Arguments None

Returns Query returns the Addressable Video relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HTimingRelAddressableVideoCh1”
 Query may return: “HTimingRelAddressableVideoCh1 14.22”

HTimingRelBackPorchCh[1..3]?

Query the Back Porch relative value resulting from the H Timing measurement on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingRelBackPorchCh1" VARIABLE:VALUE? "HTimingRelBackPorchCh2" VARIABLE:VALUE? "HTimingRelBackPorchCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Back Porch relative value resulting from the H Timing measurement on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingRelBackPorchCh1" Query may return: "HTimingRelBackPorchCh1 2.70"

HTimingRelFrontPorchCh[1..3]?

Query the Front Porch relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "HTimingRelFrontPorchCh1"
 VARIABLE:VALUE? "HTimingRelFrontPorchCh2"
 VARIABLE:VALUE? "HTimingRelFrontPorchCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Front Porch relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRelFrontPorchCh1"
 Query may return: "HTimingRelFrontPorchCh1 0.56"

HTimingRelLeftBorderCh[1..3]?

Query the Left Border relative value resulting from the H Timing measurement on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingRelLeftBorderCh1" VARIABLE:VALUE? "HTimingRelLeftBorderCh2" VARIABLE:VALUE? "HTimingRelLeftBorderCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Left Border relative value resulting from the H Timing measurement on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingRelLeftBorderCh1" Query may return: "HTimingRelLeftBorderCh1 0"

HTimingRelPixelClock?

Query the Pixel Clock relative value resulting from the H Timing measurement.

Syntax VARIable:VALue? "HTimingRelPixelClock"

Group Relative Results Query

Arguments None

Returns Query returns the Pixel Clock relative value resulting from the H Timing measurement.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRelPixelClock"
Query may return: "HTimingRelPixelClock 56.25"

HTimingRelRightBorderCh[1..3]?

Query the Right Border relative value resulting from the H Timing measurement on the specified channel.

Syntax	VARIABLE:VALUE? "HTimingRelRightBorderCh1" VARIABLE:VALUE? "HTimingRelRightBorderCh2" VARIABLE:VALUE? "HTimingRelRightBorderCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Right Border relative value resulting from the H Timing measurement on the specified channel. The returned value is in microseconds (μ s). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "HTimingRelRightBorderCh1" Query may return: "HTimingRelRightBorderCh1 0"

HTimingRelSyncPulseWidth?

Query the Sync Pulse Width relative value resulting from the H Timing measurement.

Syntax VARIABLE:VALUE? "HTimingRelSyncPulseWidth"

Group Relative Results Query

Arguments None

Returns Query returns the Sync Pulse Width relative value resulting from the H Timing measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRelSyncPulseWidth"
Query may return: "HTimingRelSyncPulseWidth 1.13"

HTimingRightBorderCh[1..3]?

Query the measured Right Border resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingRightBorderCh1"
 VARIable:VALue? "HTimingRightBorderCh2"
 VARIable:VALue? "HTimingRightBorderCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Right Border resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRightBorderCh1"
 Query may return: "HTimingRightBorderCh1 0"

HTimingSet <setting>

Set or query whether to perform the H Timing measurements upon Execute.

Syntax VARIable:VALue “HTimingSet”, “<setting>”

VARIable:VALue? “HTimingSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Timing measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the H Timing measurement is not selected.

Query returns “1” if the H Timing measurement is selected.

Examples VARIable:VALue “HTimingSet”, “ON”

VARIable:VALue? “HTimingSet”

Query may return: “HTimingSet 1”

HTimingStatus?

Query the status of the H Timing measurement.

Syntax	VARIABLE:VALUE? "HTimingStatus"
Group	Results Summary Query
Arguments	None
Returns	Query may return one of these values: "Done", "Stopped", "Pass", "Fail" Query returns Done when the measurement is completed without limit testing. Query returns Stopped when the measurement is halted before completion. Returns "---" if no valid values are currently available.
Examples	VARIABLE:VALUE? "HTimingStatus" Query may return: "HTimingStatus Pass"

HTimingSyncPulseWidth?

Query the measured Sync Pulse Width resulting from the H Timing measurement.

Syntax VARIABLE:VALUE? "HTimingSyncPulseWidth"

Group Measured Results Query

Arguments None

Returns Query returns the measured Sync Pulse Width resulting from the H Timing measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingSyncPulseWidth"
Query may return: "HTimingSyncPulseWidth 1.13"

ID?

Query the ID/Version of the application.

Syntax VARIable:VALue? "ID"

Group Global

Arguments None

Returns Returns the application's ID.

Examples VARIable:VALue? "ID"
Query may return: "ID Tek/VMSeries Version 0.96"

LimitFileLoad <pathstring>

Loads the Limit file to be used for Limit (pass/fail test) testing.

Syntax VARIABLE:VALue “LimitFileLoad”, “<pathstring>”

Group Reference and Limits

Arguments <pathstring> specifies the path/filename where the limits file is located. Can either be (1) the full path and filename, or (2) just the filename, and the default path “C:\VMApps\OptVGA\RefLimFiles\DMT” will be used for the DMT timing standard. The file extension must be csv. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALue “LimitFileLoad”,
 “C:\VMApps\OptVGA\RefLimFiles\DMT\
 DefaultLimits1024X768@75-RGB.csv”

LimitSet

Set or query whether Limit Testing is performed upon Execute.

Syntax VARIable:VALue “LimitSet”, “<setting>”
 VARIable:VALue? “LimitSet”

Group Reference and Limits

Arguments <setting> specifies whether to perform the Limit testing upon Execute.
 Valid values are: OFF, ON, 0, 1.

Returns Query returns 0 or 1 depending on whether the LimitSet is enabled or disabled.

Examples VARIable:VALue “LimitSet”, “ON”

 VARIable:VALue? “LimitSet”
 Query may return:“LimitSet 1 ”

LinearityAverage <samples>

Set or query the total number of samples over which to average the Linearity measurement.

Syntax VARIable:VALue “LinearityAverage”, “<samples>”

VARIable:VALue? “LinearityAverage”

Group Measurement Setup

Related Commands LinearityLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Values must be in the range: 1..64.

Returns Query returns the currently assigned total number of samples the Linearity Measurement.

Examples VARIable:VALue “LinearityAverage”, “1”

VARIable:VALue? “LinearityAverage”
Query may return: “LinearityAverage 8”

LinearityMaxDNLAtStepNumberCh[1..3]?

Query the step number at which the Max INL occurs for the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityMaxDNLAtStepNumberCh1"
 VARIable:VALue? "LinearityMaxDNLAtStepNumberCh2"
 VARIable:VALue? "LinearityMaxDNLAtStepNumberCh3"

Group Measured Results Query

Arguments None

Returns Query returns the step number at which the Max DNL is measured resulting from the Linearity measurement on the specified channel.
 Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxDNLAtStepNumberCh1"
 Query may return: "LinearityMaxDNLAtStepNumberCh1 23"

LinearityMaxDNLCh[1..3]?

Query the measured Max DNL resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMaxDNLCh1"
 VARIABLE:VALUE? "LinearityMaxDNLCh2"
 VARIABLE:VALUE? "LinearityMaxDNLCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Max DNL resulting from the Linearity measurement on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMaxDNLCh1"
 Query may return: "LinearityMaxDNLCh1 0.0"

LinearityMaxINLAtStepNumberCh[1..3]?

Query the step number at which the MaxINL occurs for the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityMaxINLAtStepNumberCh1"
 VARIable:VALue? "LinearityMaxINLAtStepNumberCh2"
 VARIable:VALue? "LinearityMaxINLAtStepNumberCh3"

Group Measured Results Query

Arguments None

Returns Query returns the step number at which the Max INL is measured resulting from the Linearity measurement on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxINLAtStepNumberCh1"
 Query may return: "LinearityMaxINLAtStepNumberCh1 13"

LinearityMaxINLCh[1..3]?

Query the measured Max INL resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALue? “LinearityMaxINLCh1”
 VARIABLE:VALue? “LinearityMaxINLCh2”
 VARIABLE:VALue? “LinearityMaxINLCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Max INL resulting from the Linearity measurement on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityMaxINLCh1”
 Query may return: “LinearityMaxINLCh1 0.0”

LinearityLine<line number>

Set or query the line number used to perform the Linearity measurement.

Syntax VARIable:VALue “LinearityLine”, “<line number>”
 VARIable:VALue? “LinearityLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number used to perform the Linearity measurement.

Examples VARIable:VALue “LinearityLine”, “200”

 VARIable:VALue? “LinearityLine”
 Query may return: “LinearityLine 325”

LinearityMaxMaxDNLCh[1..3]?

Query the Linearity Max DNL maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMaxMaxDNLCh1"
 VARIABLE:VALUE? "LinearityMaxMaxDNLCh2"
 VARIABLE:VALUE? "LinearityMaxMaxDNLCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Linearity Max DNL maximum limit value specified in the Limits file on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMaxMaxDNLCh1"
 Query may return: "LinearityMaxMaxDNLCh1 0.0"

LinearityMaxMaxINLCh[1..3]?

Query the Linearity Max INL maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "LinearityMaxMaxINLCh1" VARIABLE:VALUE? "LinearityMaxMaxINLCh2" VARIABLE:VALUE? "LinearityMaxMaxINLCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Linearity Max INL maximum limit value specified in the Limits file on the specified channel. The returned value is in LSB (Least Significant Bit). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityMaxMaxINLCh1" Query may return: "LinearityMaxMaxINLCh1 0.0"

LinearityMaxMonotonicCh[1..3]?

Query the Linearity Monotonic maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “LinearityMaxMonotonicCh1”
 VARIABLE:VALue? “LinearityMaxMonotonicCh2”
 VARIABLE:VALue? “LinearityMaxMonotonicCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Linearity Monotonic maximum limit value specified in the Limits file on the specified channel.
 The value can be either 1 or 0.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityMaxMonotonicCh1”
 Query may return: “LinearityMaxMonotonicCh1 1”

LinearityMaxResolutionCh[1..3]?

Query the Linearity Resolution maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LinearityMaxResolutionCh1"
 VARIable:VALue? "LinearityMaxResolutionCh2"
 VARIable:VALue? "LinearityMaxResolutionCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Linearity Resolution maximum limit value specified in the Limits file on the specified channel.
 The value represents the number of bits of resolution of the input signal.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxResolutionCh1"
 Query may return: "LinearityMaxResolutionCh1 7"

LinearityMinMaxDNLCh[1..3]?

Query the Linearity Max DNL minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMinMaxDNLCh1"
 VARIABLE:VALUE? "LinearityMinMaxDNLCh2"
 VARIABLE:VALUE? "LinearityMinMaxDNLCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Linearity Max DNL minimum limit value specified in the Limits file on the specified channel.
 The returned value is in LSB (Least Significant Bit)
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMinMaxDNLCh1"
 Query may return: "LinearityMinMaxDNLCh1 0.0"

LinearityMinMaxINLCh[1..3]?

Query the Linearity Max INL minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "LinearityMinMaxINLCh1" VARIABLE:VALUE? "LinearityMinMaxINLCh2" VARIABLE:VALUE? "LinearityMinMaxINLCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Linearity Max INL minimum limit value specified in the Limits file on the specified channel. The returned value is in LSB (Least Significant Bit). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityMinMaxINLCh1" Query may return: "LinearityMinMaxINLCh1 0.0"

LinearityMinMonotonicCh[1..3]?

Query the Linearity Monotonic minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “LinearityMinMonotonicCh1”
 VARIABLE:VALue? “LinearityMinMonotonicCh2”
 VARIABLE:VALue? “LinearityMinMonotonicCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Linearity Monotonic minimum limit value specified in the Limits file on the specified channel.
 The value can be either 1 or 0.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityMinMonotonicCh1”
 Query may return: “LinearityMinMonotonicCh1 1”

LinearityMinResolutionCh[1..3]?

Query the Linearity Resolution minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LinearityMinResolutionCh1"
 VARIable:VALue? "LinearityMinResolutionCh2"
 VARIable:VALue? "LinearityMinResolutionCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Linearity Resolution minimum limit value specified in the Limits file on the specified channel.
 The value represents the number of bits of resolution of the input signal.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMinResolutionCh1"
 Query may return: "LinearityMinResolutionCh1 7"

LinearityMonotonicAtStepNumberCh[1..3]?

Query the step number at which the maximum Monotonic value is measured resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMonotonicAtStepNumberCh1"
 VARIABLE:VALUE? "LinearityMonotonicAtStepNumberCh2"
 VARIABLE:VALUE? "LinearityMonotonicAtStepNumberCh3"

Group Measured Results Query

Arguments None

Returns Query returns the step number at which the maximum Monotonic value is measured resulting from the Linearity measurement on the specified channel. The value can be either 1 or 0.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMonotonicAtStepNumberCh1"
 Query may return: "LinearityMonotonicAtStepNumberCh1 1"

LinearityMonotonicCh[1..3]?

Query the measured Monotonic value resulting from the Linearity measurement on the specified channel.

Syntax	VARIABLE:VALUE? "LinearityMonotonicCh1" VARIABLE:VALUE? "LinearityMonotonicCh2" VARIABLE:VALUE? "LinearityMonotonicCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Monotonic value resulting from the Linearity measurement on the specified channel. The value can be either 1 or 0. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityMonotonicCh1" Query may return: "LinearityMonotonicCh1 1"

LinearityMultiLineEnd <line number>

Set or query the ending line number used to perform the Linearity measurement on multiple lines.

Syntax VARIable:VALue “LinearityMultiLineEnd”, “<line number>”

VARIable:VALue? “LinearityMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the Linearity measurement on multiple lines.

Examples VARIable:VALue “LinearityMultiLineEnd”, “200”

VARIable:VALue? “LinearityMultiLineEnd”

Query may return: “LinearityMultiLineEnd 325”

LinearityMultiLineStart <line number>

Set or query the starting line number used to perform the Linearity measurement on multiple lines.

Syntax VARIable:VALue “LinearityMultiLineStart”, “<line number>”
VARIable:VALue? “LinearityMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the Linearity measurement on multiple lines.

Examples VARIable:VALue “LinearityMultiLineStart”, “200”

VARIable:VALue? “LinearityMultiLineStart”
Query may return: “LinearityMultiLineStart 325”

LinearityPassAll?

Query the pass/fail status for all the values resulting from the Linearity measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALUE? "LinearityPassAll"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values resulting from the Linearity measurement on all the channels.

The order is: Resolution in Bits (Ch1), Max INL (Ch1), Max INL @ Step No (Ch1), Max DNL (Ch1), Max DNL @ Step No (Ch1), Monotonic Y/N (Ch1), Monotonic @ Step No (Ch1), Resolution in Bits (Ch2), Max INL (Ch2), Max INL @ Step No (Ch2), Max DNL (Ch2), Max DNL @ Step No (Ch2), Monotonic Y/N (Ch2), Monotonic @ Step No (Ch2), Resolution in Bits (Ch3), Max INL (Ch3), Max INL @ Step No (Ch3), Max DNL (Ch3), Max DNL @ Step No (Ch3), Monotonic Y/N (Ch3), Monotonic @ Step No (Ch3).

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityPassAll"
Query may return: "LinearityPassAll 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1"

LinearityPassMaxDNLCh[1..3]?

Query the pass/fail status for the Max DNL resulting from the Linearity measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "LinearityPassMaxDNLCh1" VARIABLE:VALUE? "LinearityPassMaxDNLCh2" VARIABLE:VALUE? "LinearityPassMaxDNLCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Max DNL resulting from the Linearity measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityPassMaxDNLCh1" Query may return: "LinearityPassMaxDNLCh1 1"

LinearityPassMaxINLCh[1..3]?

Query the pass/fail status for the Max INL resulting from the Linearity measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “LinearityPassMaxINLCh1”
 VARIABLE:VALue? “LinearityPassMaxINLCh2”
 VARIABLE:VALue? “LinearityPassMaxINLCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Max INL resulting from the Linearity measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityPassMaxINLCh1”
 Query may return: “LinearityPassMaxINLCh1 1”

LinearityPassMonotonicCh[1..3]?

Query the pass/fail status for the Monotonic value resulting from the Linearity measurement on the specified channel.

Syntax	VARIABLE:VALUE? "LinearityPassMonotonicCh1" VARIABLE:VALUE? "LinearityPassMonotonicCh2" VARIABLE:VALUE? "LinearityPassMonotonicCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Monotonic value resulting from the Linearity measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityPassMonotonicCh1" Query may return: "LinearityPassMonotonicCh1 1"

LinearityPassResolutionCh[1..3]?

Query the pass/fail status for the resolution resulting from the Linearity measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “LinearityPassResolutionCh1”
 VARIABLE:VALue? “LinearityPassResolutionCh2”
 VARIABLE:VALue? “LinearityPassResolutionCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the resolution resulting from the Linearity measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityPassResolutionCh1”
 Query may return: “LinearityPassResolutionCh1 1”

LinearityRefMaxDNLCh[1..3]?

Query the Linearity Max DNL reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "LinearityRefMaxDNLCh1"
 VARIable:VALue? "LinearityRefMaxDNLCh2"
 VARIable:VALue? "LinearityRefMaxDNLCh3"

Group Reference Values Query

Arguments None

Returns Query returns the Linearity Max DNL reference value specified in the Reference file on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityRefMaxDNLCh1"
 Query may return: "LinearityRefMaxDNLCh1 0.0"

LinearityRefMaxINLCh[1..3]?

Query the Linearity Max INL reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRefMaxINLCh1"
 VARIABLE:VALUE? "LinearityRefMaxINLCh2"
 VARIABLE:VALUE? "LinearityRefMaxINLCh3"

Group Reference Values Query

Arguments None

Returns Query returns the Linearity Max INL reference value specified in the Reference file on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRefMaxINLCh1"
 Query may return: "LinearityRefMaxINLCh1 0.0"

LinearityRefMonotonicCh[1..3]?

Query the Linearity Monotonic reference value specified in the Reference file on the specified channel.

Syntax	VARIABLE:VALUE? "LinearityRefMonotonicCh1" VARIABLE:VALUE? "LinearityRefMonotonicCh2" VARIABLE:VALUE? "LinearityRefMonotonicCh3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Linearity Monotonic reference value specified in the Reference file on the specified channel. The value can be either 1 or 0. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityRefMonotonicCh1" Query may return: "LinearityRefMonotonicCh1 1"

LinearityRefResolutionCh[1..3]?

Query the Linearity Resolution reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “LinearityRefResolutionCh1”
 VARIABLE:VALue? “LinearityRefResolutionCh2”
 VARIABLE:VALue? “LinearityRefResolutionCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Linearity Resolution reference value specified in the Reference file on the specified channel.
 The value represents the number of bits of resolution of the input signal.
 The returned value is in Bits.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityRefResolutionCh1”
 Query may return: “LinearityRefResolutionCh1 7”

LinearityRelMaxDNLCh[1..3]?

Query the Max DNL relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityRelMaxDNLCh1"
 VARIable:VALue? "LinearityRelMaxDNLCh2"
 VARIable:VALue? "LinearityRelMaxDNLCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Max DNL relative value resulting from the Linearity measurement on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityRelMaxDNLCh1"
 Query may return: "LinearityRelMaxDNLCh1 0.0"

LinearityRelMaxINLCh[1..3]?

Query the Max INL relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRelMaxINLCh1"
 VARIABLE:VALUE? "LinearityRelMaxINLCh2"
 VARIABLE:VALUE? "LinearityRelMaxINLCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Max INL relative value resulting from the Linearity measurement on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRelMaxINLCh1"
 Query may return: "LinearityRelMaxINLCh1 0.0"

LinearityRelMonotonicCh[1..3]?

Query the Monotonic relative value resulting from the Linearity measurement on the specified channel.

Syntax	VARIABLE:VALUE? "LinearityRelMonotonicCh1" VARIABLE:VALUE? "LinearityRelMonotonicCh2" VARIABLE:VALUE? "LinearityRelMonotonicCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Monotonic relative value resulting from the Linearity measurement on the specified channel. The returned value can be either "Yes" or "No". Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LinearityRelMonotonicCh1" Query may return: "LinearityRelMonotonicCh1 Yes"

LinearityRelResolutionCh[1..3]?

Query the Resolution relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRelResolutionCh1"
 VARIABLE:VALUE? "LinearityRelResolutionCh2"
 VARIABLE:VALUE? "LinearityRelResolutionCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Resolution relative value resulting from the Linearity measurement on the specified channel.
 The returned value is in bits.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRelResolutionCh1"
 Query may return: "LinearityRelResolutionCh1 7"

LinearityResolutionCh[1..3]?

Query the measured Resolution resulting from the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityResolutionCh1"
 VARIable:VALue? "LinearityResolutionCh2"
 VARIable:VALue? "LinearityResolutionCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Resolution resulting from the Linearity measurement on the specified channel.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityResolutionCh1"
 Query may return: "LinearityResolutionCh1 7"

LinearitySet <setting>

Set or query whether to perform the Linearity measurements upon Execute.

Syntax VARIable:VALue “LinearitySet”, “<setting>”

VARIable:VALue? “LinearitySet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Linearity measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the Linearity measurement is not selected.

Query returns “1” if the Linearity measurement is selected.

Examples VARIable:VALue “LinearitySet”, “ON”

VARIable:VALue? “LinearitySet”

Query may return: “LinearitySet 1”

LinearityStatus?

Query the status of the Linearity measurement.

Syntax VARIable:VALue? "LinearityStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", "Fail".
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "LinearityStatus"
Query may return: "LinearityStatus Pass"

LogErrors

Set or query whether errors are logged to a file. If enabled, errors are logged in the “C:\VMApps\OptVGA\log.txt” file.

Syntax VARIABLE:VALUE “LogErrors”, “<setting>”
 VARIABLE:VALUE? “LogErrors”

Group Reporting

Arguments <setting> specifies whether to log errors to the log.txt file.
 Valid values are: OFF, ON, 0, 1.

Returns Query returns 0 or 1 depending on whether the LogErrors is enabled or disabled.

Examples VARIABLE:VALUE “LogErrors”, “ON”

 VARIABLE:VALUE? “LogErrors”
 Query may return: “LogErrors ON ”

LumaLevelsAverage <samples>

Set or query the total number of samples over which to average the Linearity measurement.

Syntax VARIable:VALue “LumaLevelsAverage”, “<samples>”

VARIable:VALue? “LumaLevelsAverage”

Group Measurement Setup

Related Commands LumaLevelsLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples resulting from the Linearity measurement.

Examples VARIable:VALue “LumaLevelsAverage”, “1”

VARIable:VALue? “LumaLevelsAverage”

Query may return: “LumaLevelsAverage 8”

LumaLevelsAll?

Query the measured values of all the Luma Levels measurements on all the channels.

Syntax VARIable:VALue? “LumaLevelsAll”

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the Luma Levels measurements on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LumaLevelsAll”
Query may return:
“LumaLevelsAll 699.32 119.33 699.32 119.33 699.32 119.33”

LumaLevelsAmpMaxCh[1..3]?

Query the measured Maximum Amplitude resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsAmpMaxCh1"
 VARIable:VALue? "LumaLevelsAmpMaxCh2"
 VARIable:VALue? "LumaLevelsAmpMaxCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Maximum Amplitude resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsAmpMaxCh1"
 Query may return: "LumaLevelsAmpMaxCh1 699.32"

LumaLevelsAmpMinCh[1..3]?

Query the measured Minimum Amplitude resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? “LumaLevelsAmpMinCh1”
 VARIable:VALue? “LumaLevelsAmpMinCh2”
 VARIable:VALue? “LumaLevelsAmpMinCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Minimum Amplitude resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LumaLevelsAmpMinCh1”
 Query may return: “LumaLevelsAmpMinCh1 119.33”

LumaLevelsLine<line number>

Set or query the line number used to perform the Luma Levels measurement.

