

TLA Family Selection Guide



▶ TLA60X/61X/62X.



▶ TLA715.



▶ TLA721.

Applications

	TLA60X/61X/62X	TLA715	TLA721
Timing and State Analysis	Yes	Yes	Yes
Single-processor/Bus Analysis	Yes	Yes	Yes
Real-time Instruction Trace Analysis	Yes	Yes	Yes
Source Code Debug	Yes	Yes	Yes
Performance Analysis	Yes	Yes	Yes
Multi-processor/Bus Analysis		Yes	Yes
Digital Stimulus and Control		Yes	Yes
Digital Signal Quality Analysis	Yes	Yes	Yes
System Validation			Yes

Features

Logic Analyzer	TLA60X/61X/62X	TLA715	TLA721
Channels	34, 68, 102, 136	34, 68, 102, 136 per module	34, 68, 102, 136 per module
Max Channels per Bus (merged)	136	272	408
Max Channels per Mainframe	136	272	680
Max Channels per System	136	3,264 (with four TLA7XMs)	8,160 (with ten TLA7XMs)
Max Independent Buses per System	1	24 (with four TLA7XMs)	60 (with ten TLA7XMs)
MagniVu Timing (all channels)	500 ps	500 ps	500 ps
State Clock Rate	100 MHz Std. 200 MHz Opt.	100 MHz Std. 200 MHz Opt.	100 MHz Std. 200 MHz Opt.
State Data Rate (half/full channels – requires 200 MHz Opt.)	400 MHz/200 MHz	400 MHz/200 MHz	400 MHz/200 MHz
Simultaneous State & Timing Through Same Probe	Yes	Yes	Yes
Deep Timing (half/full channels)	2 ns/4 ns	2 ns/4 ns	2 ns/4 ns
Memory Depth per (half/full channels with timestamp)	128/64 Kb to 2/1 Mb	128/64 Kb to 128/64 Mb	128/64 Kb to 128/64 Mb
Pattern Generator			
Channels		64	64
Max Channels per Bus (merged)		128	320