Syntax VARIable:VALue “LumaLevelsLine”, “<line number>”
 VARIable:VALue? “LumaLevelsLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number used to perform the Luma Levels measurement.

Examples VARIable:VALue “LumaLevelsLine”, “200”

 VARIable:VALue? “LumaLevelsLine”
 Query may return: “LumaLevelsLine 325”

LumaLevelsMaxAll?

Query all the Luma Levels maximum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "LumaLevelsMaxAll"

Group Maximum Limits Query

Arguments None

Returns Query returns all the Luma Levels maximum limit values specified in the Limits file on all the channels.
The returned value is in millivolts (mV).

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMaxAll"
Query may return: "LumaLevelsMaxAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsMaxAmpMaxCh[1..3]?

Query the Luma Levels Maximum Amplitude maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LumaLevelsMaxAmpMaxCh1"
 VARIable:VALue? "LumaLevelsMaxAmpMaxCh2"
 VARIable:VALue? "LumaLevelsMaxAmpMaxCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Luma Levels Maximum Amplitude maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMaxAmpMaxCh1"
 Query may return: "LumaLevelsMaxAmpMaxCh1 699.32"

LumaLevelsMaxAmpMinCh[1..3]?

Query the Luma Levels Minimum Amplitude maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “LumaLevelsMaxAmpMinCh1”
 VARIable:VALue? “LumaLevelsMaxAmpMinCh2”
 VARIable:VALue? “LumaLevelsMaxAmpMinCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Luma Levels Minimum Amplitude maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LumaLevelsMaxAmpMinCh1”
 Query may return: “LumaLevelsMaxAmpMinCh1 119.33”

LumaLevelsMinAll?

Query all the Luma Levels minimum limit values specified in the Limits file on all the channels.

Syntax	VARIABLE:VALUE? "LumaLevelsMinAll"
Group	Minimum Limits Query
Arguments	None
Returns	<p>Query returns all the Luma Levels minimum limit values specified in the Limits file on all the channels.</p> <p>The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3). The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "LumaLevelsMinAll" Query may return: "LumaLevelsMinAll 699.32 119.33 699.32 119.33 699.32 119.33"</p>

LumaLevelsMinAmpMaxCh[1..3]?

Query the Luma Levels Maximum Amplitude minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LumaLevelsMinAmpMaxCh1"
 VARIable:VALue? "LumaLevelsMinAmpMaxCh2"
 VARIable:VALue? "LumaLevelsMinAmpMaxCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Luma Levels Maximum Amplitude minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMinAmpMaxCh1"
 Query may return: "LumaLevelsMinAmpMaxCh1 699.32"

LumaLevelsMinAmpMinCh[1..3]?

Query the Luma Levels Minimum Amplitude minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "LumaLevelsMinAmpMinCh1" VARIABLE:VALUE? "LumaLevelsMinAmpMinCh2" VARIABLE:VALUE? "LumaLevelsMinAmpMinCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Luma Levels Minimum Amplitude minimum limit value specified in the Limits file on the specified channel. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LumaLevelsMinAmpMinCh1" Query may return: "LumaLevelsMinAmpMinCh1 119.33"

LumaLevelsMultiLineEnd <line number>

Set or query the ending line number used to perform the Luma Levels measurement on multiple lines.

Syntax VARIable:VALue “LumaLevelsMultiLineEnd”,“<line number>”
VARIable:VALue? “LumaLevelsMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the Luma Levels measurement on multiple lines.

Examples VARIable:VALue “LumaLevelsMultiLineEnd”, “200”
VARIable:VALue? “LumaLevelsMultiLineEnd”
Query may return: “LumaLevelsMultiLineEnd 325”

LumaLevelsMultiLineStart <line number>

Set or query the starting line number used to perform the Luma Levels measurement on multiple lines.

Syntax VARIable:VALue “LumaLevelsMultiLineStart”, “<line number>”

VARIable:VALue? “LumaLevelsMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the Luma Levels measurement on multiple lines.

Examples VARIable:VALue “LumaLevelsMultiLineStart”, “200”

VARIable:VALue? “LumaLevelsMultiLineStart”

Query may return: “LumaLevelsMultiLineStart 325”

LumaLevelsPassAll?

Query the pass/fail status for all the values resulting from the Luma Levels measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIable:VALue? “LumaLevelsPassAll”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values resulting from the Luma Levels measurement on all the channels.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LumaLevelsPassAll”
Query may return: “LumaLevelsPassAll 1 1 1 0 1 1”

LumaLevelsPassAmpMaxCh[1..3]?

Query the pass/fail status for the maximum amplitude resulting from the Luma Levels measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "LumaLevelsPassAmpMaxCh1" VARIABLE:VALUE? "LumaLevelsPassAmpMaxCh2" VARIABLE:VALUE? "LumaLevelsPassAmpMaxCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the maximum amplitude resulting from the Luma Levels measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LumaLevelsPassAmpMaxCh1" Query may return: "LumaLevelsPassAmpMaxCh1 0"

LumaLevelsPassAmpMinCh[1..3]?

Query the pass/fail status for the minimum amplitude resulting from the Luma Levels measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “LumaLevelsPassAmpMinCh1”
 VARIABLE:VALue? “LumaLevelsPassAmpMinCh2”
 VARIABLE:VALue? “LumaLevelsPassAmpMinCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the minimum amplitude resulting from the Luma Levels measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LumaLevelsPassAmpMinCh1”
 Query may return: “LumaLevelsPassAmpMinCh1 1”

LumaLevelsRefAll?

Query all the Luma Levels reference values specified in the Reference file on all the channels.

Syntax VARIable:VALue? "LumaLevelsRefAll"

Group Reference Values Query

Arguments None

Returns Query returns all the Luma Levels reference values specified in the Reference file on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRefAll"
Query may return: "LumaLevelsRefAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsRefAmpMaxCh[1..3]?

Query the Luma Levels Maximum Amplitude reference value specified in the Reference on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRefAmpMaxCh1"
 VARIable:VALue? "LumaLevelsRefAmpMaxCh2"
 VARIable:VALue? "LumaLevelsRefAmpMaxCh3"

Group Reference Values Query

Arguments None

Returns Query returns the Luma Levels Maximum Amplitude reference value specified in the Reference on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRefAmpMaxCh1"
 Query may return: "LumaLevelsRefAmpMaxCh1 699.32"

LumaLevelsRefAmpMinCh[1..3]?

Query the Luma Levels Minimum Amplitude reference value specified in the Reference on the specified channel.

Syntax	VARIABLE:VALUE? "LumaLevelsRefAmpMinCh1" VARIABLE:VALUE? "LumaLevelsRefAmpMinCh2" VARIABLE:VALUE? "LumaLevelsRefAmpMinCh3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Luma Levels Minimum Amplitude reference value specified in the Reference on the specified channel. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LumaLevelsRefAmpMinCh1" Query may return: "LumaLevelsRefAmpMinCh1 119.33"

LumaLevelsRelAll?

Query all the relative values resulting from the Luma Levels measurement on all the channels.

Syntax VARIABLE:VALUE? "LumaLevelsRelAll"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the Luma Levels measurement on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LumaLevelsRelAll"
Query may return: "LumaLevelsRelAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsRelAmpMaxCh[1..3]?

Query the Maximum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRelAmpMaxCh1"
 VARIable:VALue? "LumaLevelsRelAmpMaxCh2"
 VARIable:VALue? "LumaLevelsRelAmpMaxCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Maximum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelAmpMaxCh1"
 Query may return: "LumaLevelsRelAmpMaxCh1 699.32"

LumaLevelsRelAmpMinCh[1..3]?

Query the Minimum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRelAmpMinCh1"
 VARIable:VALue? "LumaLevelsRelAmpMinCh2"
 VARIable:VALue? "LumaLevelsRelAmpMinCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Minimum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelAmpMinCh1"
 Query may return: "LumaLevelsRelAmpMinCh1 119.33"

LumaLevelsRelPctAll?

Query all the relative values (in percent) resulting from the Luma Levels measurement on all the channels.

Syntax	VARIABLE:VALUE? "LumaLevelsRelPctAll"
Group	Relative Results Query
Arguments	None
Returns	<p>Query returns all the relative values (in percent) resulting from the Luma Levels measurement on all the channels.</p> <p>The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).</p> <p>The returned value is in percent (%). Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "LumaLevelsRelPctAll"</p> <p>Query may return: "LumaLevelsRelPctAll 99.32 19.33 99.32 19.33 99.32 19.33"</p>

LumaLevelsRelPctAmpMaxCh[1..3]?

Query the Maximum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? “LumaLevelsRelPctAmpMaxCh1”
 VARIable:VALue? “LumaLevelsRelPctAmpMaxCh2”
 VARIable:VALue? “LumaLevelsRelPctAmpMaxCh3”

Group Relative Results Query

Arguments None

Returns Query returns the Maximum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LumaLevelsRelPctAmpMaxCh1”
 Query may return: “LumaLevelsRelPctAmpMaxCh1 99.32”

LumaLevelsRelPctAmpMinCh[1..3]?

Query the Minimum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.

Syntax	VARIABLE:VALUE? "LumaLevelsRelPctAmpMinCh1" VARIABLE:VALUE? "LumaLevelsRelPctAmpMinCh2" VARIABLE:VALUE? "LumaLevelsRelPctAmpMinCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Minimum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "LumaLevelsRelPctAmpMinCh1" Query may return: "LumaLevelsRelPctAmpMinCh1 19.33"

LumaLevelsSet <setting>

Set or query whether to perform the Luma Levels measurements upon Execute.

Syntax VARIable:VALue “LumaLevelsSet”, “<setting>”

VARIable:VALue? “LumaLevelsSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Luma Levels measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the Luma Levels measurement is not selected.

Query returns “1” if the Luma Levels measurement is selected.

Examples VARIable:VALue “LumaLevelsSet”, “ON”

VARIable:VALue? “LumaLevelsSet”

Query may return: “LumaLevelsSet 1”

LumaLevelsStatus?

Query the status of the Luma Levels measurement

Syntax VARIable:VALue? "LumaLevelsStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "LumaLevelsStatus"
Query may return: "LumaLevelsStatus Pass"

Noise500MHzFilterSet <setting>

Set or query whether to enable the 500 MHz filter for performing the Noise measurement.

Syntax VARIable:VALue “Noise500MHzFilterSet”, “<setting>”
 VARIable:VALue? “Noise500MHzFilterSet”

Group Configuration

Arguments <setting> specifies whether to enable the 500 MHz filter for performing the Noise measurement. Valid values are: 0, 1, ON, OFF.

Returns Query returns the current specified setting.

Examples VARIable:VALue “Noise500MHzFilterSet”, “OFF”

 VARIable:VALue? “Noise500MHzFilterSet”
 Query may return: “Noise500MHzFilterSet 1”

NoiseAll?

Query the measured values of all the Noise Inj Ratio measurements on all the channels.

Syntax VARIable:VALue? "NoiseAll"

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the Noise Inj Ratio measurements on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseAll"
Query may return: "NoiseAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseAverage <samples>

Set or query the number of samples over which to average the Noise Inj Ratio measurement.

Syntax VARIable:VALue “NoiseAverage”, “<samples>”

VARIable:VALue? “NoiseAverage”

Group Measurement Setup

Related Commands NoiseLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples for the Noise Inj Ratio measurement.

Examples VARIable:VALue “NoiseAverage”, “1”

VARIable:VALue? “NoiseAverage”
Query may return: “NoiseAverage 8”

NoisedBCh[1..3]?

Query the measured Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax	VARIABLE:VALUE? "NoisedBCh1" VARIABLE:VALUE? "NoisedBCh2" VARIABLE:VALUE? "NoisedBCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel. The returned value is in decibels (dB). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "NoisedBCh1" Query may return: "NoisedBCh1 17.5"

NoiseIrCh[1..3]?

Query the measured Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? “NoiseIrCh1”
 VARIable:VALue? “NoiseIrCh2”
 VARIable:VALue? “NoiseIrCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoiseIrCh1”
 Query may return: “NoiseIrCh1 2.5”

NoiseLine<line number>

Set or query the line number used for the Noise Inj Ratio measurement.

Syntax VARIable:VALue “NoiseLine”, “<line number>”
 VARIable:VALue? “NoiseLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number for the Noise Inj Ratio measurement.

Examples VARIable:VALue “NoiseLine”, “200”

 VARIable:VALue? “NoiseLine”
 Query may return: “NoiseLine 325”

NoiseMaxAll?

Query all the Noise Inj Ratio maximum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALue? "NoiseMaxAll"

Group Maximum Limits Query

Arguments None

Returns Query returns all the Noise Inj Ratio maximum limit values specified in the Limits file on all the channels.

The order is: mV (Ch1), dB (Ch1), Inj Ratio (Ch1) %, mV (Ch2), dB (Ch2), Inj Ratio (Ch2) %, mV (Ch3), dB (Ch3), Inj Ratio (Ch3) %.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "NoiseMaxAll"
Query may return: "NoiseMaxAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseMaxdBCh[1..3]?

Query the Noise Inj Ratio (in dB) maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMaxdBCh1"
 VARIable:VALue? "NoiseMaxdBCh2"
 VARIable:VALue? "NoiseMaxdBCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Noise Inj Ratio (in dB) maximum limit value specified in the Limits file on the specified channel.
 The returned value is in decibels (dB).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxdBCh1"
 Query may return: "NoiseMaxdBCh1 17.5"

NoiseMaxIrCh[1..3]?

Query the Noise Inj Ratio maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMaxIrCh1"
 VARIable:VALue? "NoiseMaxIrCh2"
 VARIable:VALue? "NoiseMaxIrCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Noise Inj Ratio maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxIrCh1"
 Query may return: "NoiseMaxIrCh1 2.5"

NoiseMaxmVCh[1..3]?

Query the Noise Inj Ratio (in mV) maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMaxmVCh1"
 VARIable:VALue? "NoiseMaxmVCh2"
 VARIable:VALue? "NoiseMaxmVCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Noise Inj Ratio (in mV) maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxmVCh1"
 Query may return: "NoiseMaxmVCh1 -65"

NoiseMinAll?

Query all the Noise Inj Ratio minimum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALue? "NoiseMinAll"

Group Minimum Limits Query

Arguments None

Returns Query returns all the Noise Inj Ratio minimum limit values specified in the Limits file on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "NoiseMinAll"
Query may return: "NoiseMinAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseMindBCh[1..3]?

Query the Noise Inj Ratio (in dB) minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMindBCh1"
 VARIable:VALue? "NoiseMindBCh2"
 VARIable:VALue? "NoiseMindBCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Noise Inj Ratio (in dB) minimum limit value specified in the Limits file on the specified channel.
 The returned value is in decibels (dB).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMindBCh1"
 Query may return: "NoiseMindBCh1 17.5"

NoiseMinIrCh[1..3]?

Query the Noise Inj Ratio minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “NoiseMinIrCh1”
 VARIable:VALue? “NoiseMinIrCh2”
 VARIable:VALue? “NoiseMinIrCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Noise Inj Ratio minimum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoiseMinIrCh1”
 Query may return: “NoiseMinIrCh1 2.5”

NoiseMinmVCh[1..3]?

Query the Noise Inj Ratio (in mV) minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMinmVCh1"
 VARIable:VALue? "NoiseMinmVCh2"
 VARIable:VALue? "NoiseMinmVCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Noise Inj Ratio (in mV) minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMinmVCh1"
 Query may return: "NoiseMinmVCh1 -65"

NoisemVCh[1..3]?

Query the measured Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? “NoisemVCh1”
 VARIable:VALue? “NoisemVCh2”
 VARIable:VALue? “NoisemVCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoisemVCh1”
 Query may return: “NoisemVCh1 -65”

NoisePassAll?

Query the pass/fail status for all the values resulting from the Noise Inj Ratio measurement on all the channels.

Syntax	VARIABLE:VALUE? "NoisePassAll"
Group	Pass/Fail Status Query
Arguments	None
Returns	<p>Query returns the pass/fail status for all the values resulting from the Noise Inj Ratio measurement on all the channels.</p> <p>The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).</p> <p>A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "NoisePassAll"</p> <p>Query may return: "NoisePassAll 1 1 1 0 0 1 0 1 0"</p>

NoisePassdBCh[1..3]?

Query the pass/fail status of the Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisePassdBCh1"
 VARIable:VALue? "NoisePassdBCh2"
 VARIable:VALue? "NoisePassdBCh3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisePassdBCh1"
 Query may return: "NoisePassdBCh1 1"

NoisePassIrCh[1..3]?

Query the pass/fail status of the Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisePassIrCh1"
 VARIable:VALue? "NoisePassIrCh2"
 VARIable:VALue? "NoisePassIrCh3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisePassIrCh1"
 Query may return: "NoisePassIrCh1 1"

NoisePassmVCh[1..3]?

Query the pass/fail status of the Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisePassmVCh1"
 VARIable:VALue? "NoisePassmVCh2"
 VARIable:VALue? "NoisePassmVCh3"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status of the Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisePassmVCh1"
 Query may return: "NoisePassmVCh1 1"

NoiseRefAll?

Query all the Noise Inj Ratio reference values specified in the Reference file on all the channels.

Syntax VARIable:VALue? "NoiseRefAll"

Group Reference Values Query

Arguments None

Returns Query returns all the Noise Inj Ratio reference values specified in the Reference file on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRefAll"
Query may return: "NoiseRefAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseRefdBCh[1..3]?

Query the Noise Inj Ratio (in dB) reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “NoiseRefdBCh1”
 VARIable:VALue? “NoiseRefdBCh2”
 VARIable:VALue? “NoiseRefdBCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Noise Inj Ratio (in dB) reference value specified in the Reference file on the specified channel.
 The returned value is in decibels (dB).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoiseRefdBCh1”
 Query may return: “NoiseRefdBCh1 17.5”

NoiseRefIrCh[1..3]?

Query the Noise Inj Ratio reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "NoiseRefIrCh1"
 VARIable:VALue? "NoiseRefIrCh2"
 VARIable:VALue? "NoiseRefIrCh3"

Group Reference Values Query

Arguments None

Returns Query returns the Noise Inj Ratio reference value specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRefIrCh1"
 Query may return: "NoiseRefIrCh1 2.5"

NoiseRefmVCh[1..3]?

Query the Noise Inj Ratio (in mV) reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “NoiseRefmVCh1”
 VARIable:VALue? “NoiseRefmVCh2”
 VARIable:VALue? “NoiseRefmVCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Noise Inj Ratio (in mV) reference value specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoiseRefmVCh1”
 Query may return: “NoiseRefmVCh1 -65”

NoiseRelAll?

Query all the relative values resulting from the Noise Inj Ratio measurement on all the channels.

Syntax VARIABLE:VALue? "NoiseRelAll"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the Noise Inj Ratio measurement on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "NoiseRelAll"
Query may return: "NoiseRelAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseReIdBCh[1..3]?

Query the Noise Inj Ratio (in dB) relative value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? “NoiseReIdBCh1”
 VARIable:VALue? “NoiseReIdBCh2”
 VARIable:VALue? “NoiseReIdBCh3”

Group Relative Results Query

Arguments None

Returns Query returns the Noise Inj Ratio (in dB) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoiseReIdBCh1”
 Query may return: “NoiseReIdBCh1 17.5”

NoiseRelIrCh[1..3]?

Query the Inj Ratio relative value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoiseRelIrCh1"
 VARIable:VALue? "NoiseRelIrCh2"
 VARIable:VALue? "NoiseRelIrCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Inj Ratio relative value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRelIrCh1"
 Query may return: "NoiseRelIrCh1 2.5"

NoiseRelmVCh[1..3]?

Query the Noise Inj Ratio (in mV) relative value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoiseRelmVCh1"
 VARIable:VALue? "NoiseRelmVCh2"
 VARIable:VALue? "NoiseRelmVCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Noise Inj Ratio (in mV) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRelmVCh1"
 Query may return: "NoiseRelmVCh1 -65"

NoiseSet <setting>

Set or query whether to measure Noise Inj Ratio upon Execute.

Syntax VARIable:VALue “NoiseSet”, “<setting>”

VARIable:VALue? “NoiseSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Noise Inj Ratio measurement upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the Noise Inj Ratio measurement is not selected.
Query returns “1” if the Noise Inj Ratio measurement is selected.

Examples VARIable:VALue “NoiseSet”, “ON”

VARIable:VALue? “NoiseSet”

Query may return: “NoiseSet 1”

NoiseStatus?

Query the status of the Noise Inj Ratio measurement

Syntax VARIable:VALue? "NoiseStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseStatus"
Query may return: "NoiseStatus Pass"

OPComplete <setting>

This command is used for ensuring that the previous commands have been processed by the instrument, before either querying its value or calling the next command. OPComplete is set to “1” whenever a GPIB command has been received and processed and a new command is ready to be processed. OPComplete can only be reset to “0” by the user, and it can only be set to “1”, when a command has been sent and the next command is ready to be input. It is initialized to “0” on startup. For the “Execute” command, OPComplete is set to “1” after the execution begins.

Syntax	VARIABLE:VALUE “OPComplete”, “<setting>” VARIABLE:VALUE? “OPComplete”
Group	Global
Arguments	<setting> resets OPComplete so it is ready for the next command. Valid values are: OFF, 0.
Returns	Query returns “1” if a command has been completed since OPComplete was last reset, otherwise it returns “0”.
Examples	VARIABLE:VALUE “OPComplete”, “OFF” VARIABLE:VALUE? “OPComplete” Query may return: “OPComplete 1”

PopupWarnings

Set or query if Pop-up warnings appear on screen.

Syntax VARIable:VALue “PopupWarnings”, “<setting>”
 VARIable:VALue “PopupWarnings”

Group Reporting

Arguments <setting> specifies whether or not to display pop-up warnings.
 Valid values are: OFF, ON, 0, 1.

Returns Returns setting for whether or not warnings are displayed.

Examples VARIable:VALue “PopupWarnings”, “OFF”

 VARIable:VALue? “PopupWarnings”
 Query may return: “PopupWarnings 1”

RecallSettings <pathstring>

Recall settings recalls the settings stored in the specified path/filename.

If you only specify the filename with extension, the default path “C:\VMApps\OptVGA” is used. The file specified in pathstring must have the default extension “.vmset”. You have to specify the extension for the filename. The command does not append the filename extension automatically.

If you get the error message, “Invalid Filename”, confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “RecallSettings”, “<pathstring>”
 VARIABLE:VALUE? “RecallSettings”

Group Global

Arguments <pathstring> specifies the path/filename where the setup file is stored. Can either be the full path and filename, or just the filename.

Related Commands SaveSettings

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “RecallSettings”, “C:\VMApps\OptVGA\Tek1.vmset”

 VARIABLE:VALUE? “RecallSettings”
 Query may return: “RecallSettings OK”

ReferenceFileLoad <pathstring>

Specifies Reference file to be loaded for Relative to Reference testing.

Syntax VARIABLE:VALUE “ReferenceFileLoad”, “<pathstring>”

Group Reference and Limits

Arguments <pathstring> specifies the path/filename with extension where the Reference file is located. Can either be the full path and filename with extension, or just the filename with extension.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “ReferenceFileLoad”
 “C:\VMApps\OptVGA\RefLimFiles\DMT\DefaultReference1024X768@75-RGB.csv”

ReferenceFileSave <filepath>

Saves the current measurement results to a Reference file that is used for Relative to Reference testing.

Syntax VARIable:VALue “ReferenceFileSave”, “<filepath>”

Group Reference and Limits

Arguments <filestring> path/filename with extension where file is to be stored. Can either be the full path and filename with extension, or just the filename with extension.

Returns Returns OK after the file is written.

Examples VARIable:VALue “ReferenceFileSave”
 “C:\VMApps\OptVGA\RefLimFiles\DMT\New_DefaultReference1024X768@75-RGB.csv”

ReferenceSet

Set or query whether Reference Testing is enabled or disabled.

Syntax VARIable:VALue “ReferenceSet”, “<setting>”
 VARIable:VALue? “ReferenceSet”

Group Reference and Limits

Arguments <setting> specifies whether to perform Relative to Reference testing upon Execute.
 Valid values are: OFF, ON, 0, 1.

Returns Query returns 0 or 1 depending on whether Reference Testing is selected.

Examples VARIable:VALue “ReferenceSet”, “ON”

 VARIable:VALue? “ReferenceSet”
 Query may return: “ReferenceSet 1”

ReportFormatType <setting>

Specifies the file type to be used when ReportGenerate is invoked.

Syntax VARIable:VALue “ReportFormatType”, <setting>
 VARIable:VALue? “ReportFormatType”

Group Reporting

Arguments Valid values for <setting> are: “PDF”, “RTF”, “CSV”

Returns The file type used by the ReportGenerate command.

Examples VARIable:VALue “ReportFormatType”, “PDF”

 VARIable:VALue? “ReportFormatType”
 Query may return: “ReportFormatType PDF”

ReportGenerate <pathstring>

Generates a measurement report of the specified type (if a measure has been run and results are available), and saves it in the file specified by pathstring.

You have to specify the extension for the filename. The command does not append the filename extension automatically. The type of file (.rtf, .csv or .pdf) is determined by the file extension in the pathstring. If the extension does not match one of these endings, an error is returned.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “ReportGenerate”, “<pathstring>”
 VARIABLE:VALUE? “ReportGenerate”

Group Reporting

Arguments <pathstring> path/filename where file is to be stored. Can either be the full path and filename with extension or just the filename with extension.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples sVARIABLE:VALUE “ReportGenerate”, “C:\VMApps\OptVGA\Reports\color-bars.csv”

VARIABLE:VALUE? “ReportGenerate”
Query may return: “ReportGenerate OK”

ReportMeasurements <setting>

Set or query the measurements to write to the report when ReportGenerate is called.

Syntax VARIABLE:VALUE "ReportMeasurements", "<setting>"
VARIABLE:VALUE? "ReportMeasurements"

Group Reporting

Arguments Valid values for <setting> are: "All" and "Selected".
"All" reports all of the currently available valid measurements results, while
"Selected" reports only those measurement results that are currently selected.

Related Commands ChChMismatchSet
ChChSkewSet
ColorBarsSet
HSyncSet
HSyncJitterSet
HTimingSet
LinearitySet
LumaLevelsSet
NoiseSet
VSyncSet
VTimingSet
VideoTransientSet

Returns Query returns the current specified report measurement mode.

Examples VARIABLE:VALUE "ReportMeasurements", "All"

VARIABLE:VALUE? "ReportMeasurements"
Query may return: "ReportMeasurements Selected"

ReportString <string>

Set or query any additional information to write to the report when ReportGenerate is called. This string is initialized to empty string "" on startup.

Syntax VARIABLE:VALUE "ReportString", "<string>"
 VARIABLE:VALUE? "ReportString"

Group Reporting

Arguments <string> can be up to 46 characters in length. The comma and double quote characters are not permitted and their usage may result in unexpected program behavior. All other printable characters are permitted.

Returns Query returns the currently specified report string.

Examples VARIABLE:VALUE "ReportString", "Tested by Me"

 VARIABLE:VALUE? "ReportString"
 Query may return: "ReportString Tested by Me"

RunMode <runmode>

Set or query run mode to use for measurement.

Syntax VARIable:VALue "RunMode","<runmode>"
 VARIable:VALue? "RunMode"

Group Configuration

Arguments <runmode> specifies the run mode that is to be used.
 Valid run modes are: "Once", "Continuously", "OnceAndReport".
 When you select Multi Lines, "Once" and "Continuously" are not available.

Returns Query returns the currently specified run mode.

Examples VARIable:VALue "RunMode", "Once"

 VARIable:VALue? "RunMode"
 Query may return: "RunMode Continuously"

SaveSettings <pathstring>

Save current settings in the specified path/filename.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you only specify the filename, the default path “C:\VMApps\OptVGA” is used. You have to specify the extension (.vmset) for the filename.

The command does not append the filename extension automatically.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALue “SaveSettings”, “<pathstring>”
 VARIABLE:VALue? “SaveSettings”

Group Global

Arguments <pathstring> specifies the path/filename where the file is to be stored. Can either be the full path and filename, or just the filename.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALue “SaveSettings”, “C:\VMApps\OptVGA\Tek1.vmset”

 VARIABLE:VALue? “SaveSettings”
 Query may return: “SaveSettings OK”

SelectLine <linemode>

Set or query the line mode to be used for the measurements.

Syntax VARIable:VALue “SelectLine”, “<linemode>”
 VARIable:VALue? “SelectLine”

Group Configuration

Arguments <linemode> specifies if the measurements are done on a single line or multiple lines.
 Valid line modes are: “SingleLine”, “MultiLine”

Returns Query returns the currently selected line mode.

Examples VARIable:VALue “SelectLine”, “MultiLine”

 VARIable:VALue? “SelectLine”
 Query may return: “SelectLine MultiLine”

SetupAndOrRun <setuprunmode>

Set or query the setup mode to use for measurement.

Syntax VARIable:VALue “SetupAndOrRun”, “<setuprunmode>”
 VARIable:VALue? “SetupAndOrRun”

Group Operations

Arguments <setuprunmode> specifies how to perform setup when performing a measurement. Valid modes are: SetupAndRun, SetupOnly, RunOnly. When you select Multi Lines, SetupOnly and RunOnly are not available.

Returns Query returns the current specified setup mode.

Examples VARIable:VALue “SetupAndOrRun”, “SetupOnly”

 VARIable:VALue? “SetupAndOrRun”
 Query may return: “SetupAndOrRun SetupOnly”

StopOnError <setting>

Set or query Stop on Error is enabled.

Syntax VARIable:VALue “StopOnError”, “<setting>”
 VARIable:VALue “StopOnError”

Group Run

Arguments <setting> specifies whether or not to stop testing if limits are exceeded.
 Valid values are: OFF, ON, 0, 1.

Returns Returns setting for whether or not the VM Series System will stop testing on an error.

Examples VARIable:VALue “StopOnError”, “OFF”

 VARIable:VALue? “StopOnError”
 Query may return: “StopOnError 0”

SyncPolarityDetectSet

Set or query the Sync Polarity option which is performed automatically while running the measurements.

The specified polarities for the H Sync and V Sync signals vary between the timing standards. In the absence of the MIU and with Auto Detect selected, the VM Series System will prompt you to connect the H and V Sync signals to automatically determine the polarities. If you use the MIU, the VM Series System will automatically determine the H and V Sync polarities.

Once the sync signal polarities are determined, the measurement cycle begins. This "polarity test" is performed at the beginning of every measurement cycle. To prevent this test from running at the beginning of every measurement cycle, take any measurement once with Auto Detect selected. Once a measurement cycle has been completed with Auto Detect selected, you can deselect Auto Detect. The VM Series System remembers the polarity of the sync signals. Any time you change the format set-up for the device-under-test, you should complete a measurement cycle with Auto Detect selected.

Syntax VARIABLE:VALue "SyncPolarityDetectSet", "<setting>"
 VARIABLE:VALue? "SyncPolarityDetectSet"

Group Configuration

Arguments <setting> specifies whether to perform Sync Polarity detection while running the measurements.
 Valid values are: OFF, ON, 0, 1.

Returns Query returns 0 or 1 depending on whether the Sync Polarity Detection is enabled or disabled.

Examples VARIABLE:VALue "SyncPolarityDetectSet", "ON"

 VARIABLE:VALue? "SyncPolarityDetectSet"
 Query may return: "SyncPolarityDetectSet 1"

TimingStandardType

Set or query the timing standard used while performing the measurements.

Syntax VARIable:VALue "TimingStandardType", "<TimingStandard>"
VARIable:VALue? "TimingStandardType"

Group Configuration

Arguments <TimingStandard> specifies the timing standard used for performing the measurement.
The valid/supported timing standards are: DMT, CVT, CVTR and GTF.

Returns Query returns the currently configured timing standard.

Examples VARIable:VALue "TimingStandardType", "CVTR"
VARIable:VALue? "TimingStandardType"

Query may return: "TimingStandardType DMT"

UseMIUSet <setting>

Set or query, if the hardware accessory "RGBHV MIU" is connected, the VM Series System runs tests in an automatic mode that does not require user intervention. If the RGBHV MIU is not connected, the user must make manual connection changes when prompted by the VM Series System.

Syntax VARIABLE:VALue "UseMIUSet","<setting>"
 VARIABLE:VALue? "UseMIUSet"

Group Configuration

Arguments Valid values for <setting> are: "OFF", "ON", "0", "1".

Returns Query returns the current setting on the instrument's front panel UI.

Examples VARIABLE:VALue "UseMIUSet","ON"

 VARIABLE:VALue? "UseMIUSet"
 Query may return: "UseMIUSet 1"

UserFormatDelete <user-format-name>

Delete a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the “UserFormatListAll” command.

Syntax VARIABLE:VALUE “UserFormatDelete”, “<user-format-name>”

Group Configuration

Arguments < user-format-name > is a string corresponding to the name of a user-defined format.

Returns None

Examples VARIABLE:VALUE “UserFormatDelete”, “myTekUserCustomFormat”

UserFormatDisplay?

Query the details of the various parameters of the currently selected user-defined format.

Syntax VARIABLE:VALue? "UserFormatDisplay"

Group Configuration

Arguments None

Returns Query will return an array of values, delimited by a space (" ") character; in the following order:
" <user-format-name> <H-Address Time> <H-Blank Time>
<H-Back Porch Time> <H-Border Time> <H-Sync Time> <V-Address Time>
<V-Blank Time> <V-Back Porch Time> <V-Border Time> <V-Sync Time>
<Refresh Rate> <H-Sync Polarity> <V-Sync Polarity>"

The list of values correspond to the following parameter settings of the user-defined format:

<user-format-name> is the name of the new user-defined format.

<H-Address Time> specifies the total number of pixels for H-Address.

<H-Blank Time> specifies the total number of pixels for H-Blank.

<H-Back Porch Time> specifies the total number of pixels for H-Back Porch.

<H-Border Time> specifies the total number of pixels for H-Border.

<H-Sync Time> specifies the total number of pixels for H-Sync.

<V-Address Time> specifies the total number of lines for V-Address.

<V-Blank Time> specifies the total number of lines for V-Blank.

<V-Back Porch Time> specifies the total number of lines for V-Back Porch.

<V-Border Time> specifies the total number of lines for V-Border.

<V-Sync Time> specifies the total number of lines for V-Sync.

<Refresh Rate> specifies the refresh rate for the format.

<H-Sync Polarity> The setting can be: "Pos" for positive H-Sync polarity and "Neg" for negative H-Sync polarity.

<V-Sync Polarity> The setting can be: "Pos" for positive V-Sync polarity and "Neg" for negative V-Sync polarity.

Examples The following command will display the details, if a user-format named as "myCustomFormat" has been selected.
VARIABLE:VALue? "UserFormatDisplay"

Query may return: VARIABLE:VALue "UserFormatDisplay myCustomFormat
2000 700 300 0 200 1500 70 60 0 4 86 Pos Neg"

UserFormatListAll

Query the list of the currently available user-defined formats from the instrument.

Syntax VARIable:VALue? "UserFormatListAll"

Group Configuration

Arguments None

Returns Query returns a list of the names of the currently available user-defined format. The individual names are separated/delimited by a space (" ") character. E.g. "user1 user2 user3"

Examples VARIable:VALue? "UserFormatListAll"
Query may return: "UserFormatListAll myCustomFormat1 myCustomFormat2 myCustomFormat3"

UserFormatSave <user-format-name>

Create / update a user defined format All of the input arguments must be specified. The arguments that correspond to an integer value, should be within their respective maximum and minimum limits.

Syntax VARIABLE:VALUE “UserFormatSave”, “<user-format-name>
<H-Address Time> <H-Blank Time> <H-Back Porch Time>
<H-Border Time> <H-Sync Time> <V-Address Time> <V-Blank Time>
<V-Back Porch Time> <V-Border Time> <V-Sync Time> <Refresh Rate>
<H-Sync Polarity> <V-Sync Polarity>”

Group Configuration

Arguments <user-format-name> identifies the new user-defined format and should be a string of length 20.
<H-Address Time> specifies the total number of pixels for H-Address and the valid value range is 100..2048.
<H-Blank Time> specifies the total number of pixels for H-Blank and the valid value range is 0..(H-Address-Time).
<H-Back Porch Time> specifies the total number of pixels for H-Back Porch and the valid value range is 0..(H-Address-Time).
<H-Border Time> specifies the total number of pixels for H-Border and the valid value range is 0..(H-Address-Time).
<H-Sync Time> specifies the total number of pixels for H-Sync and the valid value range is 0..(H-Address-Time).
<V-Address Time> specifies the total number of lines for V-Address and the valid value range is 100..2048.
<V-Blank Time> specifies the total number of lines for V-Blank and the valid value range is 0..(V-Address-Time).
<V-Back Porch Time> specifies the total number of lines for V-Back Porch and the valid value range is 0..(V-Address-Time).
<V-Border Time> specifies the total number of lines for V-Border and the valid value range is 0..(V-Address-Time).
<V-Sync Time> specifies the total number of lines for V-Sync and the valid value range is 0..(V-Address-Time).
<Refresh Rate> specifies the refresh rate for the format and should be a valid positive integer ranging from 50 .. $\left(\frac{2048 \times 2048 \times 60}{V_{addressTime} \times H_{addressTime}}\right)$
<H-Sync Polarity> The valid values can be: “Pos” for positive H-Sync polarity and “Neg”for negative H-Sync polarity.
<V-Sync Polarity> The valid values can be: “Pos” for positive V-Sync polarity and “Neg”for negative V-Sync polarity.

Returns None

Examples The following command will create a new user-defined format named as “myCustomFormat”.

```
VARIABLE:VALUE “UserFormatSave”,“myCustomFormat 2000 700 300 0 200  
1500 70 60 0 4 86 Pos Neg”
```

UserFormatSet <user-format-name>

Set or query a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the “UserFormatListAll” command.

Syntax VARIABLE:VALue “UserFormatSet”, “<user-format-name>”

VARIABLE:VALue? “UserFormatSet”

Group Configuration

Arguments < user-format-name > must be a string corresponding to the name of a user-defined format already present on the instrument.

Returns Query returns the currently selected user-defined format.

Examples VARIABLE:VALue “UserFormatSet”, “myTekUserCustomFormat”

VARIABLE:VALue? “UserFormatSet”

Query may return: “UserFormatSet myTekUserCustomFormat”

VideoTransientAverage <samples>

Set or Query the the total number of samples over which to average the Video Transient measurement.

Syntax VARIable:VALue “VideoTransientAverage”, “<samples>”

VARIable:VALue? “VideoTransientAverage”

Group Measurement Setup

Related Commands VideoTransientLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples for the Video Transient measurement.

Examples VARIable:VALue “VideoTransientAverage”, “1”

VARIable:VALue? “VideoTransientAverage”

Query may return: “VideoTransientAverage 8”

VideoTransientLine <line number>

Set or query the line number resulting from the Video Transient measurement.

Syntax VARIable:VALue “VideoTransientLine”, “<line number>”

VARIable:VALue? “VideoTransientLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned line number resulting from the Video Transient measurement.

Examples VARIable:VALue “VideoTransientLine”, “200”

VARIable:VALue? “VideoTransientLine”

Query may return: “VideoTransientLine 325”

VideoTransientMaxOvershootCh[1..3]?

Query the Video Transient Overshoot maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMaxOvershootCh1" VARIABLE:VALUE? "VideoTransientMaxOvershootCh2" VARIABLE:VALUE? "VideoTransientMaxOvershootCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Video Transient Overshoot maximum limit value specified in the Limits file on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMaxOvershootCh1" Query may return: "VideoTransientMaxOvershootCh1 1.06"

VideoTransientMaxOvershootSettlingTimeCh[1..3]?

Query the Video Transient Overshoot Settling Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Video Transient Overshoot Settling Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh1"
 Query may return: "VideoTransientMaxOvershootSettlingTimeCh1 2.66"

VideoTransientMaxUndershootCh[1..3]?

Query the Video Transient Undershoot maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMaxUndershootCh1" VARIABLE:VALUE? "VideoTransientMaxUndershootCh2" VARIABLE:VALUE? "VideoTransientMaxUndershootCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Video Transient Undershoot maximum limit value specified in the Limits file on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMaxUndershootCh1" Query may return: "VideoTransientMaxUndershootCh1 1.06"

VideoTransientMaxUndershootSettlingTimeCh[1..3]?

Query the Video Transient Undershoot Settling Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the Video Transient Undershoot Settling Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh1"
 Query may return: "VideoTransientMaxUndershootSettlingTimeCh1 2.66"

VideoTransientMaxVideoFallTimeCh[1..3]?

Query the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMaxVideoFallTimeCh1" VARIABLE:VALUE? "VideoTransientMaxVideoFallTimeCh2" VARIABLE:VALUE? "VideoTransientMaxVideoFallTimeCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMaxVideoFallTimeCh1" Query may return: "VideoTransientMaxVideoFallTimeCh1 1.77"

VideoTransientMaxVideoFallTimePercentageCh[1..3]?

Query the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientMaxVideoFallTimePercentageCh1”
 VARIABLE:VALue? “VideoTransientMaxVideoFallTimePercentageCh2”
 VARIABLE:VALue? “VideoTransientMaxVideoFallTimePercentageCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientMaxVideoFallTimePercentageCh1”
 Query may return: “VideoTransientMaxVideoFallTimePercentageCh1 1.77”

VideoTransientMaxVideoRiseTimeCh[1..3]?

Query the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMaxVideoRiseTimeCh1" VARIABLE:VALUE? "VideoTransientMaxVideoRiseTimeCh2" VARIABLE:VALUE? "VideoTransientMaxVideoRiseTimeCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMaxVideoRiseTimeCh1" Query may return: "VideoTransientMaxVideoRiseTimeCh1 1.77"

VideoTransientMaxVideoRiseTimePercentageCh[1..3]?

Query the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh1”
 VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh2”
 VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh1”
 Query may return: “VideoTransientMaxVideoRiseTimePercentageCh1 1.77”

VideoTransientMinOvershootCh[1..3]?

Query the Video Transient Overshoot minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMinOvershootCh1" VARIABLE:VALUE? "VideoTransientMinOvershootCh2" VARIABLE:VALUE? "VideoTransientMinOvershootCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Video Transient Overshoot minimum limit value specified in the Limits file on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMinOvershootCh1" Query may return: "VideoTransientMinOvershootCh1 1.06"

VideoTransientMinOvershootSettlingTimeCh[1..3]?

Query the Video Transient Overshoot Settling Time minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientMinOvershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientMinOvershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientMinOvershootSettlingTimeCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the Video Transient Overshoot Settling Time minimum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientMinOvershootSettlingTimeCh1"
 Query may return: "VideoTransientMinOvershootSettlingTimeCh1 2.66"

VideoTransientMinUndershootCh[1..3]?

Query the Video Transient Undershoot minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMinUndershootCh1" VARIABLE:VALUE? "VideoTransientMinUndershootCh2" VARIABLE:VALUE? "VideoTransientMinUndershootCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Video Transient Undershoot minimum limit value specified in the Limits file on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMinUndershootCh1" Query may return: "VideoTransientMinUndershootCh1 1.06"

VideoTransientMinUndershootSettlingTimeCh[1..3]?

Query the Video Transient Undershoot Settling Time minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh1”
 VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh2”
 VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Video Transient Undershoot Settling Time minimum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh1”
 Query may return: “VideoTransientMinUndershootSettlingTimeCh1 2.66”

VideoTransientMinVideoFallTimeCh[1..3]?

Query the Video Transient Video Fall Time minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMinVideoFallTimeCh1" VARIABLE:VALUE? "VideoTransientMinVideoFallTimeCh2" VARIABLE:VALUE? "VideoTransientMinVideoFallTimeCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Video Transient Video Fall Time minimum limit value specified in the Limits file on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMinVideoFallTimeCh1" Query may return: "VideoTransientMinVideoFallTimeCh1 1.77"

VideoTransientMinVideoFallTimePercentageCh[1..3]?

Query the Video Transient Video Fall Time minimum limit value (in percent) specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh1”
 VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh2”
 VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Video Transient Video Fall Time minimum limit value (in percent) specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh1”
 Query the may return: “VideoTransientMinVideoFallTimePercentageCh1 1.77”

VideoTransientMinVideoRiseTimeCh[1..3]?

Query the Video Transient Video Rise Time minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientMinVideoRiseTimeCh1" VARIABLE:VALUE? "VideoTransientMinVideoRiseTimeCh2" VARIABLE:VALUE? "VideoTransientMinVideoRiseTimeCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the Video Transient Video Rise Time minimum limit value specified in the Limits file on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientMinVideoRiseTimeCh1" Query may return: "VideoTransientMinVideoRiseTimeCh1 1.77"

VideoTransientMinVideoRiseTimePercentageCh[1..3]?

Query the Video Transient Video Rise Time minimum limit value (in percent) specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh1”
 VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh2”
 VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the Video Transient Video Rise Time minimum limit value (in percent) specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh1”
 Query may return: “VideoTransientMinVideoRiseTimePercentageCh1 1.77”

VideoTransientMultiLineEnd <line number>

Set or query the ending line number used to perform the Video Transient measurement on multiple lines.

Syntax VARIable:VALue “VideoTransientMultiLineEnd”, “<line number>”

VARIable:VALue? “VideoTransientMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned ending line number used to perform the Video Transient measurement on multiple lines.

Examples VARIable:VALue “VideoTransientMultiLineEnd”, “200”

VARIable:VALue? “VideoTransientMultiLineEnd”

Query may return: “VideoTransientMultiLineEnd 325”

VideoTransientMultiLineStart <line number>

Set or query the starting line number used to perform the Video Transient measurement on multiple lines.

Syntax VARIable:VALue “VideoTransientMultiLineStart”, “<line number>”

VARIable:VALue? “VideoTransientMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Returns Query returns the currently assigned starting line number used to perform the Video Transient measurement on multiple lines.

Examples VARIable:VALue “VideoTransientMultiLineStart”, “200”

VARIable:VALue? “VideoTransientMultiLineStart”

Query may return: “VideoTransientMultiLineStart 325”

VideoTransientOvershootCh[1..3]?

Query the measured Overshoot resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientOvershootCh1" VARIABLE:VALUE? "VideoTransientOvershootCh2" VARIABLE:VALUE? "VideoTransientOvershootCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Overshoot resulting from the Video Transient measurement on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientOvershootCh1" Query may return: "VideoTransientOvershootCh1 1.06"

VideoTransientOvershootSettlingTimeCh[1..3]?

Query the measured Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientOvershootSettlingTimeCh1”
 VARIABLE:VALue? “VideoTransientOvershootSettlingTimeCh2”
 VARIABLE:VALue? “VideoTransientOvershootSettlingTimeCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientOvershootSettlingTimeCh1”
 Query may return: “VideoTransientOvershootSettlingTimeCh1 2.66”

VideoTransientPassAll?

Query the pass/fail status for all the values resulting from the Video Transient measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax	VARIABLE:VALUE? "VideoTransientPassAll"
Group	Pass/Fail Status Query
Arguments	None
Returns	<p>Query returns the pass/fail status for all the values resulting from the Video Transient measurement on all the channels.</p> <p>The order is: Video Rise Time (Ch1), Video Fall Time (Ch1), Video Rise Time Percentage (Ch1), Video Fall Time Percentage (Ch1), Overshoot (Ch1), Undershoot (Ch1), Overshoot Settling Time (Ch1), Undershoot Settling Time (Ch1), Video Rise Time (Ch2), Video Fall Time (Ch2), Video Rise Time (Ch2), Video Fall Time (Ch2), Overshoot (Ch2), Undershoot (Ch2), Overshoot Settling Time (Ch2)s, Undershoot Settling Time (Ch2)s, Video Rise Time (Ch3), Video Fall Time (Ch3), Video Rise Time (Ch3), Video Fall Time (Ch3), Overshoot (Ch3), Undershoot (Ch3), Overshoot Settling Time (Ch3), Undershoot Settling Time (Ch3).</p> <p>A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "VideoTransientPassAll"</p> <p>Query may return: "VideoTransientPassAll 1 1 1 0 0 1 0 1 0 1 0 1 1 1 1 0 1 0"</p>

VideoTransientPassOvershootCh[1..3]?

Query the pass/fail status for the Overshoot value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VideoTransientPassOvershootCh1”
 VARIABLE:VALue? “VideoTransientPassOvershootCh2”
 VARIABLE:VALue? “VideoTransientPassOvershootCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Overshoot value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientPassOvershootCh1”
 Query may return: “VideoTransientPassOvershootCh1 1”

VideoTransientPassOvershootSettlingTimeCh[1..3]?

Query the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VideoTransientPassOvershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientPassOvershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientPassOvershootSettlingTimeCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientPassOvershootSettlingTimeCh1" Query may return: "VideoTransientPassOvershootSettlingTimeCh1 1"

VideoTransientPassUndershootCh[1..3]?

Query the pass/fail status for the Undershoot value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VideoTransientPassUndershootCh1”
 VARIABLE:VALue? “VideoTransientPassUndershootCh2”
 VARIABLE:VALue? “VideoTransientPassUndershootCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Undershoot value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientPassUndershootCh1”
 Query may return: “VideoTransientPassUndershootCh1 1”

VideoTransientPassUndershootSettlingTimeCh[1..3]?

Query the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VideoTransientPassUndershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientPassUndershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientPassUndershootSettlingTimeCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientPassUndershootSettlingTimeCh1" Query may return: "VideoTransientPassUndershootSettlingTimeCh1 1"

VideoTransientPassVideoFallTimeCh[1..3]?

Query the pass/fail status for the Video Fall Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VideoTransientPassVideoFallTimeCh1”
 VARIABLE:VALue? “VideoTransientPassVideoFallTimeCh2”
 VARIABLE:VALue? “VideoTransientPassVideoFallTimeCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Video Fall Time value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientPassVideoFallTimeCh1”
 Query may return: “VideoTransientPassVideoFallTimeCh1 1”

VideoTransientPassVideoFallTimePercentageCh[1..3]?

Query the pass/fail status for the Video Fall Time (%) value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VideoTransientPassVideoFallTimePercentageCh1" VARIABLE:VALUE? "VideoTransientPassVideoFallTimePercentageCh2" VARIABLE:VALUE? "VideoTransientPassVideoFallTimePercentageCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Video Fall Time (%) value resulting from the Video Transient measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientPassVideoFallTimePercentageCh1" Query may return: "VideoTransientPassVideoFallTimePercentageCh1 1"

VideoTransientPassVideoRiseTimeCh[1..3]?

Query the pass/fail status for the Video Rise Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VideoTransientPassVideoRiseTimeCh1”
 VARIABLE:VALue? “VideoTransientPassVideoRiseTimeCh2”
 VARIABLE:VALue? “VideoTransientPassVideoRiseTimeCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Video Rise Time value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientPassVideoRiseTimeCh1”
 Query may return: “VideoTransientPassVideoRiseTimeCh1 1”

VideoTransientPassVideoRiseTimePercentageCh[1..3]?

Query the pass/fail status for the Video Rise Time (%) value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VideoTransientPassVideoRiseTimePercentageCh1" VARIABLE:VALUE? "VideoTransientPassVideoRiseTimePercentageCh2" VARIABLE:VALUE? "VideoTransientPassVideoRiseTimePercentageCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Video Rise Time (%) value resulting from the Video Transient measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientPassVideoRiseTimePercentageCh1" Query may return: "VideoTransientPassVideoRiseTimePercentageCh1 1"

VideoTransientRefOvershootCh[1..3]?

Query the Video Transient Overshoot reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientRefOvershootCh1”
 VARIABLE:VALue? “VideoTransientRefOvershootCh2”
 VARIABLE:VALue? “VideoTransientRefOvershootCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Video Transient Overshoot reference value specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientRefOvershootCh1”
 Query may return: “VideoTransientRefOvershootCh1 1.06”

VideoTransientRefOvershootSettlingTimeCh[1..3]?

Query the Video Transient Overshoot Settling Time reference value specified in the Reference file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRefOvershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientRefOvershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientRefOvershootSettlingTimeCh3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Video Transient Overshoot Settling Time reference value specified in the Reference file on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRefOvershootSettlingTimeCh1" Query may return: "VideoTransientRefOvershootSettlingTimeCh1 2.66"

VideoTransientRefUndershootCh[1..3]?

Query the Video Transient Undershoot reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientRefUndershootCh1”
 VARIABLE:VALue? “VideoTransientRefUndershootCh2”
 VARIABLE:VALue? “VideoTransientRefUndershootCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Video Transient Undershoot reference value specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientRefUndershootCh1”
 Query may return: “VideoTransientRefUndershootCh1 1.06”

VideoTransientRefUndershootSettlingTimeCh[1..3]?

Query the Video Transient Undershoot Settling Time reference value specified in the Reference file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRefUndershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientRefUndershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientRefUndershootSettlingTimeCh3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Video Transient Undershoot Settling Time reference value specified in the Reference file on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRefUndershootSettlingTimeCh1" Query may return: "VideoTransientRefUndershootSettlingTimeCh1 2.66"

VideoTransientRefVideoFallTimeCh[1..3]?

Query the Video Transient Video Fall Time reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VideoTransientRefVideoFallTimeCh1”
 VARIable:VALue? “VideoTransientRefVideoFallTimeCh2”
 VARIable:VALue? “VideoTransientRefVideoFallTimeCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Video Transient Video Fall Time reference value specified in the Reference file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientRefVideoFallTimeCh1”
 Query may return: “VideoTransientRefVideoFallTimeCh1 1.77”

VideoTransientRefVideoFallTimePercentageCh[1..3]?

Query the Video Transient Video Fall Time reference value (in percent) specified in the Reference file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRefVideoFallTimePercentageCh1" VARIABLE:VALUE? "VideoTransientRefVideoFallTimePercentageCh2" VARIABLE:VALUE? "VideoTransientRefVideoFallTimePercentageCh3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Video Transient Video Fall Time reference value (in percent) specified in the Reference file on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRefVideoFallTimePercentageCh1" Query may return: "VideoTransientRefVideoFallTimePercentageCh1 1.77"

VideoTransientRefVideoRiseTimeCh[1..3]?

Query the Video Transient Video Rise Time reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientRefVideoRiseTimeCh1”
 VARIABLE:VALue? “VideoTransientRefVideoRiseTimeCh2”
 VARIABLE:VALue? “VideoTransientRefVideoRiseTimeCh3”

Group Reference Values Query

Arguments None

Returns Query returns the Video Transient Video Rise Time reference value specified in the Reference file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientRefVideoRiseTimeCh1”
 Query may return: “VideoTransientRefVideoRiseTimeCh1 1.77”

VideoTransientRefVideoRiseTimePercentageCh[1..3]?

Query the Video Transient Video Rise Time reference value (in percent) specified in the Reference file on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRefVideoRiseTimePercentageCh1" VARIABLE:VALUE? "VideoTransientRefVideoRiseTimePercentageCh2" VARIABLE:VALUE? "VideoTransientRefVideoRiseTimePercentageCh3"
Group	Reference Values Query
Arguments	None
Returns	Query returns the Video Transient Video Rise Time reference value (in percent) specified in the Reference file on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRefVideoRiseTimePercentageCh1" Query may return: "VideoTransientRefVideoRiseTimePercentageCh1 1.77"

VideoTransientRelOvershootCh[1..3]?

Query the Overshoot relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientRelOvershootCh1"
 VARIABLE:VALue? "VideoTransientRelOvershootCh2"
 VARIABLE:VALue? "VideoTransientRelOvershootCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Video Fall Time relative value (in percent) resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientRelOvershootCh1"
 Query may return: "VideoTransientRelOvershootCh1 1.06"

VideoTransientRelOvershootSettlingTimeCh[1..3]?

Query the Overshoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRelOvershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientRelOvershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientRelOvershootSettlingTimeCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Overshoot Settling Time relative value resulting from the Video Transient measurement on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRelOvershootSettlingTimeCh1" Query may return: "VideoTransientRelOvershootSettlingTimeCh1 2.66"

VideoTransientRelUndershootCh[1..3]?

Query the Undershoot relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientRelUndershootCh1"
 VARIABLE:VALue? "VideoTransientRelUndershootCh2"
 VARIABLE:VALue? "VideoTransientRelUndershootCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Undershoot relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientRelUndershootCh1"
 Query may return: "VideoTransientRelUndershootCh1 1.06"

VideoTransientRelUndershootSettlingTimeCh[1..3]?

Query the Undershoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRelUndershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientRelUndershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientRelUndershootSettlingTimeCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Undershoot Settling Time relative value resulting from the Video Transient measurement on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRelUndershootSettlingTimeCh1" Query may return: "VideoTransientRelUndershootSettlingTimeCh1 2.66"

VideoTransientRelVideoFallTimeCh[1..3]?

Query the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALUE? "VideoTransientRelVideoFallTimeCh1"
 VARIABLE:VALUE? "VideoTransientRelVideoFallTimeCh2"
 VARIABLE:VALUE? "VideoTransientRelVideoFallTimeCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VideoTransientRelVideoFallTimeCh1"
 Query may return: "VideoTransientRelVideoFallTimeCh1 1.77"

VideoTransientRelVideoFallTimePercentageCh[1..3]?

Query the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRelVideoFallTimePercentageCh1" VARIABLE:VALUE? "VideoTransientRelVideoFallTimePercentageCh2" VARIABLE:VALUE? "VideoTransientRelVideoFallTimePercentageCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRelVideoFallTimePercentageCh1" Query may return: "VideoTransientRelVideoFallTimePercentageCh1 1.77"

VideoTransientRelVideoRiseTimeCh[1..3]?

Query the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALUE? "VideoTransientRelVideoRiseTimeCh1"
 VARIABLE:VALUE? "VideoTransientRelVideoRiseTimeCh2"
 VARIABLE:VALUE? "VideoTransientRelVideoRiseTimeCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VideoTransientRelVideoRiseTimeCh1"
 Query may return: "VideoTransientRelVideoRiseTimeCh1 1.77"

VideoTransientRelVideoRiseTimePercentageCh[1..3]?

Query the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientRelVideoRiseTimePercentageCh1" VARIABLE:VALUE? "VideoTransientRelVideoRiseTimePercentageCh2" VARIABLE:VALUE? "VideoTransientRelVideoRiseTimePercentageCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientRelVideoRiseTimePercentageCh1" Query may return: "VideoTransientRelVideoRiseTimePercentageCh1 1.77"

VideoTransientSet <setting>

Set or query whether to perform the Video Transient measurements upon Execute.

Syntax VARIABLE:VALue "VideoTransientSet", "<setting>"

VARIABLE:VALue? "VideoTransientSet"

Group Measurement Setup

Arguments <setting> specifies whether to perform the Video Transient measurements upon Execute.

Valid values are: "OFF", "ON", "0", "1"

Returns Query returns "0" if the Video Transient measurement is not selected.
Query returns "1" if the Video Transient measurement is selected.

Examples VARIABLE:VALue "VideoTransientSet", "ON"

VARIABLE:VALue? "VideoTransientSet"
Query may return: "VideoTransientSet 1"

VideoTransientStatus?

Query the status of the Video Transient measurement.

Syntax VARIable:VALue? "VideoTransientStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", "Fail".
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "VideoTransientStatus"
Query may return: "VideoTransientStatus Pass"

VideoTransientUndershootCh[1..3]?

Query the measured Undershoot resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientUndershootCh1"
 VARIABLE:VALue? "VideoTransientUndershootCh2"
 VARIABLE:VALue? "VideoTransientUndershootCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Undershoot resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientUndershootCh1"
 Query may return: "VideoTransientUndershootCh1 1.06"

VideoTransientUndershootSettlingTimeCh[1..3]?

Query the measured Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientUndershootSettlingTimeCh1" VARIABLE:VALUE? "VideoTransientUndershootSettlingTimeCh2" VARIABLE:VALUE? "VideoTransientUndershootSettlingTimeCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Undershoot Settling Time resulting from the Video Transient measurement on the specified channel. The returned value is in nanoseconds (ns). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientUndershootSettlingTimeCh1" Query may return: "VideoTransientUndershootSettlingTimeCh1 2.66"

VideoTransientVideoFallTimeCh[1..3]?

Query the measured Video Fall Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? “VideoTransientVideoFallTimeCh1”
 VARIable:VALue? “VideoTransientVideoFallTimeCh2”
 VARIable:VALue? “VideoTransientVideoFallTimeCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Video Fall Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientVideoFallTimeCh1”
 Query may return: “VideoTransientVideoFallTimeCh1 1.77”

VideoTransientVideoFallTimePercentageCh[1..3]?

Query the measured Video Fall Time (in percent) resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientVideoFallTimePercentageCh1" VARIABLE:VALUE? "VideoTransientVideoFallTimePercentageCh2" VARIABLE:VALUE? "VideoTransientVideoFallTimePercentageCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Video Fall Time (in percent) resulting from the Video Transient measurement on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientVideoFallTimePercentageCh1" Query may return: "VideoTransientVideoFallTimePercentageCh1 1.77"

VideoTransientVideoRiseTimeCh[1..3]?

Query the measured Video Rise Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? “VideoTransientVideoRiseTimeCh1”
 VARIable:VALue? “VideoTransientVideoRiseTimeCh2”
 VARIable:VALue? “VideoTransientVideoRiseTimeCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Video Rise Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientVideoRiseTimeCh1”
 Query may return: “VideoTransientVideoRiseTimeCh1 1.77”

VideoTransientVideoRiseTimePercentageCh[1..3]?

Query the measured Video Rise Time (in percent) resulting from the Video Transient measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VideoTransientVideoRiseTimePercentageCh1" VARIABLE:VALUE? "VideoTransientVideoRiseTimePercentageCh2" VARIABLE:VALUE? "VideoTransientVideoRiseTimePercentageCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Video Rise Time (in percent) resulting from the Video Transient measurement on the specified channel. The returned value is in percent (%). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VideoTransientVideoRiseTimePercentageCh1" Query may return: "VideoTransientVideoRiseTimePercentageCh1 1.77"

VSyncAll?

Query the measured values of all the V Sync measurements.

Syntax VARiable:VALue? "VSyncAll"

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the V Sync measurements.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T(ns), Undershoot S.T(ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "VSyncAll"

Query may return:

"VSyncAll Pos 1 11.76 85.03 5 5 4.45 5.22 3.8 0.0 Yes Yes 3188.5 400
2820.695 464.411"

VSyncAverage <samples>

Set or query the number of samples over which to average the V Sync measurement.

Syntax VARIable:VALue “VSyncAverage”, “<samples>”
 VARIable:VALue? “VSyncAverage”

Group Measurement Setup

Related Commands None

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples for the V Sync measurement.

Examples VARIable:VALue “VSyncAverage”, “1”

 VARIable:VALue? “VSyncAverage”
 Query may return: “VSyncAverage 8”

VSyncFallTime?

Query the measured Fall Time resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncFallTime”

Group Measured Results Query

Arguments None

Returns Query returns the measured Fall Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncFallTime”
Query may return: “VSyncFallTime 1”

VSyncFrequency?

Query the measured Frequency resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncFrequency"

Group Measured Results Query

Arguments None

Returns Query returns the measured Frequency resulting from the V Sync measurement.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncFrequency"
Query may return: "VSyncFrequency 85"

VSyncLogicLevel0Value1?

Query the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncLogicLevel0Value1"

Group Measured Results Query

Arguments None

Returns Query returns the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncLogicLevel0Value1"
Query may return: "VSyncLogicLevel0Value1 1"

VSyncLogicLevel0Value2?

Query the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncLogicLevel0Value2"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncLogicLevel0Value2" Query may return: "VSyncLogicLevel0Value2 1"

VSyncLogicLevel1Value1?

Query the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncLogicLevel1Value1"

Group Measured Results Query

Arguments None

Returns Query returns the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncLogicLevel1Value1"
Query may return: "VSyncLogicLevel1Value1 1"

VSyncLogicLevel1Value2?

Query the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncLogicLevel1Value2"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement. The unit of the value is millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncLogicLevel1Value2" Query may return: "VSyncLogicLevel1Value2 1"

VSyncMaxAll?

Query all the V Sync maximum limit values specified in the Limits file.

Syntax VARiable:VALue? "VSyncMaxAll"

Group Maximum Limits Query

Arguments None

Returns Query returns all the V Sync maximum limit values specified in the Limits file.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T(ns), Undershoot S.T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "VSyncMaxAll"
Query may return: "VSyncMaxAll Pos 1.033 13.765 86.0 5.37 5.37 30.0 30.0 304.8 304.8 Yes Yes 5500.0 500 5500.0 500"

VSyncMaxFallTime?

Query the V Sync Fall Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxFallTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Fall Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxFallTime"
Query may return: "VSyncMaxFallTime 7.1"

VSyncMaxFrequency?

Query the V Sync Frequency maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxFrequency”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Frequency maximum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxFrequency”
Query may return: “VSyncMaxFrequency 85”

VSyncMaxLogicLevel0Value1?

Query the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "VSyncMaxLogicLevel0Value1"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncMaxLogicLevel0Value1" Query may return: "VSyncMaxLogicLevel0Value1 1"

VSyncMaxLogicLevel0Value2?

Query the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMaxLogicLevel0Value2"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMaxLogicLevel0Value2"
Query may return: "VSyncMaxLogicLevel0Value2 1"

VSyncMaxLogicLevel1Value1?

Query the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "VSyncMaxLogicLevel1Value1"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncMaxLogicLevel1Value1" Query may return: "VSyncMaxLogicLevel1Value1 1"

VSyncMaxLogicLevel1Value2?

Query the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMaxLogicLevel1Value2"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

The returned value is in millivolts (mV).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMaxLogicLevel1Value2"
Query may return: "VSyncMaxLogicLevel1Value2 1"

VSyncMaxMonotonicFall?

Query the V Sync Monotonic Fall maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxMonotonicFall”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Monotonic Fall maximum limit value specified in the Limits file.
The returned value is either “Yes” or “No”.
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxMonotonicFall”
Query may return: “VSyncMaxMonotonicFall Yes”

VSyncMaxMonotonicRise?

Query the V Sync Monotonic Rise maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? “VSyncMaxMonotonicRise”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Monotonic Rise maximum limit value specified in the Limits file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncMaxMonotonicRise”
Query may return: “VSyncMaxMonotonicRise Yes”

VSyncMaxOvershoot?

Query the V Sync Overshoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxOvershoot"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Overshoot maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxOvershoot"
Query may return: "VSyncMaxOvershoot 15"

VSyncMaxOvershootSettlingTime?

Query the V Sync Overshoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMaxOvershootSettlingTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Overshoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMaxOvershootSettlingTime"
Query may return: "VSyncMaxOvershootSettlingTime 7.1"

VSyncMaxPolarity?

Query the V Sync Polarity maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxPolarity"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Polarity maximum limit value specified in the Limits file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxPolarity"
Query may return: "VSyncMaxPolarity Pos"

VSyncMaxPulseWidth?

Query the V Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxPulseWidth”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxPulseWidth”
Query may return: “VSyncMaxPulseWidth 0.05”

VSyncMaxRiseTime?

Query the V Sync Rise Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxRiseTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Rise Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxRiseTime"
Query may return: "VSyncMaxRiseTime 7.1"

VSyncMaxSyncPeriod?

Query the V Sync Sync Period maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxSyncPeriod”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Sync Period maximum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxSyncPeriod”
Query may return: “VSyncMaxSyncPeriod 11.75”

VSyncMaxUndershoot?

Query the V Sync Undershoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxUndershoot”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Undershoot maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxUndershoot”
Query may return: “VSyncMaxUndershoot 15”

VSyncMaxUndershootSettlingTime?

Query the V Sync Undershoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMaxUndershootSettlingTime"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Sync Undershoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMaxUndershootSettlingTime"
Query may return: "VSyncMaxUndershootSettlingTime 7.1"

VSyncMinAll?

Query all the V Sync minimum limit values specified in the Limits file.

Syntax	VARIABLE:VALUE? "VSyncMinAll"
Group	Minimum Limits Query
Arguments	None
Returns	<p>Query returns all the V Sync minimum limit values specified in the Limits file.</p> <p>The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T (ns), Undershoot S.T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "VSyncMinAll"</p> <p>Query may return: "VSyncMinAll Neg 0.0 9.765 84.0 0.35 0.35 0.0 0.0 0.0 0.0 Yes Yes 2400.0 0.0 2400.0 0.0"</p>

VSyncMinFallTime?

Query the V Sync Fall Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMinFallTime”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Fall Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMinFallTime”
Query may return: “VSyncMinFallTime 7.1”

VSyncMinFrequency?

Query the V Sync Frequency minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinFrequency"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Frequency minimum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinFrequency"
Query may return: "VSyncMinFrequency 85"

VSyncMinLogicLevel0Value1?

Query the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinLogicLevel0Value1"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinLogicLevel0Value1"
Query may return: "VSyncMinLogicLevel0Value1 1"

VSyncMinLogicLevel0Value2?

Query the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "VSyncMinLogicLevel0Value2"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncMinLogicLevel0Value2" Query may return: "VSyncMinLogicLevel0Value2 1"

VSyncMinLogicLevel1Value1?

Query the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinLogicLevel1Value1"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinLogicLevel1Value1"
Query may return: "VSyncMinLogicLevel1Value1 1"

VSyncMinLogicLevel1Value2?

Query the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax	VARIABLE:VALUE? "VSyncMinLogicLevel1Value2"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncMinLogicLevel1Value2" Query may return: "VSyncMinLogicLevel1Value2 1"

VSyncMinMonotonicFall?

Query the V Sync Monotonic Fall minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? “VSyncMinMonotonicFall”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Monotonic Fall minimum limit value specified in the Limits file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncMinMonotonicFall”
Query may return: “VSyncMinMonotonicFall Yes”

VSyncMinMonotonicRise?

Query the V Sync Monotonic Rise minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMinMonotonicRise”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Monotonic Rise minimum limit value specified in the Limits file.
The returned value is either “Yes” or “No”.
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMinMonotonicRise”
Query may return: “VSyncMinMonotonicRise Yes”

VSyncMinOvershoot?

Query the V Sync Overshoot minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMinOvershoot"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Overshoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMinOvershoot"
Query may return: "VSyncMinOvershoot 15"

VSyncMinOvershootSettlingTime?

Query the V Sync Overshoot minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinOvershootSettlingTime"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Overshoot minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinOvershootSettlingTime"
Query may return: "VSyncMinOvershootSettlingTime 7.1"

VSyncMinPolarity?

Query the V Sync Polarity minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMinPolarity”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Polarity minimum limit value specified in the Limits file.
The returned value can be either “Pos” or “Neg”.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMinPolarity”
Query may return: “VSyncMinPolarity Pos”

VSyncMinPulseWidth?

Query the V Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinPulseWidth"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinPulseWidth"
Query may return: "VSyncMinPulseWidth 0.05"

VSyncMinRiseTime?

Query the V Sync Rise Time minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? “VSyncMinRiseTime”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Rise Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncMinRiseTime”
Query may return: “VSyncMinRiseTime 7.1”

VSyncMinSyncPeriod?

Query the V Sync Period minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinSyncPeriod"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Period minimum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinSyncPeriod"
Query may return: "VSyncMinSyncPeriod 11.75"

VSyncMinUndershoot?

Query the V Sync Undershoot minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinUndershoot"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Undershoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinUndershoot"
Query may return: "VSyncMinUndershoot 15"

VSyncMinUndershootSettlingTime?

Query the V Sync Undershoot Settling Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMinUndershootSettlingTime”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Sync Undershoot Settling Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMinUndershootSettlingTime”
Query may return: “VSyncMinUndershootSettlingTime 7.1”

VSyncMonotonicFall?

Query the measured Monotonic Fall value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncMonotonicFall"

Group Measured Results Query

Arguments None

Returns Query returns the measured Monotonic Fall value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMonotonicFall"
Query may return: "VSyncMonotonicFall Yes"

VSyncMonotonicRise?

Query the measured Monotonic Rise value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncMonotonicRise"

Group Measured Results Query

Arguments None

Returns Query returns the measured Monotonic Rise value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMonotonicRise"
Query may return: "VSyncMonotonicRise Yes"

VSyncOvershoot?

Query the measured Overshoot resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncOvershoot”

Group Measured Results Query

Arguments None

Returns Query returns the measured Overshoot resulting from the V Sync measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncOvershoot”
Query may return: “VSyncOvershoot 1”

VSyncOvershootSettlingTime?

Query the measured Overshoot Settling Time resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncOvershootSettlingTime”

Group Measured Results Query

Arguments None

Returns Query returns the measured Overshoot Settling Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncOvershootSettlingTime”
Query may return: “VSyncOvershootSettlingTime 1”

VSyncPassAll?

Query the pass/fail status for all the values resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassAll"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values resulting from the V Sync measurement.

The order is: Polarity, Pulse Width, Sync Period, Frequency, Rise Time, Fall Time, Overshoot, Undershoot, Overshoot S.T, Undershoot S.T, Monotonic Rise, Monotonic Fall, Logic Level 1 At Value1, Logic Level 0 At Value1, Logic Level 1 At Value2, and Logic Level 0 At Value2.

A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassAll"
Query may return: "VSyncPassAll 1 1 1 0 0 0 1 0 0 1 1 1 0 1"

VSyncPassFallTime?

Query the pass/fail status for the Fall Time value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassFallTime"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Fall Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassFallTime"
Query may return: "VSyncPassFallTime 1"

VSyncPassFrequency?

Query the pass/fail status for the Frequency value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassFrequency"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Frequency value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassFrequency"
Query may return: "VSyncPassFrequency 1"

VSyncPassLogicLevel0Value1?

Query the pass/fail status for the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncPassLogicLevel0Value1"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the V Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncPassLogicLevel0Value1" Query may return: "VSyncPassLogicLevel0Value1 1"

VSyncPassLogicLevel0Value2?

Query the pass/fail status for the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassLogicLevel0Value2"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement. The value used for the relative comparison is defined in the limits file.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassLogicLevel0Value2"
Query may return: "VSyncPassLogicLevel0Value2 1"

VSyncPassLogicLevel1Value1?

Query the pass/fail status for the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncPassLogicLevel1Value1"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncPassLogicLevel1Value1" Query may return: "VSyncPassLogicLevel1Value1 1"

VSyncPassLogicLevel1Value2?

Query the pass/fail status for the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassLogicLevel1Value2"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

A returned value of 1 means Pass, a returned value of 0 means Fail.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassLogicLevel0Value2"
Query may return: "VSyncPassLogicLevel0Value2 1"

VSyncPassMonotonicFall?

Query the pass/fail status for the Monotonic Fall value resulting from the V Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VSyncPassMonotonicFall"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Monotonic Fall value resulting from the V Sync measurement. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncPassMonotonicFall" Query may return: "VSyncPassMonotonicFall 1"

VSyncPassMonotonicRise?

Query the pass/fail status for the Monotonic Rise value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? “VSyncPassMonotonicRise”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Monotonic Rise value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncPassMonotonicRise”
Query may return: “VSyncPassMonotonicRise 1”

VSyncPassOvershoot?

Query the pass/fail status for the Overshoot value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncPassOvershoot”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Overshoot value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncPassOvershoot”
Query may return: “VSyncPassOvershoot 1”

VSyncPassOvershootSettlingTime?

Query the pass/fail status for the Overshoot Settling Time value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassOvershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Overshoot Settling Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassOvershootSettlingTime"
Query may return: "VSyncPassOvershootSettlingTime 1"

VSyncPassPolarity?

Query the pass/fail status for the Polarity value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncPassPolarity”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Polarity value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncPassPolarity”
Query may return: “VSyncPassPolarity 1”

VSyncPassPulseWidth?

Query the pass/fail status for the Pulse Width value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncPassPulseWidth”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Pulse Width value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncPassPulseWidth”
Query may return: “VSyncPassPulseWidth 1”

VSyncPassRiseTime?

Query the pass/fail status for the Rise Time value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassRiseTime"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Rise Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassRiseTime"
Query may return: "VSyncPassRiseTime 1"

VSyncPassSyncPeriod?

Query the pass/fail status for the Sync Period value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? “VSyncPassSyncPeriod”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Sync Period value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncPassSyncPeriod”
Query may return: “VSyncPassSyncPeriod 1”

VSyncPassUndershoot?

Query the pass/fail status for the Undershoot value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassUndershoot"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Undershoot value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassUndershoot"
Query may return: "VSyncPassUndershoot 1"

VSyncPassUndershootSettlingTime?

Query the pass/fail status for the Undershoot Settling Time value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? “VSyncPassUndershootSettlingTime”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Undershoot Settling Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncPassUndershootSettlingTime”
Query may return: “VSyncPassUndershootSettlingTime 1”

VSyncPolarity?

Query the measured Polarity resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPolarity"

Group Measured Results Query

Arguments None

Returns Query returns the measured Polarity resulting from the V Sync measurement.
The returned value is either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPolarity"
Query may return: "VSyncPolarity Pos"

VSyncPulseWidth?

Query the measured Pulse Width resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncPulseWidth”

Group Measured Results Query

Arguments None

Returns Query returns the measured Pulse Width resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncPulseWidth”
Query may return: “VSyncPulseWidth 1”

VSyncRefAll?

Query all the V Sync reference values specified in the Reference file.

Syntax	VARIABLE:VALUE? "VSyncRefAll"
Group	Reference Values Query
Arguments	None
Returns	<p>Query returns all the V Sync reference values specified in the Reference file.</p> <p>The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T(ns), Undershoot S.T(ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "VSyncRefAll"</p> <p>Query may return: "VSyncRefAll Pos 0.033 11.765 85.0 2.51 2.51 0 0 0 0 Yes Yes 3950.0 0.0 3950.0 0.0"</p>

VSyncRefFallTime?

Query the V Sync Fall Time reference value specified in the Reference file.

Syntax VARIable:VALue? “VSyncRefFallTime”

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Fall Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRefFallTime”
Query may return: “VSyncRefFallTime 7.1”

VSyncRefFrequency?

Query the V Sync Frequency reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefFrequency"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Frequency reference value specified in the Reference file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefFrequency"
Query may return: "VSyncRefFrequency 85"

VSyncRefLogicLevel0Value1?

Query the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VSyncRefLogicLevel0Value1"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRefLogicLevel0Value1"
Query may return: "VSyncRefLogicLevel0Value1 1"

VSyncRefLogicLevel0Value2?

Query the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax	VARIABLE:VALUE? "VSyncRefLogicLevel0Value2"
Group	Reference Values Query
Arguments	None
Returns	<p>Query returns the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.</p> <p>The returned value is in millivolts (mV).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "VSyncRefLogicLevel0Value2"</p> <p>Query may return: "VSyncRefLogicLevel0Value2 1"</p>

VSynRefLogicLevel1Value1?

Query the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIable:VALue? “VSynRefLogicLevel1Value1”

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSynRefLogicLevel1Value1”
Query may return: “VSynRefLogicLevel1Value1 1”

VSyncRefLogicLevel1Value2?

Query the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax	VARIABLE:VALUE? "VSyncRefLogicLevel1Value2"
Group	Reference Values Query
Arguments	None
Returns	Query returns the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRefLogicLevel1Value2" Query may return: "VSyncRefLogicLevel1Value2 1"

VSyncRefMonotonicFall?

Query the V Sync Monotonic Fall reference value specified in the Reference file.

Syntax VARIable:VALue? “VSyncRefMonotonicFall”

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Monotonic Fall reference value specified in the Reference file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRefMonotonicFall”
Query may return: “VSyncRefMonotonicFall Yes”

VSyncRefMonotonicRise?

Query the V Sync Monotonic Rise reference value specified in the Reference file.

Syntax VARIable:VALue? “VSyncRefMonotonicRise”

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Monotonic Rise reference value specified in the Reference file.
The returned value is either “Yes” or “No”.
Returns “--” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRefMonotonicRise”
Query may return: “VSyncRefMonotonicRise Yes”

VSyncRefOvershoot?

Query the V Sync Overshoot reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VSyncRefOvershoot"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Overshoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRefOvershoot"
Query may return: "VSyncRefOvershoot 15"

VSyncRefOvershootSettlingTime?

Query the V Sync Overshoot Settling Time reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefOvershootSettlingTime"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Overshoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefOvershootSettlingTime"
Query may return: "VSyncRefOvershootSettlingTime 7.1"

VSyncRefPolarity?

Query the V Sync Polarity reference value specified in the Reference file.

Syntax VARIABLE:VALue? “VSyncRefPolarity”

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Polarity reference value specified in the Reference file.
The returned value can be either “Pos” or “Neg”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncRefPolarity”
Query may return: “VSyncRefPolarity Pos”

VSyncRefPulseWidth?

Query the V Sync Pulse Width reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefPulseWidth"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Pulse Width reference value specified in the Reference file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefPulseWidth"
Query may return: "VSyncRefPulseWidth 0.05"

VSyncRefRiseTime?

Query the V Sync Rise Time reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VSyncRefRiseTime"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Rise Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRefRiseTime"
Query may return: "VSyncRefRiseTime 7.1"

VSyncRefSyncPeriod?

Query the V Sync Sync Period reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefSyncPeriod"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Sync Period reference value specified in the Reference file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefSyncPeriod"
Query may return: "VSyncRefSyncPeriod 11.75"

VSyncRefUndershoot?

Query the V Sync Undershoot reference value specified in the Reference file.

Syntax VARIABLE:VALue? “VSyncRefUndershoot”

Group Reference Values Query

Arguments None

Returns Query returns V Sync Undershoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncRefUndershoot”
Query may return: “VSyncRefUndershoot 15”

VSyncRefUndershootSettlingTime?

Query the V Sync Undershoot Settling Time reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "VSyncRefUndershootSettlingTime"

Group Reference Values Query

Arguments None

Returns Query returns the V Sync Undershoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRefUndershootSettlingTime"
Query may return: "VSyncRefUndershootSettlingTime 7.1"

VSynCRelAll?

Query all the relative values resulting from the V Sync measurement.

Syntax VARiable:VALue? "VSynCRelAll"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the V Sync measurement.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T (ns), Undershoot S.T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "VSynCRelAll"
Query may return: "VSynCRelAll Pos 1 -0.005 0,034 5 5 4.458 5.226 3.8 0.0
Yes Yes -761.48 -400 -1129.3 464.4"

VSyncRelFallTime?

Query the Fall Time relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelFallTime"

Group Relative Results Query

Arguments None

Returns Query returns the Fall Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelFallTime"
Query may return: "VSyncRelFallTime 7.1"

VSyncRelFrequency?

Query the Frequency relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncRelFrequency”

Group Relative Results Query

Arguments None

Returns Query returns the Frequency relative value resulting from the V Sync measurement.
The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRelFrequency”
Query may return: “VSyncRelFrequency 85”

VSyncRelLogicLevel0Value1?

Query the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncRelLogicLevel0Value1"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRelLogicLevel0Value1" Query may return: "VSyncRelLogicLevel0Value1 1"

VSyncRelLogicLevel0Value2?

Query the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncRelLogicLevel0Value2"

Group Relative Results Query

Arguments None

Returns Query returns the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRelLogicLevel0Value2"
Query may return: "VSyncRelLogicLevel0Value2 1"

VSyncRelLogicLevel1Value1?

Query the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement.

Syntax	VARIABLE:VALUE? "VSyncRelLogicLevel1Value1"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VSyncRelLogicLevel1Value1" Query may return: "VSyncRelLogicLevel1Value1 1"

VSyncRelLogicLevel1Value2?

Query the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncRelLogicLevel1Value2"

Group Relative Results Query

Arguments None

Returns Query returns the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRelLogicLevel1Value2"
Query may return: "VSyncRelLogicLevel1Value2 1"

VSyncRelMonotonicFall?

Query the Monotonic Fall relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelMonotonicFall"

Group Relative Results Query

Arguments None

Returns Query returns the Monotonic Fall relative value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelMonotonicFall"
Query may return: "VSyncRelMonotonicFall Yes"

VSyncRelMonotonicRise?

Query the Monotonic Rise relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncRelMonotonicRise"

Group Relative Results Query

Arguments None

Returns Query returns the Monotonic Rise relative value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRelMonotonicRise"
Query may return: "VSyncRelMonotonicRise Yes"

VSyncRelOvershoot?

Query the Overshoot relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelOvershoot"

Group Relative Results Query

Arguments None

Returns Query returns the Overshoot relative value resulting from the V Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelOvershoot"
Query may return: "VSyncRelOvershoot 15"

VSyncRelOvershootSettlingTime?

Query the Overshoot Settling Time relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncRelOvershootSettlingTime"

Group Relative Results Query

Arguments None

Returns Query returns the Overshoot Settling Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRelOvershootSettlingTime"
Query may return: "VSyncRelOvershootSettlingTime 7.1"

VSyncRelPolarity?

Query the Polarity relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelPolarity"

Group Relative Results Query

Arguments None

Returns Query returns the Polarity relative value resulting from the V Sync measurement.
The value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelPolarity"
Query may return: "VSyncRelPolarity Pos"

VSyncRelPulseWidth?

Query the Pulse Width relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncRelPulseWidth”

Group Relative Results Query

Arguments None

Returns Query returns the Pulse Width relative value resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRelPulseWidth”
Query may return: “VSyncRelPulseWidth 0.05”

VSyncRelRiseTime?

Query the Rise Time relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelRiseTime"

Group Relative Results Query

Arguments None

Returns Query returns the Rise Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelRiseTime"
Query may return: "VSyncRelRiseTime 7.1"

VSyncRelSyncPeriod?

Query the Sync Period relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncRelSyncPeriod”

Group Relative Results Query

Arguments None

Returns Query returns the Sync Period relative value resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRelSyncPeriod”
Query may return: “VSyncRelSyncPeriod 11.75”

VSyncRelUndershoot?

Query the Undershoot relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelUndershoot"

Group Relative Results Query

Arguments None

Returns Query returns the Undershoot relative value resulting from the V Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelUndershoot"
Query may return: "VSyncRelUndershoot 15"

VSynRelUndershootSettlingTime?

Query the Undershoot Settling Time relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSynRelUndershootSettlingTime"

Group Relative Results Query

Arguments None

Returns Query returns the Undershoot Settling Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSynRelUndershootSettlingTime"
Query may return: "VSynRelUndershootSettlingTime 7.1"

VSyncRiseTime?

Query the measured Rise Time resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRiseTime"

Group Measured Results Query

Arguments None

Returns Query returns the measured Rise Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRiseTime"
Query may return: "VSyncRiseTime 1"

VSyncSet <setting>

Set or query whether to measure V Sync upon Execute.

Syntax VARIABLE:VALue "VSyncSet", "<setting>"

VARIABLE:VALue? "VSyncSet"

Group Measurement Setup

Arguments <setting> specifies whether to perform the V Sync measurements upon Execute.
Valid values are: "OFF", "ON", "0", "1"

Returns Query returns "0" if the V Sync measurement is not selected.
Query returns "1" if the V Sync measurement is selected.

Examples VARIABLE:VALue "VSyncSet", "ON"

VARIABLE:VALue? "VSyncSet"
Query may return: "VSyncSet 1"

VSyncStatus?

Query the status of the V Sync measurement.

Syntax VARIable:VALue? "VSyncStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "VSyncStatus"
Query may return: "VSyncStatus Pass"

VSyncSyncPeriod?

Query the measured Sync Period resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncSyncPeriod”

Group Measured Results Query

Arguments None

Returns Query returns the measured Sync Period resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncSyncPeriod”
Query may return: “VSyncSyncPeriod 1”

VSyncUndershoot?

Query the measured Undershoot resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncUndershoot"

Group Measured Results Query

Arguments None

Returns Query returns the measured Undershoot resulting from the V Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncUndershoot"
Query may return: "VSyncUndershoot 1"

VSyncUndershootSettlingTime?

Query the measured Undershoot Settling Time resulting from the V Sync measurement.

Syntax VARIABLE:VALue? “VSyncUndershootSettlingTime”

Group Measured Results Query

Arguments None

Returns Query returns the measured Undershoot Settling Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncUndershootSettlingTime”
Query may return: “VSyncUndershootSettlingTime 1”

VTimingAddressableLinesCh[1..3]?

Query the measured Addressable Video resulting from the V Timing measurement on the specified channel.

Syntax	VARIABLE:VALUE? "VTimingAddressableLinesCh1" VARIABLE:VALUE? "VTimingAddressableLinesCh2" VARIABLE:VALUE? "VTimingAddressableLinesCh3"
Group	Measured Results Query
Arguments	None
Returns	Query returns the measured Addressable Video resulting from the V Timing measurement on the specified channel. The returned value is a line number. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingAddressableLinesCh1" Query may return: "VTimingAddressableLinesCh1 600"

VTimingAll?

Query the measured values of all the V Timing measurements.

Syntax VARIABLE:VALUE? "VTimingAll"

Group Measured Results Query

Arguments None

Returns Query returns the measured values of all the V Timing measurements.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingAll"
Query may return: "VTimingAll 47 0.0 1023.0 0.0 2.0 47 0.0 1023.0 0.0 2.0 47 0.0 1023.0 0.0 2.0 47 0.0 1023.0 0.0 2.0 3.0"

VTimingAverage <samples>

Set or query the total number of samples over which to average the V Timing measurement.

Syntax VARIable:VALue “VTimingAverage”, “<samples>”

VARIable:VALue? “VTimingAverage”

Group Measurement Setup

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Returns Query returns the currently assigned total number of samples for the V Timing measurement

Examples VARIable:VALue “VTimingAverage”, “1”

VARIable:VALue? “VTimingAverage”

Query may return: “VTimingAverage 8”

VTimingBackPorchCh[1..3]?

Query the measured Back Porch resulting from the V Timing measurement on the specified channel.

Syntax VARIABLE:VALue? “VTimingBackPorchCh1”
 VARIABLE:VALue? “VTimingBackPorchCh2”
 VARIABLE:VALue? “VTimingBackPorchCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Back Porch resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingBackPorchCh1”
 Query may return: “VTimingBackPorchCh1 27”

VTimingBottomBorderCh[1..3]?

Query the measured Bottom Border resulting from the V Timing measurement on the specified channel.

Syntax VARIable:VALue? “VTimingBottomBorderCh1”
 VARIable:VALue? “VTimingBottomBorderCh2”
 VARIable:VALue? “VTimingBottomBorderCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Bottom Border resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingBottomBorderCh1”
 Query may return: “VTimingBottomBorderCh1 0”

VTimingFrontPorchCh[1..3]?

Query the measured Front Porch resulting from the V Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "VTimingFrontPorchCh1"
 VARIABLE:VALUE? "VTimingFrontPorchCh2"
 VARIABLE:VALUE? "VTimingFrontPorchCh3"

Group Measured Results Query

Arguments None

Returns Query returns the measured Front Porch resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingFrontPorchCh1"
 Query may return: "VTimingFrontPorchCh1 1"

VTimingMaxAddressableLinesCh[1..3]?

Query the V Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VTimingMaxAddressableLinesCh1”
 VARIable:VALue? “VTimingMaxAddressableLinesCh2”
 VARIable:VALue? “VTimingMaxAddressableLinesCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingMaxAddressableLinesCh1”
 Query may return: “VTimingMaxAddressableLinesCh1 600”

VTimingMaxAll?

Query all the V Timing maximum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALue? “VTimingMaxAll”

Group Maximum Limits Query

Arguments None

Returns Query returns all the V Timing maximum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingMaxAll”
Query may return: “VTimingMaxAll 48.0 1.0 1025.0 1.0 2.0 48.0 1.0 1025.0 1.0 2.0 48.0 1.0 1025.0 1.0 2.0 4.0”

VTimingMaxBackPorchCh[1..3]?

Query the V Timing Back Porch maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VTimingMaxBackPorchCh1"
 VARIable:VALue? "VTimingMaxBackPorchCh2"
 VARIable:VALue? "VTimingMaxBackPorchCh3"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingMaxBackPorchCh1"
 Query may return: "VTimingMaxBackPorchCh1 27"

VTimingMaxBottomBorderCh[1..3]?

Query the V Timing Bottom Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “VTimingMaxBottomBorderCh1”
 VARIABLE:VALue? “VTimingMaxBottomBorderCh2”
 VARIABLE:VALue? “VTimingMaxBottomBorderCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the V Timing Bottom Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingMaxBottomBorderCh1”
 Query may return: “VTimingMaxBottomBorderCh1 0”

VTimingMaxFrontPorchCh[1..3]?

Query the V Timing Front Porch maximum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VTimingMaxFrontPorchCh1" VARIABLE:VALUE? "VTimingMaxFrontPorchCh2" VARIABLE:VALUE? "VTimingMaxFrontPorchCh3"
Group	Maximum Limits Query
Arguments	None
Returns	Query returns the V Timing Front Porch maximum limit value specified in the Limits file on the specified channel. The returned value is a line number. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingMaxFrontPorchCh1" Query may return: "VTimingMaxFrontPorchCh1 1"

VTimingMaxSyncPulseWidth?

Query the V Timing Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VTimingMaxSyncPulseWidth"

Group Maximum Limits Query

Arguments None

Returns Query returns the V Timing Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingMaxSyncPulseWidth"
Query may return: "VTimingMaxSyncPulseWidth 3"

VTimingMaxTopBorderCh[1..3]?

Query the V Timing Top Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VTimingMaxTopBorderCh1”
 VARIable:VALue? “VTimingMaxTopBorderCh2”
 VARIable:VALue? “VTimingMaxTopBorderCh3”

Group Maximum Limits Query

Arguments None

Returns Query returns the Top Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingMaxTopBorderCh1”
 Query may return: “VTimingMaxTopBorderCh1 0”

VTimingMinAddressableLinesCh[1..3]?

Query the V Timing Addressable Lines minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "VTimingMinAddressableLinesCh1"
 VARIABLE:VALUE? "VTimingMinAddressableLinesCh2"
 VARIABLE:VALUE? "VTimingMinAddressableLinesCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Timing Addressable Lines minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMinAddressableLinesCh1"
 Query may return: "VTimingMinAddressableLinesCh1 600"

VTimingMinAll?

Query all the V Timing minimum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALUE? "VTimingMinAll"

Group Minimum Limits Query

Arguments None

Returns Query returns all the V Timing minimum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMinAll"
Query may return: "VTimingMinAll 46.0 0.0 1023.0 0.0 0.0 46.0 0.0 1023.0 0.0 0.0 46.0 0.0 1023.0 0.0 0.0 2.0"

VTimingMinBackPorchCh[1..3]?

Query the V Timing Back Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "VTimingMinBackPorchCh1"
 VARIABLE:VALUE? "VTimingMinBackPorchCh2"
 VARIABLE:VALUE? "VTimingMinBackPorchCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMinBackPorchCh1"
 Query may return: "VTimingMinBackPorchCh1 27"

VTimingMinBottomBorderCh[1..3]?

Query the V Timing Bottom Border minimum limit value specified in the Limits file on the specified channel.

Syntax	VARIABLE:VALUE? "VTimingMinBottomBorderCh1" VARIABLE:VALUE? "VTimingMinBottomBorderCh2" VARIABLE:VALUE? "VTimingMinBottomBorderCh3"
Group	Minimum Limits Query
Arguments	None
Returns	Query returns the V Timing Bottom Border minimum limit value specified in the Limits file on the specified channel. The returned value is a line number. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingMinBottomBorderCh1" Query may return: "VTimingMinBottomBorderCh1 0"

VTimingMinFrontPorchCh[1..3]?

Query the V Timing Front Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? “VTimingMinFrontPorchCh1”
 VARIABLE:VALUE? “VTimingMinFrontPorchCh2”
 VARIABLE:VALUE? “VTimingMinFrontPorchCh3”

Group Minimum Limits Query

Arguments None

Returns Query returns the V Timing Front Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALUE? “VTimingMinFrontPorchCh1”
 Query may return: “VTimingMinFrontPorchCh1 1”

VTimingMinSyncPulseWidth?

Query the V Timing Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VTimingMinSyncPulseWidth"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Timing Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingMinSyncPulseWidth"
Query may return: "VTimingMinSyncPulseWidth 3"

VTimingMinTopBorderCh[1..3]?

Query the V Timing Top Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "VTimingMinTopBorderCh1"
 VARIABLE:VALUE? "VTimingMinTopBorderCh2"
 VARIABLE:VALUE? "VTimingMinTopBorderCh3"

Group Minimum Limits Query

Arguments None

Returns Query returns the V Timing Top Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMinTopBorderCh1"
 Query may return: "VTimingMinTopBorderCh1 0"

VTimingPassAddressableLinesCh[1..3]?

Query the pass/fail status for the Addressable Lines value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VTimingPassAddressableLinesCh1" VARIABLE:VALUE? "VTimingPassAddressableLinesCh2" VARIABLE:VALUE? "VTimingPassAddressableLinesCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Addressable Lines value resulting from the V Timing measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingPassAddressableLinesCh1" Query may return: "VTimingPassAddressableLinesCh1 1"

VTimingPassAll?

Query the pass/fail status for all the values resulting from the V Timing measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALUE? "VTimingPassAll"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for all the values resulting from the V Timing measurement on all the channels.

The order is: Back Porch (Ch1), Top Border (Ch1), Addressable Video (Ch1), Bottom Border (Ch1), Front Porch (Ch1), Back Porch (Ch2), Top Border (Ch2), Addressable Video (Ch2), Bottom Border (Ch2), Front Porch (Ch2), Back Porch (Ch3), Top Border (Ch3), Addressable Video (Ch3), Bottom Border (Ch3), Front Porch (Ch3), and Sync Pulse Width.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingPassAll"
Query may return: "VTimingPassAll 1 0 0 0 1 1 1 0 1 0 1 1 1 1 1 1 1"

VTimingPassBackPorchCh[1..3]?

Query the pass/fail status for the Back Porch value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VTimingPassBackPorchCh1" VARIABLE:VALUE? "VTimingPassBackPorchCh2" VARIABLE:VALUE? "VTimingPassBackPorchCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Back Porch value resulting from the V Timing measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingPassBackPorchCh1" Query may return: "VTimingPassBackPorchCh1 1"

VTimingPassBottomBorderCh[1..3]?

Query the pass/fail status for the Bottom Border value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VTimingPassBottomBorderCh1”
 VARIABLE:VALue? “VTimingPassBottomBorderCh2”
 VARIABLE:VALue? “VTimingPassBottomBorderCh3”

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Bottom Border value resulting from the V Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingPassBottomBorderCh1”
 Query may return: “VTimingPassBottomBorderCh1 1”

VTimingPassFrontPorchCh[1..3]?

Query the pass/fail status for the Front Porch value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VTimingPassFrontPorchCh1" VARIABLE:VALUE? "VTimingPassFrontPorchCh2" VARIABLE:VALUE? "VTimingPassFrontPorchCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Front Porch value resulting from the V Timing measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingPassFrontPorchCh1" Query may return: "VTimingPassFrontPorchCh1 1"

VTimingPassSyncPulseWidth?

Query the pass/fail status for the Sync Pulse Width value resulting from the V Timing measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "VTimingPassSyncPulseWidth"

Group Pass/Fail Status Query

Arguments None

Returns Query returns the pass/fail status for the Sync Pulse Width value resulting from the V Timing measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingPassSyncPulseWidth"
Query may return: "VTimingPassSyncPulseWidth 1"

VTimingPassTopBorderCh[1..3]?

Query the pass/fail status for the Top Border value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax	VARIABLE:VALUE? "VTimingPassTopBorderCh1" VARIABLE:VALUE? "VTimingPassTopBorderCh2" VARIABLE:VALUE? "VTimingPassTopBorderCh3"
Group	Pass/Fail Status Query
Arguments	None
Returns	Query returns the pass/fail status for the Top Border value resulting from the V Timing measurement on the specified channel. A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingPassTopBorderCh1" Query may return: "VTimingPassTopBorderCh1 1"

VTimingRefAddressableLinesCh[1..3]?

Query the V Timing Addressable Lines reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? “VTimingRefAddressableLinesCh1”
 VARIABLE:VALUE? “VTimingRefAddressableLinesCh2”
 VARIABLE:VALUE? “VTimingRefAddressableLinesCh3”

Group Reference Values Query

Arguments None

Returns Query returns the V Timing Addressable Lines reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALUE? “VTimingRefAddressableLinesCh1”
 Query may return: “VTimingRefAddressableLinesCh1 600”

VTimingRefAll?

Query all the V Timing reference value specified in the Reference file on all the channels.

Syntax	VARIABLE:VALUE? "VTimingRefAll"
Group	Reference Values Query
Arguments	None
Returns	<p>Query returns all the V Timing reference value specified in the Reference file on all the channels.</p> <p>The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).</p> <p>Returns "---" if no valid value is currently available.</p>
Examples	<p>VARIABLE:VALUE? "VTimingRefAll"</p> <p>Query may return: "VTimingRefAll 47.0 0.0 1024.0 0.0 1.0 47.0 0.0 1024.0 0.0 1.0 47.0 0.0 1024.0 0.0 1.0 3.0"</p>

VTimingRefBackPorchCh[1..3]?

Query the V Timing Back Porch reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? "VTimingRefBackPorchCh1"
 VARIABLE:VALUE? "VTimingRefBackPorchCh2"
 VARIABLE:VALUE? "VTimingRefBackPorchCh3"

Group Reference Values Query

Arguments None

Returns Query returns the V Timing Back Porch reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRefBackPorchCh1"
 Query may return: "VTimingRefBackPorchCh1 27"

VTimingRefBottomBorderCh[1..3]?

Query the V Timing Bottom Border reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VTimingRefBottomBorderCh1”
 VARIable:VALue? “VTimingRefBottomBorderCh2”
 VARIable:VALue? “VTimingRefBottomBorderCh3”

Group Reference Values Query

Arguments None

Returns Query returns the V Timing Bottom Border reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRefBottomBorderCh1”
 Query may return: “VTimingRefBottomBorderCh1 0”

VTimingRefFrontPorchCh[1..3]?

Query the V Timing Front Porch reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “VTimingRefFrontPorchCh1”
 VARIABLE:VALue? “VTimingRefFrontPorchCh2”
 VARIABLE:VALue? “VTimingRefFrontPorchCh3”

Group Reference Values Query

Arguments None

Returns Query returns the V Timing Front Porch reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingRefFrontPorchCh1”
 Query may return: “VTimingRefFrontPorchCh1 1”

VTimingRefSyncPulseWidth?

Query the V Timing Sync Pulse Width reference value specified in the Reference file.

Syntax VARIable:VALue? "VTimingRefSyncPulseWidth"

Group Reference Values Query

Arguments None

Returns Query returns the V Timing Sync Pulse Width reference value specified in the Reference file.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingRefSyncPulseWidth"
Query may return: "VTimingRefSyncPulseWidth 3"

VTimingRefTopBorderCh[1..3]?

Query the V Timing Top Border reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “VTimingRefTopBorderCh1”
 VARIABLE:VALue? “VTimingRefTopBorderCh2”
 VARIABLE:VALue? “VTimingRefTopBorderCh3”

Group Reference Values Query

Arguments None

Returns Query returns the V Timing Top Border reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingRefTopBorderCh1”
 Query may return: “VTimingRefTopBorderCh1 0”

VTimingRelAddressableLinesCh[1..3]?

Query the Addressable Lines relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIable:VALue? “VTimingRelAddressableLinesCh1”
 VARIable:VALue? “VTimingRelAddressableLinesCh2”
 VARIable:VALue? “VTimingRelAddressableLinesCh3”

Group Relative Results Query

Arguments None

Returns Query returns the Addressable Lines relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRelAddressableLinesCh1”
 Query may return: “VTimingRelAddressableLinesCh1 600”

VTimingRelAll?

Query all the relative values resulting from the V Timing measurement on all the channels.

Syntax VARIABLE:VALue? "VTimingRelAll"

Group Relative Results Query

Arguments None

Returns Query returns all the relative values resulting from the V Timing measurement on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingRelAll"
Query may return: "VTimingRelAll 1 0.0 -1.0 0.0 1.0 1 0.0 -1.0 0.0 1.0 1 0.0 -1.0 0.0 1.0 0.0"

VTimingRelBackPorchCh[1..3]?

Query the Back Porch relative value resulting from the V Timing measurement on a specific channel.

Syntax	VARIABLE:VALUE? "VTimingRelBackPorchCh1" VARIABLE:VALUE? "VTimingRelBackPorchCh2" VARIABLE:VALUE? "VTimingRelBackPorchCh3"
Group	Relative Results Query
Arguments	None
Returns	Query returns the Back Porch relative value resulting from the V Timing measurement on a specific channel. The returned value is a line number. Returns "---" if no valid value is currently available.
Examples	VARIABLE:VALUE? "VTimingRelBackPorchCh1" Query may return: "VTimingRelBackPorchCh1 27"

VTimingRelBottomBorderCh[1..3]?

Query the Bottom Border relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIABLE:VALUE? "VTimingRelBottomBorderCh1"
 VARIABLE:VALUE? "VTimingRelBottomBorderCh2"
 VARIABLE:VALUE? "VTimingRelBottomBorderCh3"

Group Relative Results Query

Arguments None

Returns Query returns the Bottom Border relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRelBottomBorderCh1"
 Query may return: "VTimingRelBottomBorderCh1 0"

VTimingRelFrontPorchCh[1..3]?

Query the Front Porch relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIable:VALue? “VTimingRelFrontPorchCh1”
 VARIable:VALue? “VTimingRelFrontPorchCh2”
 VARIable:VALue? “VTimingRelFrontPorchCh3”

Group Relative Results Query

Arguments None

Returns Query returns the Front Porch relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRelFrontPorchCh1”
 Query may return: “VTimingRelFrontPorchCh1 1”

VTimingRelSyncPulseWidth?

Query the Sync Pulse Width relative value resulting from the V Timing measurement.

Syntax VARIABLE:VALue? “VTimingRelSyncPulseWidth”

Group Relative Results Query

Arguments None

Returns Query returns the Sync Pulse Width relative value resulting from the V Timing measurement.
The returned value is a line number.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingRelSyncPulseWidth”
Query may return: “VTimingRelSyncPulseWidth 3”

VTimingRelTopBorderCh[1..3]?

Query the Top Border relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIable:VALue? “VTimingRelTopBorderCh1”
 VARIable:VALue? “VTimingRelTopBorderCh2”
 VARIable:VALue? “VTimingRelTopBorderCh3”

Group Relative Results Query

Arguments None

Returns Query returns the Top Border relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRelTopBorderCh1”
 Query may return: “VTimingRelTopBorderCh1 0”

VTimingSet <setting>

Set or query whether to perform the V Timing measurements upon Execute.

Syntax VARIable:VALue “VTimingSet”, “<setting>”

VARIable:VALue? “VTimingSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the V Timing measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Returns Query returns “0” if the V Timing measurement is not selected.

Query returns “1” if the V Timing measurement is selected.

Examples VARIable:VALue “VTimingSet”, “ON”

VARIable:VALue? “VTimingSet”

Query may return: “VTimingSet 1”

VTimingStatus?

Query the status of the V Timing measurement.

Syntax VARIable:VALue? "VTimingStatus"

Group Results Summary Query

Arguments None

Returns Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "VTimingStatus"
Query may return: "VTimingStatus Pass"

VTimingSyncPulseWidth?

Query the measured Sync Pulse Width resulting from the V Timing measurement.

Syntax VARIABLE:VALue? “VTimingSyncPulseWidth”

Group Measured Results Query

Arguments None

Returns Query returns the measured Sync Pulse Width resulting from the V Timing measurement.
The returned value is in Line.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingSyncPulseWidth”
Query may return: “VTimingSyncPulseWidth 3”

VTimingTopBorderCh[1..3]?

Query the measured Top Border resulting from the V Timing measurement on the specified channel.

Syntax VARIable:VALue? “VTimingTopBorderCh1”
 VARIable:VALue? “VTimingTopBorderCh2”
 VARIable:VALue? “VTimingTopBorderCh3”

Group Measured Results Query

Arguments None

Returns Query returns the measured Top Border resulting from the V Timing measurement on the specified channel.
 The returned value is in Line.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingTopBorderCh1”
 Query may return: “VTimingTopBorderCh1 0”

WarningReportingMeasure <setting>

Set or query whether measurement warnings create a warning message.

Syntax VARIABLE:VALue “WarningReportingMeasure”, “<setting>”

VARIABLE:VALue? “WarningReportingMeasure”

Group Reporting

Arguments <setting> Valid settings are: OFF, ON, 0, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportResults
WarningReportSignal

Returns Query returns the current specified setting.

Examples VARIABLE:VALue “WarningReportingMeasure”, “ON”

VARIABLE:VALue? “WarningReportingMeasure”
Query may return: “WarningReportingMeasure 0”

WarningReportingResults <setting>

Set or query whether results warnings are to create a warning message.

Syntax VARIable:VALue “WarningReportingResults”, “<setting>”

VARIable:VALue? “WarningReportingResults”

Group Reporting

Arguments <setting> valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
WarningReportingSignal

Returns Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingResults”, “ON”

VARIable:VALue? “WarningReportingResults”
Query may return: “WarningReportingResults 0”

WarningReportingSignal <setting>

Set or query whether signal warnings create a warning message.

Syntax VARIABLE:VALue “WarningReportingSignal”, “<setting>”

VARIABLE:VALue? “WarningReportingSignal”

Group Reporting

Arguments <setting> valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
WarningReportingResults

Returns Query returns the current specified setting.

Examples VARIABLE:VALue “WarningReportingSignal”, “ON”

VARIABLE:VALue? “WarningReportingSignal”
Query may return: “WarningReportingSignal 0”



Appendix

Appendix A: Programming the VM Series System

The VM Series System product software CD contains several files of example host controller code to help you get started programming the VM Series System. You can view these files to see how to write your code to ensure consistent and reliable operation with the VM Series System. The files included are:

- `colorbars.c` -- Example program to make measurements using the Tektronix VM Series System. It is expected you will restructure this file to fit your project's needs, changing the error reporting boundaries to fit your product.
- `control.h` -- These timeouts are "safety nets", so the code will not hang if there is an unexpected problem.
- `decl--32.h` -- Win32 include file for accessing the 32--bit GPIB DLL (`gpib--32.dll`).
- `lib.c` -- Example program to make measurements using the Tektronix VM Series System. It is expected you will restructure this to fit your project's needs changing the error reporting boundaries to fit your product.
- `lib.h` -- Header file for `lib.c`.
- `tolerances.h` -- This file contains the tolerances used in the GPIB example controller program for the VM Series System, `main.c`. Option VGA does not have this file.

Sending GPIB Commands

The time required for a command to transfer from the platform to the VM Series System Java application can vary.

In previous versions of this product, we recommended a 50 ms delay between each command to allow time for the instrument to fully process commands. However, due to the more sophisticated signal processing present in the latest version of the instrument, the 50 ms delay can occasionally be inadequate. Thus, we have developed a different solution that is both reliable and also faster. The solution is after every COMMAND you send to the instrument, QUERY the same GPIB variable until you see the command in the value.

Option SD/HD

For example, to turn on the sync measurement you send:

```
VARI:VAL "SyncSet", "1"
```

If you send the query:

```
VARI:VAL? "SyncSet"
```

while the command is still being processed (note the added question mark), the response is "1". When the command is fully ingested, the response is:

```
"SyncSet 1"
```

The addition of the command name in the response lets you know the command is processed.

Example code that illustrates this method is presented below:

```
// VARI:VAL
//
// Example usage: sendCommand("SyncSet", "1");
//
void sendCommand(const char *variable, const char *setValue)
{
char sendBuf[BUFSIZ], receiveBuf[BUFSIZ];

// Formulate a VARI:VAL command, and send it to the VM Series System
sprintf(sendBuf, "VARI:VAL \"%s\" \"%s\"", variable, setValue);
gpiSend(sendBuf);

// Reformulate to make a VARI:VAL query of the same variable
sprintf(sendBuf, "VARI:VAL? \"%s\"", variable);

// Send the query & receive the result. Return when variable is in the
// value
do {
gpiSend(sendBuf);
gpiReceive(receiveBuf, sizeof(receiveBuf));
} while ( !strstr(receiveBuf, variable) );
}
```

Option VGA

Example code is as follows:

```
// Send a query to the VM Series System platform and get the response, the ID
and
version No.
strcpy(outString, "VARI:VAL? \"ID\"");
printf("Query response to VARI:VAL? \"ID\" is %s\n",
queryVM Series System(outString, readBuf));

/* set the VM Series System to its default setting to provide
* a known starting setup. Note color Bars is enabled by default
*/
doDefaultSettings();
```

```

printf("Selecting HSync Measurement\n\n");

strcpy(outString, "VARI:VAL \"ColorBarsSet\", \"0\"\n");
sendCommandToVM Series System(outString);

strcpy(outString, "VARI:VAL \"HSyncSet\", \"1\"\n");
sendCommandToVM Series System(outString);

strcpy(outString, "VARI:VAL? \"HSyncSet\"\n");
printf("Query response to \"HSyncSet\" is %s\n",
queryVM Series System(outString, readBuf));

// Select format type & get the response.
strcpy(outString, "VARI:VAL \"Format\",
\"1280x1024_60\"\n");
sendCommandToVM Series System(outString);
strcpy(outString, "VARI:VAL? \"Format\"\n");
printf("Query response to \"Format\" is %s\n", queryVM Series
System(outString, readBuf));

printf("Configure the Measurement SETUP Parameters: \n\n");

```

The code above takes advantage of the fact that the VM Series System always adds the command back into each GPIB value as it processes it.

You can see the actual file to get the complete list of the code in the VM Series System product software CD.

NOTE. This method is required only for COMMANDS sent through the GPIB. There is no limitation on how fast you can QUERY the VM Series System.



Index

Index

A

AppStatus?, 2-17, 3-36
AutoScale, 2-18, 3-37
AutoScaleInit
 Default, 2-19, 3-38
 LastMeas, 2-19, 3-38
 PreStored, 2-19, 3-38

C

ChannelDelayAll?, 2-20
ChannelDelayAverage, 2-21
ChannelDelayCh1Ch2?, 2-22
ChannelDelayCh1Ch3?, 2-23
ChannelDelayCh2Ch3?, 2-24
ChannelDelayLine, 2-25
ChannelDelayMultiLineEnd, 2-26
ChannelDelayMultiLineStart, 2-27
ChannelDelayPassAll?, 2-28
ChannelDelayPassCh1Ch2?, 2-29
ChannelDelayPassCh1Ch3?, 2-30
ChannelDelayPassCh2Ch3?, 2-31
ChannelDelayRelAll?, 2-32
ChannelDelayRelCh1Ch2?, 2-33
ChannelDelayRelCh1Ch3?, 2-34
ChannelDelayRelCh2Ch3?, 2-35
ChannelDelaySet, 2-36
ChannelDelayStatus?, 2-37
ChChMismatchAll?, 3-39
ChChMismatchAverage, 3-40
ChChMismatchCh1Ch2?, 3-41
ChChMismatchCh1Ch3?, 3-42
ChChMismatchCh2Ch3?, 3-43
ChChMismatchLine, 3-44
ChChMismatchMaxAll?, 3-45
ChChMismatchMaxCh1Ch2?, 3-46
ChChMismatchMaxCh1Ch3?, 3-47
ChChMismatchMaxCh2Ch3?, 3-48
ChChMismatchMaxPeakToPeakCh1Ch2?, 3-49
ChChMismatchMaxPeakToPeakCh1Ch3?, 3-50
ChChMismatchMaxPeakToPeakCh2Ch3?, 3-51
ChChMismatchMinAll?, 3-52
ChChMismatchMinCh1Ch2?, 3-53
ChChMismatchMinCh1Ch3?, 3-54
ChChMismatchMinCh2Ch3?, 3-55
ChChMismatchMinPeakToPeakCh1Ch2?, 3-56
ChChMismatchMinPeakToPeakCh1Ch3?, 3-57
ChChMismatchMinPeakToPeakCh2Ch3?, 3-58
ChChMismatchMultiLineEnd, 3-59
ChChMismatchMultiLineStart, 3-60
ChChMismatchPassAll?, 3-61
ChChMismatchPassCh1Ch2?, 3-62
ChChMismatchPassCh1Ch3?, 3-63
ChChMismatchPassCh2Ch3?, 3-64
ChChMismatchPassPeakToPeakCh1Ch2?, 3-65
ChChMismatchPassPeakToPeakCh1Ch3?, 3-66
ChChMismatchPassPeakToPeakCh2Ch3?, 3-67
ChChMismatchPeakToPeakCh1Ch2?, 3-68
ChChMismatchPeakToPeakCh1Ch3?, 3-69
ChChMismatchPeakToPeakCh2Ch3?, 3-70
ChChMismatchRefAll?, 3-71
ChChMismatchRefCh1Ch2?, 3-72
ChChMismatchRefCh1Ch3?, 3-73
ChChMismatchRefCh2Ch3?, 3-74
ChChMismatchRefPeakToPeakCh1Ch2?, 3-75
ChChMismatchRefPeakToPeakCh1Ch3?, 3-76
ChChMismatchRefPeakToPeakCh2Ch3?, 3-77
ChChMismatchRelAll?, 3-78
ChChMismatchRelCh1Ch2?, 3-79
ChChMismatchRelCh1Ch3?, 3-80
ChChMismatchRelCh2Ch3?, 3-81
ChChMismatchRelPeakToPeakCh1Ch2?, 3-82
ChChMismatchRelPeakToPeakCh1Ch3?, 3-83
ChChMismatchRelPeakToPeakCh2Ch3?, 3-84
ChChMismatchSet?, 3-85
ChChMismatchStatus?, 3-86
ChChSkewAll?, 3-87
ChChSkewAverage, 3-88
ChChSkewCh1Ch2?, 3-89
ChChSkewCh1Ch3?, 3-90
ChChSkewCh2Ch3?, 3-91
ChChSkewLine, 3-92
ChChSkewMaxAll?, 3-96
ChChSkewMaxCh1Ch2?, 3-97
ChChSkewMaxCh1Ch3?, 3-98
ChChSkewMaxCh2Ch3?, 3-99
ChChSkewMaxPixelClockCh1Ch2?, 3-100
ChChSkewMaxPixelClockCh1Ch3?, 3-101
ChChSkewMaxPixelClockCh2Ch3?, 3-102
ChChSkewMinAll?, 3-103
ChChSkewMinCh1Ch2?, 3-104
ChChSkewMinCh1Ch3?, 3-105
ChChSkewMinCh2Ch3?, 3-106
ChChSkewMinPixelClockCh1Ch2?, 3-107
ChChSkewMinPixelClockCh1Ch3?, 3-108
ChChSkewMinPixelClockCh2Ch3?, 3-109
ChChSkewMultiLineEnd, 3-110

- ChChSkewMultiLineStart, 3-111
- ChChSkewPassAll?, 3-112
- ChChSkewPassCh1Ch2?, 3-113
- ChChSkewPassCh1Ch3?, 3-114
- ChChSkewPassCh2Ch3?, 3-115
- ChChSkewPassPixelClockCh1Ch2?, 3-116
- ChChSkewPassPixelClockCh1Ch3?, 3-117
- ChChSkewPassPixelClockCh2Ch3?, 3-118
- ChChSkewPixelClockCh1Ch2?, 3-93
- ChChSkewPixelClockCh1Ch3?, 3-94
- ChChSkewPixelClockCh2Ch3?, 3-95
- ChChSkewRefAll?, 3-119
- ChChSkewRefCh1Ch2?, 3-120
- ChChSkewRefCh1Ch3?, 3-121
- ChChSkewRefCh2Ch3?, 3-122
- ChChSkewRefPixelClockCh1Ch2?, 3-123
- ChChSkewRefPixelClockCh1Ch3?, 3-124
- ChChSkewRefPixelClockCh2Ch3?, 3-125
- ChChSkewRelAll?, 3-126
- ChChSkewRelCh1Ch2?, 3-127
- ChChSkewRelCh1Ch3?, 3-128
- ChChSkewRelCh2Ch3?, 3-129
- ChChSkewRelPixelClockCh1Ch2?, 3-130
- ChChSkewRelPixelClockCh1Ch3?, 3-131
- ChChSkewRelPixelClockCh2Ch3?, 3-132
- ChChSkewSet, 3-133
- ChChSkewStatus?, 3-134
- ColorBarsAverage, 2-38, 3-135
- ColorBarsCh[1..3]?, 3-136
- ColorBarsCh[1..3]Val1?, 3-137
- ColorBarsCh[1..3]Val2?, 3-138
- ColorBarsCh[1..3]Val3?, 3-139
- ColorBarsCh[1..3]Val4?, 3-140
- ColorBarsCh[1..3]Val5?, 3-141
- ColorBarsCh[1..3]Val6?, 3-142
- ColorBarsCh[1..3]Val7?, 3-143
- ColorBarsCh[1..3]Val8?, 3-144
- ColorBarsLine, 2-39, 3-145
- ColorBarsMaxCh[1..3]?, 3-146
- ColorBarsMaxCh[1..3]Val1?, 3-147
- ColorBarsMaxCh[1..3]Val2?, 3-148
- ColorBarsMaxCh[1..3]Val3?, 3-149
- ColorBarsMaxCh[1..3]Val4?, 3-150
- ColorBarsMaxCh[1..3]Val5?, 3-151
- ColorBarsMaxCh[1..3]Val6?, 3-152
- ColorBarsMaxCh[1..3]Val7?, 3-153
- ColorBarsMaxCh[1..3]Val8?, 3-154
- ColorBarsMinCh[1..3]?, 3-155
- ColorBarsMinCh[1..3]Val1?, 3-156
- ColorBarsMinCh[1..3]Val2?, 3-157
- ColorBarsMinCh[1..3]Val3?, 3-158
- ColorBarsMinCh[1..3]Val4?, 3-159
- ColorBarsMinCh[1..3]Val5?, 3-160
- ColorBarsMinCh[1..3]Val6?, 3-161
- ColorBarsMinCh[1..3]Val7?, 3-162
- ColorBarsMinCh[1..3]Val8?, 3-163
- ColorBarsMultiLineEnd, 2-40, 3-164
- ColorBarsMultiLineStart, 2-41, 3-165
- ColorBarsmVCh[1..3]?, 2-42
- ColorBarsmVCh[1..3]Val[1..8]?, 2-43
- ColorBarsPassAll?, 3-166
- ColorBarsPassCh[1..3]?, 2-44, 3-167
- ColorBarsPassCh[1..3]Val[1..8]?, 2-45
- ColorBarsPassCh[1..3]Val1?, 3-168
- ColorBarsPassCh[1..3]Val2?, 3-169
- ColorBarsPassCh[1..3]Val3?, 3-170
- ColorBarsPassCh[1..3]Val4?, 3-171
- ColorBarsPassCh[1..3]Val5?, 3-172
- ColorBarsPassCh[1..3]Val6?, 3-173
- ColorBarsPassCh[1..3]Val7?, 3-174
- ColorBarsPassCh[1..3]Val8?, 3-175
- ColorBarsRefCh[1..3]?, 3-176
- ColorBarsRefCh[1..3]Val1?, 3-177
- ColorBarsRefCh[1..3]Val2?, 3-178
- ColorBarsRefCh[1..3]Val3?, 3-179
- ColorBarsRefCh[1..3]Val4?, 3-180
- ColorBarsRefCh[1..3]Val5?, 3-181
- ColorBarsRefCh[1..3]Val6?, 3-182
- ColorBarsRefCh[1..3]Val7?, 3-183
- ColorBarsRefCh[1..3]Val8?, 3-184
- ColorBarsRelCh[1..3]?, 3-185
- ColorBarsRelCh[1..3]Val1?, 3-186
- ColorBarsRelCh[1..3]Val2?, 3-187
- ColorBarsRelCh[1..3]Val3?, 3-188
- ColorBarsRelCh[1..3]Val4?, 3-189
- ColorBarsRelCh[1..3]Val5?, 3-190
- ColorBarsRelCh[1..3]Val6?, 3-191
- ColorBarsRelCh[1..3]Val7?, 3-192
- ColorBarsRelCh[1..3]Val8?, 3-193
- ColorBarsRelmVCh[1..3]?, 2-46
- ColorBarsRelmVCh[1..3]Val[1..8]?, 2-47
- ColorBarsRelPctCh[1..3]?, 3-194
- ColorBarsRelPctCh[1..3]Val1?, 3-195
- ColorBarsRelPctCh[1..3]Val2?, 3-196
- ColorBarsRelPctCh[1..3]Val3?, 3-197
- ColorBarsRelPctCh[1..3]Val4?, 3-198
- ColorBarsRelPctCh[1..3]Val5?, 3-199
- ColorBarsRelPctCh[1..3]Val6?, 3-200
- ColorBarsRelPctCh[1..3]Val7?, 3-201
- ColorBarsRelPctCh[1..3]Val8?, 3-202
- ColorBarsRelPctmVCh[1..3]?, 2-48
- ColorBarsRelPctmVCh[1..3]Val[1..8]?, 2-49
- ColorBarsSet, 2-50, 3-203
- ColorBarsStatus?, 2-51, 3-204
- ColorSpace, 2-52

Commands, 2-17, 3-36

See also Remote commands

Compatibility, VM5000 option HD and SD to VM5000HD, 1-5

Configuration commands, 1-5, 2-1, 3-1

D

DefaultSettings, 2-53, 3-205

DetectedFormat?, 2-54

Display

Minimized, 2-55

NoiseSpectrum, 2-55

None, 2-55, 3-206

Picture, 2-55, 3-206

Vectorscope, 2-55

E

EmbedScreenCaptureSet, 3-207

Error, 2-56

Execute, 2-57, 3-208

F

FieldSelect, 2-58

Format, 2-59, 3-209

FrequencyResponseTime, 2-76

FrequencyResponseAverage, 2-61

FrequencyResponseCh[1..3]?, 2-62

FrequencyResponseCh[1..3]Val[1..5]?, 2-63

FrequencyResponseFilterBW, 2-64

FrequencyResponseFreq?, 2-65

FrequencyResponseLine, 2-66

FrequencyResponseMeasLocation

Freq422, 2-67

Freq444, 2-67

Time, 2-67

FrequencyResponseMultiLineEnd, 2-68

FrequencyResponseMultiLineStart, 2-69

FrequencyResponsePassCh[1..3]?, 2-70

FrequencyResponsePassCh[1..3]Val[1..5]?, 2-71

FrequencyResponseRelCh[1..3]?, 2-72

FrequencyResponseRelCh[1..3]Val[1..5]?, 2-73

FrequencyResponseSet, 2-74

FrequencyResponseStatus?, 2-75

G

GPIO commands. *See* Remote commands

H

HSyncAll?, 3-212

HSyncAverage, 3-213

HSyncFallTime?, 3-214

HSyncFrequency?, 3-215

HSyncJitterAccumulatedTime?, 2-78

HSyncJitterAll?, 2-77, 3-216

HSyncJitterAverage, 2-79

HSyncJitterDemarcFreq, 2-80

HSyncJitterInputSetup, 2-81

HSyncJitterLine, 3-217

HSyncJitterMaxAll?, 3-218

HSyncJitterMaxFreqDriftRate?, 2-82

HSyncJitterMaxFreqOffset?, 2-83

HSyncJitterMaxPixelClock?, 3-219

HSyncJitterMaxTime?, 3-220

HSyncJitterMinAll?, 3-221

HSyncJitterMinFreqDriftRate?, 2-84

HSyncJitterMinFreqOffset?, 2-85

HSyncJitterMinPixelClock?, 3-222

HSyncJitterMinTime?, 3-223

HSyncJitterNegPeak?, 2-86

HSyncJitterNegPeakProbability?, 2-87

HSyncJitterNumLines, 2-88

HSyncJitterPassAccumulatedTime?, 2-90

HSyncJitterPassAll?, 2-89, 3-224

HSyncJitterPassMaxFreqDriftRate?, 2-91

HSyncJitterPassMaxFreqOffset?, 2-92

HSyncJitterPassMinFreqDriftRate?, 2-93

HSyncJitterPassMinFreqOffset?, 2-94

HSyncJitterPassNegPeak?, 2-95

HSyncJitterPassNegPeakProbability?, 2-96

HSyncJitterPassPixelClock?, 3-225

HSyncJitterPassPosPeak?, 2-97

HSyncJitterPassPosPeakProbability?, 2-98

HSyncJitterPassRMSJitter?, 2-99

HSyncJitterPassTime?, 3-226

HSyncJitterPixelClock?, 3-227

HSyncJitterPosPeak?, 2-100

HSyncJitterPosPeakProbability?, 2-101

HSyncJitterRefAll?, 3-228

HSyncJitterRefPixelClock?, 3-229

HSyncJitterRefTime?, 3-230

HSyncJitterRelAccumulatedTime?, 2-102

HSyncJitterRelAll?, 3-231

HSyncJitterRelMaxFreqDriftRate?, 2-103

HSyncJitterRelMaxFreqOffset?, 2-104

HSyncJitterRelMinFreqDriftRate?, 2-105

HSyncJitterRelMinFreqOffset?, 2-106

HSyncJitterRelNegPeak?, 2-107

HSyncJitterRelNegPeakProbability?, 2-108

HSyncJitterRelPixelClock?, 3-232
HSyncJitterRelPosPeak?, 2-109
HSyncJitterRelPosPeakProbability?, 2-110
HSyncJitterRelRMSJitter?, 2-111
HSyncJitterRelTime?, 3-233
HSyncJitterRMSJitter?, 2-112
HSyncJitterSet, 3-234
HSyncJitterSet?, 2-113
HSyncJitterStatus?, 2-114, 3-235
HSyncJitterTime?, 3-236
HSyncJitterWanderDemarcFreq, 2-115
HSyncLine?, 3-237
HSyncLogicLevel0Value1?, 3-238
HSyncLogicLevel0Value2?, 3-239
HSyncLogicLevel1Value1?, 3-240
HSyncLogicLevel1Value2?, 3-241
HSyncMaxAll?, 3-242
HSyncMaxFallTime?, 3-243
HSyncMaxFrequency?, 3-244
HSyncMaxLogicLevel0Value1?, 3-245
HSyncMaxLogicLevel0Value2?, 3-246
HSyncMaxLogicLevel1Value1?, 3-247
HSyncMaxLogicLevel1Value2?, 3-248
HSyncMaxMonotonicFall?, 3-249
HSyncMaxMonotonicRise?, 3-250
HSyncMaxOvershoot?, 3-251
HSyncMaxOvershootSettlingTime?, 3-252
HSyncMaxPolarity?, 3-253
HSyncMaxPulseWidth?, 3-254
HSyncMaxRiseTime?, 3-255
HSyncMaxSyncPeriod?, 3-256
HSyncMaxUndershoot?, 3-257
HSyncMaxUndershootSettlingTime?, 3-258
HSyncMinAll?, 3-259
HSyncMinFallTime?, 3-260
HSyncMinFrequency?, 3-261
HSyncMinLogicLevel0Value1?, 3-262
HSyncMinLogicLevel0Value2?, 3-263
HSyncMinLogicLevel1Value1?, 3-264
HSyncMinLogicLevel1Value2?, 3-265
HSyncMinMonotonicFall?, 3-266
HSyncMinMonotonicRise?, 3-267
HSyncMinOvershoot?, 3-268
HSyncMinOvershootSettlingTime?, 3-269
HSyncMinPolarity?, 3-270
HSyncMinPulseWidth?, 3-271
HSyncMinRiseTime?, 3-272
HSyncMinSyncPeriod?, 3-273
HSyncMinUndershoot?, 3-274
HSyncMinUndershootSettlingTime?, 3-275
HSyncMonotonicFall?, 3-276
HSyncMonotonicRise?, 3-277
HSyncMultiLineEnd, 3-278
HSyncMultiLineStart, 3-279
HSyncOvershoot?, 3-280
HSyncOvershootSettlingTime?, 3-281
HSyncPassAll?, 3-282
HSyncPassFallTime?, 3-283
HSyncPassFrequency?, 3-284
HSyncPassLogicLevel0Value1?, 3-285
HSyncPassLogicLevel0Value2?, 3-286
HSyncPassLogicLevel1Value1?, 3-287
HSyncPassLogicLevel1Value2?, 3-288
HSyncPassMonotonicFall?, 3-289
HSyncPassMonotonicRise?, 3-290
HSyncPassOvershoot?, 3-291
HSyncPassOvershootSettlingTime?, 3-292
HSyncPassPolarity?, 3-293
HSyncPassRiseTime?, 3-295
HSyncPassSyncPeriod?, 3-296
HSyncPassSyncPulseWidth?, 3-294
HSyncPassUndershoot?, 3-297
HSyncPassUndershootSettlingTime?, 3-298
HSyncPolarity?, 3-299
HSyncPulseWidth?, 3-300
HSyncRefAll?, 3-301
HSyncRefFallTime?, 3-302
HSyncRefFrequency?, 3-303
HSyncRefLogicLevel0Value1?, 3-304
HSyncRefLogicLevel0Value2?, 3-305
HSyncRefLogicLevel1Value1?, 3-306
HSyncRefLogicLevel1Value2?, 3-307
HSyncRefMonotonicFall?, 3-308
HSyncRefMonotonicRise?, 3-309
HSyncRefOvershoot?, 3-310
HSyncRefOvershootSettlingTime?, 3-311
HSyncRefPolarity?, 3-312
HSyncRefPulseWidth?, 3-313
HSyncRefRiseTime?, 3-315
HSyncRefSyncPeriod?, 3-314
HSyncRefUndershoot?, 3-316
HSyncRefUndershootSettlingTime?, 3-317
HSyncRelAll?, 3-318
HSyncRelFallTime?, 3-319
HSyncRelFrequency?, 3-320
HSyncRelLogicLevel0Value1?, 3-321
HSyncRelLogicLevel0Value2?, 3-322
HSyncRelLogicLevel1Value1?, 3-323
HSyncRelLogicLevel1Value2?, 3-324
HSyncRelMonotonicFall?, 3-325
HSyncRelMonotonicRise?, 3-326
HSyncRelOvershoot?, 3-327
HSyncRelOvershootSettlingTime?, 3-328
HSyncRelPolarity?, 3-329
HSyncRelPulseWidth?, 3-330
HSyncRelRiseTime?, 3-331

HSyncRelSyncPeriod?, 3-332
 HSyncRelUndershoot?, 3-333
 HSyncRelUndershootSettlingTime?, 3-334
 HSyncRiseTime?, 3-335
 HSyncSet, 3-336
 HSyncStatus?, 3-337
 HSyncSyncPeriod?, 3-338
 HSyncUndershoot?, 3-339
 HSyncUndershootSettlingTime?, 3-340
 HTimingAddressableVideoCh[1..3]?, 3-342
 HTimingAll?, 3-341
 HTimingAverage, 3-343
 HTimingBackPorchCh[1..3]?, 3-344
 HTimingFrontPorchCh[1..3]?, 3-345
 HTimingLeftBorderCh[1..3]?, 3-346
 HTimingLine, 3-347
 HTimingMaxAddressableVideoCh[1..3]?, 3-349
 HTimingMaxAll?, 3-348
 HTimingMaxBackPorchCh[1..3]?, 3-350
 HTimingMaxFrontPorchCh[1..3]?, 3-351
 HTimingMaxLeftBorderCh[1..3]?, 3-352
 HTimingMaxPixelClock?, 3-353
 HTimingMaxRightBorderCh[1..3]?, 3-354
 HTimingMaxSyncPulseWidth?, 3-355
 HTimingMinAddressableVideoCh[1..3]?, 3-357
 HTimingMinAll?, 3-356
 HTimingMinBackPorchCh[1..3]?, 3-358
 HTimingMinFrontPorchCh[1..3]?, 3-359
 HTimingMinLeftBorderCh[1..3]?, 3-360
 HTimingMinPixelClock?, 3-361
 HTimingMinRightBorderCh[1..3]?, 3-362
 HTimingMinSyncPulseWidth?, 3-363
 HTimingMultiLineEnd, 3-364
 HTimingMultiLineStart, 3-365
 HTimingPassAddressableVideoCh[1..3]?, 3-367
 HTimingPassAll?, 3-366
 HTimingPassBackPorchCh[1..3]?, 3-368
 HTimingPassFrontPorchCh[1..3]?, 3-369
 HTimingPassLeftBorderCh[1..3]?, 3-370
 HTimingPassPixelClock?, 3-371
 HTimingPassRightBorderCh[1..3]?, 3-372
 HTimingPassSyncPulseWidth?, 3-373
 HTimingPixelClock?, 3-374
 HTimingRefAddressableVideoCh[1..3]?, 3-376
 HTimingRefAll?, 3-375
 HTimingRefBackPorchCh[1..3]?, 3-377
 HTimingRefFrontPorchCh[1..3]?, 3-378
 HTimingRefLeftBorderCh[1..3]?, 3-379
 HTimingRefPixelClock?, 3-380
 HTimingRefRightBorderCh[1..3]?, 3-381
 HTimingRefSyncPulseWidth?, 3-382
 HTimingRelAddressableVideoCh[1..3]?, 3-384
 HTimingRelAll?, 3-383

HTimingRelBackPorchCh[1..3]?, 3-385
 HTimingRelFrontPorchCh[1..3]?, 3-386
 HTimingRelLeftBorderCh[1..3]?, 3-387
 HTimingRelPixelClock?, 3-388
 HTimingRelRightBorderCh[1..3]?, 3-389
 HTimingRelSyncPulseWidth?, 3-390
 HTimingRightBorderCh[1..3]?, 3-391
 HTimingSet, 3-392
 HTimingStatus?, 3-393
 HTimingSyncPulseWidth?, 3-394

I

ID?, 2-116, 3-395

L

LevelsAverage, 2-117
 LevelsCh[1..3]?, 2-127
 LevelsCh[1..3]Val[1..8]?, 2-128
 LevelsConfig[1..8], 2-118
 LevelsConfigRef, 2-119
 LevelsLine, 2-120
 LevelsMultiLineEnd, 2-121
 LevelsMultiLineStart, 2-122
 LevelsPassCh[1..3]?, 2-123
 LevelsPassCh[1..3]Level[1..8]?, 2-124
 LevelsRelCh[1..3]?, 2-125
 LevelsRelCh[1..3]Level[1..8]?, 2-126
 LevelsSet, 2-129
 LevelsStatus?, 2-130
 LimitFileLoad, 2-131, 3-396
 LimitSet, 2-132, 3-397
 LinearityAverage, 3-398
 LinearityDNLAtStepNumberCh[1..3]?, 3-399
 LinearityDNLCh[1..3]?, 3-400
 LinearityINLAtStepNumberCh[1..3]?, 3-401
 LinearityINLCh[1..3]?, 3-402
 LinearityLine, 3-403
 LinearityMaxDNLCh[1..3]?, 3-404
 LinearityMaxINLCh[1..3]?, 3-405
 LinearityMaxMonotonicCh[1..3]?, 3-406
 LinearityMaxResolutionCh[1..3]?, 3-407
 LinearityMinDNLCh[1..3]?, 3-408
 LinearityMinINLCh[1..3]?, 3-409
 LinearityMinMonotonicCh[1..3]?, 3-410
 LinearityMinResolutionCh[1..3]?, 3-411
 LinearityMonotonicAtStepNumberCh[1..3]?, 3-412
 LinearityMonotonicCh[1..3]?, 3-413
 LinearityMultiLineEnd, 3-414
 LinearityMultiLineStart, 3-415
 LinearityPassAll?, 3-416

LinearityPassDNLCh[1..3]?, 3-417
 LinearityPassINLCh[1..3]?, 3-418
 LinearityPassMonotonicCh[1..3]?, 3-419
 LinearityPassResolutionCh[1..3]?, 3-420
 LinearityRefDNLCh[1..3]?, 3-421
 LinearityRefINLCh[1..3]?, 3-422
 LinearityRefMonotonicCh[1..3]?, 3-423
 LinearityRefResolutionCh[1..3]?, 3-424
 LinearityRelDNLCh[1..3]?, 3-425
 LinearityRelINLCh[1..3]?, 3-426
 LinearityRelMonotonicCh[1..3]?, 3-427
 LinearityRelResolutionCh[1..3]?, 3-428
 LinearityResolutionCh[1..3]?, 3-429
 LinearitySet, 3-430
 LinearityStatus?, 3-431
 LineSelectSet, 2-133
 LogErrors, 2-134, 3-432
 LumaLevelsAll?, 3-434
 LumaLevelsAmpMaxCh[1..3]?, 3-435
 LumaLevelsAmpMinCh[1..3]?, 3-436
 LumaLevelsAverage, 3-433
 LumaLevelsLine, 3-437
 LumaLevelsMaxAll?, 3-438
 LumaLevelsMaxAmpMaxCh[1..3]?, 3-439
 LumaLevelsMaxAmpMinCh[1..3]?, 3-440
 LumaLevelsMinAll?, 3-441
 LumaLevelsMinAmpMaxCh[1..3]?, 3-442
 LumaLevelsMinAmpMinCh[1..3]?, 3-443
 LumaLevelsMultiLineEnd, 3-444
 LumaLevelsMultiLineStart, 3-445
 LumaLevelsPassAll?, 3-446
 LumaLevelsPassAmpMaxCh[1..3]?, 3-447
 LumaLevelsPassAmpMinCh[1..3]?, 3-448
 LumaLevelsRefAll?, 3-449
 LumaLevelsRefAmpMaxCh[1..3]?, 3-450
 LumaLevelsRefAmpMinCh[1..3]?, 3-451
 LumaLevelsRelAll?, 3-452
 LumaLevelsRelAmpMaxCh[1..3]?, 3-453
 LumaLevelsRelAmpMinCh[1..3]?, 3-454
 LumaLevelsRelPctAll?, 3-455
 LumaLevelsRelPctAmpMaxCh[1..3]?, 3-456, 3-457
 LumaLevelsSet, 3-458
 LumaLevelsStatus?, 3-459

M

Miscellaneous commands, 2-2, 2-16
 MultiburstAmpdBCh[1..3]?, 2-135
 MultiburstAmpdBCh[1..3]Val[1..6]?, 2-136
 MultiburstAverage, 2-137
 MultiburstFlagmVCh[1..3]?, 2-138
 MultiburstFreqCh[1..3]?, 2-139

MultiburstFreqCh[1..3]Val[1..6]?, 2-140
 MultiburstLine, 2-141
 MultiburstMultiLineEnd, 2-142
 MultiburstMultiLineStart, 2-143
 MultiburstPassAmpdBCh[1..3]?, 2-144
 MultiburstPassAmpdBCh[1..3]Val[1..6]?, 2-145
 MultiburstPassFlagmVCh[1..3]?, 2-146
 MultiburstPassFreqCh[1..3]?, 2-147
 MultiburstPassFreqCh[1..3]Val[1..6]?, 2-148
 MultiburstRelAmpdBCh[1..3]?, 2-149
 MultiburstRelAmpdBCh[1..3]Val[1..6]?, 2-150
 MultiburstRelFlagmVCh[1..3]?, 2-151
 MultiburstRelFreqCh[1..3]?, 2-152
 MultiburstRelFreqCh[1..3]Val[1..6]?, 2-153
 MultiburstSet, 2-154
 MultiburstStatus?, 2-155

N

Noise500MHzFilterSet, 3-460
 NoiseAll?, 3-461
 NoiseAmpdBCh[1..3]?, 2-156
 NoiseAmpmVCh[1..3]?, 2-157
 NoiseAverage, 2-158, 3-462
 NoiseBW, 2-159
 NoiseCursorPos, 2-160
 NoisedBCh[1..3]?, 3-463
 NoiseFilter, 2-165
 NoiseFreqResolution?, 2-161
 NoiseIrCh[1..3]?, 3-464
 NoiseLine, 2-166, 3-465
 NoiseMaxAll?, 3-466
 NoiseMaxdBCh[1..3]?, 3-467
 NoiseMaxIrCh[1..3]?, 3-468
 NoiseMaxmVCh[1..3]?, 3-469
 NoiseMinAll?, 3-470
 NoiseMindBCh[1..3]?, 3-471
 NoiseMinIrCh[1..3]?, 3-472
 NoiseMinmVCh[1..3]?, 3-473
 NoiseMultiLineEnd, 2-162
 NoiseMultiLineStart, 2-163
 NoisemVCh[1..3]?, 3-474
 NoisePassAll?, 3-475
 NoisePassdBCh[1..3]?, 2-167, 3-476
 NoisePassIrCh[1..3]?, 3-477
 NoisePassmVCh[1..3]?, 2-168, 3-478
 NoiseRefAll?, 3-479
 NoiseRefdBCh[1..3]?, 3-480
 NoiseRefIrCh[1..3]?, 3-481
 NoiseRefmVCh[1..3]?, 3-482
 NoiseRelAll?, 3-483
 NoiseRelAmpdBCh[1..3]?, 2-169

NoiseRelAmpmVCh[1..3]?, 2-170
 NoiseRelDBCh[1..3]?, 3-484
 NoiseRelIrCh[1..3]?, 3-485
 NoiseRelmVCh[1..3]?, 3-486
 NoiseSet, 2-171, 3-487
 NoiseStatus?, 2-172, 3-488
 NoiseTimeWindowCursors, 2-164
 NonLinearityAverage, 2-173
 NonLinearityLine, 2-174
 NonLinearityMultiLineEnd, 2-175
 NonLinearityMultiLineStart, 2-176
 NonLinearityPassCh[1..3]?, 2-177
 NonLinearityPassCh[1..3]Max?, 2-178
 NonLinearityPassCh[1..3]Val[1..5]?, 2-179
 NonLinearityPctCh[1..3]?, 2-180
 NonLinearityPctCh[1..3]Max?, 2-181
 NonLinearityPctCh[1..3]Val[1..5]?, 2-182
 NonLinearityRelPctCh[1..3]?, 2-183
 NonLinearityRelPctCh[1..3]Max?, 2-184
 NonLinearityRelPctCh[1..3]Val[1..5]?, 2-185
 NonLinearitySet, 2-186
 NonLinearityStatus?, 2-187

O

OPComplete, 2-188, 3-489

P

PassFailStatus?, 2-190
 PixAspectRatio
 16x9, 2-191
 4x3, 2-191
 Auto, 2-191
 PixLine, 2-192
 PopupWarnings, 2-193, 3-490
 Programming the VM5000, A-1

R

RecallSettings, 2-194, 3-491
 ReferenceFileLoad, 2-195, 3-492
 ReferenceFileSave, 2-196, 3-493
 ReferenceSet, 2-197, 3-494
 Remote commands, 1-1, 2-1, 3-1
 command descriptions, 2-17, 3-36
 startup and exit, 1-4
 ReportFormatType, 3-495
 ReportGenerate, 2-198, 3-496
 ReportMeasurements, 2-199, 3-497
 Reports commands, 2-3, 3-3, 3-4, 3-5, 3-11

ReportString, 2-200, 3-498
 Results commands, 2-5, 3-11
 Run commands, 2-15, 3-6, 3-16, 3-21, 3-26, 3-31
 RunMode, 2-201, 3-499

S

SaveSettings, 2-202, 3-500
 SelectLine, 3-501
 Serial, command descriptions, 2-17, 3-36
 Settings commands, 2-15
 Setup commands, 2-15
 SetupAndOrRun, 2-203, 3-502
 ShortTimeDistortionAverage, 2-204
 ShortTimeDistortionCh[1..3]?, 2-205
 ShortTimeDistortionCh[1..3]Val[1..6]?, 2-206
 ShortTimeDistortionK2T?, 2-207
 ShortTimeDistortionLine, 2-208
 ShortTimeDistortionMultiLineEnd, 2-209
 ShortTimeDistortionMultiLineStart, 2-210
 ShortTimeDistortionPassCh[1..3]?, 2-211
 ShortTimeDistortionPassCh[1..3]Val[1..6]?, 2-212
 ShortTimeDistortionPassK2T?, 2-213
 ShortTimeDistortionRelCh[1..3]?, 2-214
 ShortTimeDistortionRelCh[1..3]Val[1..6]?, 2-215
 ShortTimeDistortionRelK2T?, 2-216
 ShortTimeDistortionSet, 2-217
 ShortTimeDistortionStatus?, 2-218
 SpatialDistortionAll?, 2-219
 SpatialDistortionAverage, 2-220
 SpatialDistortionBMPRefFile, 2-221
 SpatialDistortionBottomCrop?, 2-222
 SpatialDistortionFirstActiveLine?, 2-223
 SpatialDistortionHEnd?, 2-224
 SpatialDistortionHOffset?, 2-225
 SpatialDistortionHScaling?, 2-226
 SpatialDistortionHStart?, 2-227
 SpatialDistortionLastActiveLine?, 2-228
 SpatialDistortionLeftCrop?, 2-229
 SpatialDistortionPassAll?, 2-230
 SpatialDistortionPassBottomCrop?, 2-231
 SpatialDistortionPassFirstActiveLine?, 2-232
 SpatialDistortionPassHEnd?, 2-233
 SpatialDistortionPassHOffset?, 2-234
 SpatialDistortionPassHScaling?, 2-235
 SpatialDistortionPassHStart?, 2-236
 SpatialDistortionPassLastActiveLine?, 2-237
 SpatialDistortionPassLeftCrop?, 2-238
 SpatialDistortionPassRightCrop?, 2-239
 SpatialDistortionPassTopCrop?, 2-240
 SpatialDistortionPassVOffset?, 2-241
 SpatialDistortionPassVScaling?, 2-242

SpatialDistortionRelAll?, 2-243
SpatialDistortionRelBottomCrop?, 2-244
SpatialDistortionRelFirstActiveLine?, 2-245
SpatialDistortionRelHEnd?, 2-246
SpatialDistortionRelHOffset?, 2-247
SpatialDistortionRelHScaling?, 2-248
SpatialDistortionRelHStart?, 2-249
SpatialDistortionRelLastActiveLine?, 2-250
SpatialDistortionRelLeftCrop?, 2-251
SpatialDistortionRelRightCrop?, 2-252
SpatialDistortionRelTopCrop?, 2-253
SpatialDistortionRelVOffset?, 2-255
SpatialDistortionRelVScaling?, 2-254
SpatialDistortionRightCrop?, 2-256
SpatialDistortionSet, 2-257
SpatialDistortionStatus?, 2-258
SpatialDistortionTopCrop?, 2-259
SpatialDistortionVOffset?, 2-260
SpatialDistortionVScaling?, 2-261
StopOnError, 2-262, 3-503
SyncAverage, 2-263
SyncLevelsmV?, 2-264
SyncLevelsmVVal[1..3]?, 2-265
SyncLine, 2-266
SyncMeasuredOnCh1Set, 2-267
SyncMultiLineEnd, 2-268
SyncMultiLineStart, 2-269
SyncPassLevelsmV?, 2-270
SyncPassLevelsmVVal[1..3]?, 2-271
SyncPassTimes?, 2-272
SyncPassTimesVal[1..10]?, 2-273
SyncPolarityDetectSet, 3-504
SyncRelLevelsmV?, 2-274
SyncRelLevelsmVVal[1..3]?, 2-275
SyncRelTimes?, 2-276
SyncRelTimesVal[1..10]?, 2-277
SyncSet, 2-278
SyncStatus?, 2-279
SyncTimes?, 2-280
SyncTimesVal[1..10]?, 2-281
Syntax, 1-1

T

TimingStandardType, 3-505
Trigger, 2-282

U

UseMIUSet, 3-506
UserFormatDelete, 2-283, 3-507
UserFormatDisplay?, 2-284, 3-508

UserFormatListAll, 2-285, 3-509
UserFormatSave, 2-286, 3-510
UserFormatSet, 2-288, 3-512

V

VectorscopeGrat
601-SD, 2-289
709-HD, 2-289
Auto, 2-289
VectorscopeLine, 2-290
VectorscopeScale
100Pct, 2-291
75Pct, 2-291
Auto, 2-291
VideoTransientAverage, 3-513
VideoTransientLine, 3-514
VideoTransientMaxOvershootCh[1..3]?, 3-515
VideoTransientMaxOvershootSettlingTimeCh[1..3]?,
3-516
VideoTransientMaxUndershootCh[1..3]?, 3-517
VideoTransientMaxUndershootSettlingTimeCh[1..3]?,
3-518
VideoTransientMaxVideoFallTimeCh[1..3]?, 3-519
VideoTransientMaxVideoFallTimePercentageCh[1..3]?,
3-520
VideoTransientMaxVideoRiseTimeCh[1..3]?, 3-521
VideoTransientMaxVideoRiseTimePercentageCh[1..3]?,
3-522
VideoTransientMinOvershootCh[1..3]?, 3-523
VideoTransientMinOvershootSettlingTimeCh[1..3]?,
3-524
VideoTransientMinUndershootCh[1..3]?, 3-525
VideoTransientMinUndershootSettlingTimeCh[1..3]?,
3-526
VideoTransientMinVideoFallTimeCh[1..3]?, 3-527
VideoTransientMinVideoFallTimePercentageCh[1..3]?,
3-528
VideoTransientMinVideoRiseTimeCh[1..3]?, 3-529
VideoTransientMinVideoRiseTimePercentageCh[1..3]?,
3-530
VideoTransientMultiLineEnd, 3-531
VideoTransientMultiLineStart, 3-532
VideoTransientOvershootCh[1..3]?, 3-533
VideoTransientOvershootSettlingTimeCh[1..3]?, 3-534
VideoTransientPassAll?, 3-535
VideoTransientPassOvershootCh[1..3]?, 3-536
VideoTransientPassOvershootSettlingTimeCh[1..3]?,
3-537
VideoTransientPassUndershootCh[1..3]?, 3-538
VideoTransientPassUndershootSettlingTimeCh[1..3]?,
3-539

- VideoTransientPassVideoFallTimeCh[1..3]?, 3-540
- VideoTransientPassVideoFallTimePercentageCh[1..3]?, 3-541
- VideoTransientPassVideoRiseTimeCh[1..3]?, 3-542
- VideoTransientPassVideoRiseTimePercentageCh[1..3]?, 3-543
- VideoTransientRefOvershootCh[1..3]?, 3-544
- VideoTransientRefOvershootSettlingTimeCh[1..3]?, 3-545
- VideoTransientRefUndershootCh[1..3]?, 3-546
- VideoTransientRefUndershootSettlingTimeCh[1..3]?, 3-547
- VideoTransientRefVideoFallTimeCh[1..3]?, 3-548
- VideoTransientRefVideoFallTimePercentageCh[1..3]?, 3-549
- VideoTransientRefVideoRiseTimeCh[1..3]?, 3-550
- VideoTransientRefVideoRiseTimePercentageCh[1..3]?, 3-551
- VideoTransientRelOvershootCh[1..3]?, 3-552
- VideoTransientRelOvershootSettlingTimeCh[1..3]?, 3-553
- VideoTransientRelUndershootCh[1..3]?, 3-554
- VideoTransientRelUndershootSettlingTimeCh[1..3]?, 3-555
- VideoTransientRelVideoFallTimeCh[1..3]?, 3-556
- VideoTransientRelVideoFallTimePercentageCh[1..3]?, 3-557
- VideoTransientRelVideoRiseTimeCh[1..3]?, 3-558
- VideoTransientRelVideoRiseTimePercentageCh[1..3]?, 3-559
- VideoTransientSet, 3-560
- VideoTransientStatus?, 3-561
- VideoTransientUndershootCh[1..3]?, 3-562
- VideoTransientUndershootSettlingTimeCh[1..3]?, 3-563
- VideoTransientVideoFallTimeCh[1..3]?, 3-564
- VideoTransientVideoFallTimePercentageCh[1..3]?, 3-565
- VideoTransientVideoRiseTimeCh[1..3]?, 3-566
- VideoTransientVideoRiseTimePercentageCh[1..3]?, 3-567
- VSyncAll?, 2-292, 3-568
- VSyncAverage, 2-294, 3-569
- VSyncBroadPulseEnd?, 2-295
- VSyncBroadPulseStart?, 2-296
- VSyncEqPulseWidth?, 2-297
- VSyncFallTime?, 3-570
- VSyncFrequency?, 3-571
- VSyncLogicLevel0Value1?, 3-572
- VSyncLogicLevel0Value2?, 3-573
- VSyncLogicLevel1Value1?, 3-574
- VSyncLogicLevel1Value2?, 3-575
- VSyncMaxAll?, 3-576
- VSyncMaxFallTime?, 3-577
- VSyncMaxFrequency?, 3-578
- VSyncMaxLogicLevel0Value1?, 3-579
- VSyncMaxLogicLevel0Value2?, 3-580
- VSyncMaxLogicLevel1Value1?, 3-581
- VSyncMaxLogicLevel1Value2?, 3-582
- VSyncMaxMonotonicFall?, 3-583
- VSyncMaxMonotonicRise?, 3-584
- VSyncMaxOvershoot?, 3-585
- VSyncMaxOvershootSettlingTime?, 3-586
- VSyncMaxPolarity?, 3-587
- VSyncMaxPulseWidth?, 3-588
- VSyncMaxRiseTime?, 3-589
- VSyncMaxSyncPeriod?, 3-590
- VSyncMaxUndershoot?, 3-591
- VSyncMaxUndershootSettlingTime?, 3-592
- VSyncMinAll?, 3-593
- VSyncMinFallTime?, 3-594
- VSyncMinFrequency?, 3-595
- VSyncMinLogicLevel0Value1?, 3-596
- VSyncMinLogicLevel0Value2?, 3-597
- VSyncMinLogicLevel1Value1?, 3-598
- VSyncMinLogicLevel1Value2?, 3-599
- VSyncMinMonotonicFall?, 3-600
- VSyncMinMonotonicRise?, 3-601
- VSyncMinOvershoot?, 3-602
- VSyncMinOvershootSettlingTime?, 3-603
- VSyncMinPolarity?, 3-604
- VSyncMinPulseWidth?, 3-605
- VSyncMinRiseTime?, 3-606
- VSyncMinSyncPeriod?, 3-607
- VSyncMinUndershoot?, 3-608
- VSyncMinUndershootSettlingTime?, 3-609
- VSyncMonotonicFall?, 3-610
- VSyncMonotonicRise?, 3-611
- VSyncOvershoot?, 3-612
- VSyncOvershootSettlingTime?, 3-613
- VSyncPassAll?, 2-298, 3-614
- VSyncPassBroadPulseEnd?, 2-300
- VSyncPassBroadPulseStart?, 2-301
- VSyncPassEqPulseWidth?, 2-302
- VSyncPassFallTime?, 3-615
- VSyncPassFrequency?, 3-616
- VSyncPassLogicLevel0Value1?, 3-617
- VSyncPassLogicLevel0Value2?, 3-618
- VSyncPassLogicLevel1Value1?, 3-619
- VSyncPassLogicLevel1Value2?, 3-620
- VSyncPassMonotonicFall?, 3-621
- VSyncPassMonotonicRise?, 3-622
- VSyncPassOvershoot?, 3-623
- VSyncPassOvershootSettlingTime?, 3-624

VSyncPassPeriod?, 2-303
VSyncPassPolarity?, 3-625
VSyncPassPreEqDuration?, 2-304
VSyncPassPulseWidth?, 3-626
VSyncPassRiseTime?, 3-627
VSyncPassSerrPulseWidth?, 2-305
VSyncPassSyncPeriod?, 3-628
VSyncPassUndershoot?, 3-629
VSyncPassUndershootSettlingTime?, 3-630
VSyncPassVBlankDuration?, 2-306
VSyncPassVBlankPreEq?, 2-307
VSyncPassVSyncDuration?, 2-308
VSyncPeriod?, 2-309
VSyncPolarity?, 3-631
VSyncPreEqDuration?, 2-310
VSyncPulseWidth?, 3-632
VSyncRefAll?, 3-633
VSyncRefFallTime?, 3-634
VSyncRefFrequency?, 3-635
VSyncRefLogicLevel0Value1?, 3-636
VSyncRefLogicLevel0Value2?, 3-637
VSyncRefLogicLevel1Value1?, 3-638
VSyncRefLogicLevel1Value2?, 3-639
VSyncRefMonotonicFall?, 3-640
VSyncRefMonotonicRise?, 3-641
VSyncRefOvershoot?, 3-642
VSyncRefOvershootSettlingTime?, 3-643
VSyncRefPolarity?, 3-644
VSyncRefPulseWidth?, 3-645
VSyncRefRiseTime?, 3-646
VSyncRefSyncPeriod?, 3-647
VSyncRefUndershoot?, 3-648
VSyncRefUndershootSettlingTime?, 3-649
VSyncRelAll?, 2-311, 3-650
VSyncRelBroadPulseEnd?, 2-313
VSyncRelBroadPulseStart?, 2-314
VSyncRelEqPulseWidth?, 2-315
VSyncRelFallTime?, 3-651
VSyncRelFieldPeriod?, 2-316
VSyncRelFrequency?, 3-652
VSyncRelLogicLevel0Value1?, 3-653, 3-656
VSyncRelLogicLevel0Value2?, 3-654
VSyncRelLogicLevel1Value1?, 3-655
VSyncRelMonotonicFall?, 3-657
VSyncRelMonotonicRise?, 3-658
VSyncRelOvershoot?, 3-659
VSyncRelOvershootSettlingTime?, 3-660
VSyncRelPolarity?, 3-661
VSyncRelPreEqDuration?, 2-317
VSyncRelPulseWidth?, 3-662
VSyncRelRiseTime?, 3-663
VSyncRelSerrPulseWidth?, 2-318
VSyncRelSyncPeriod?, 3-664
VSyncRelUndershoot?, 3-665
VSyncRelUndershootSettlingTime?, 3-666
VSyncRelVBlankDuration?, 2-319
VSyncRelVBlankPreEq?, 2-320
VSyncRelVSyncDuration?, 2-321
VSyncRiseTime?, 3-667
VSyncSerrPulseWidth?, 2-322
VSyncSet, 2-323, 3-668
VSyncStatus?, 2-324, 3-669
VSyncSyncPeriod?, 3-670
VSyncUndershoot?, 3-671
VSyncUndershootSettlingTime?, 3-672
VSyncVBlankDuration?, 2-325
VSyncVBlankPreEq?, 2-326
VSyncVSyncDuration?, 2-327
VTimingAddressableLinesCh[1..3]?, 3-673
VTimingAll?, 3-674
VTimingAverage, 3-675
VTimingBackPorchCh[1..3]?, 3-676
VTimingBottomBorderCh[1..3]?, 3-677
VTimingFrontPorchCh[1..3]?, 3-678
VTimingMaxAddressableLinesCh[1..3]?, 3-679
VTimingMaxAll?, 3-680
VTimingMaxBackPorchCh[1..3]?, 3-681
VTimingMaxBottomBorderCh[1..3]?, 3-682
VTimingMaxFrontPorchCh[1..3]?, 3-683
VTimingMaxSyncPulseWidth?, 3-684
VTimingMaxTopBorderCh[1..3]?, 3-685
VTimingMinAddressableLinesCh[1..3]?, 3-686
VTimingMinAll?, 3-687
VTimingMinBackPorchCh[1..3]?, 3-688
VTimingMinBottomBorderCh[1..3]?, 3-689
VTimingMinFrontPorchCh[1..3]?, 3-690
VTimingMinSyncPulseWidth?, 3-691
VTimingMinTopBorderCh[1..3]?, 3-692
VTimingPassAddressableLinesCh[1..3]?, 3-693
VTimingPassAll?, 3-694
VTimingPassBackPorchCh[1..3]?, 3-695
VTimingPassBottomBorderCh[1..3]?, 3-696
VTimingPassFrontPorchCh[1..3]?, 3-697
VTimingPassSyncPulseWidth?, 3-698
VTimingPassTopBorderCh[1..3]?, 3-699
VTimingRefAddressableLinesCh[1..3]?, 3-700
VTimingRefAll?, 3-701
VTimingRefBackPorchCh[1..3]?, 3-702
VTimingRefBottomBorderCh[1..3]?, 3-703
VTimingRefFrontPorchCh[1..3]?, 3-704
VTimingRefSyncPulseWidth?, 3-705
VTimingRefTopBorderCh[1..3]?, 3-706
VTimingRelAddressableLinesCh[1..3]?, 3-707
VTimingRelAll?, 3-708
VTimingRelBackPorchCh[1..3]?, 3-709
VTimingRelBottomBorderCh[1..3]?, 3-710

VTimingRelFrontPorchCh[1..3]?, 3-711
VTimingRelSyncPulseWidth?, 3-712
VTimingRelTopBorderCh[1..3]?, 3-713
VTimingSet, 3-714
VTimingStatus?, 3-715
VTimingSyncPulseWidth?, 3-716
VTimingTopBorderCh[1..3]?, 3-717

W

Warning, 2-328
WarningReportingMeasure, 2-329, 3-718
WarningReportingResults, 2-330, 3-719
WarningReportingSignal, 2-331, 3-720

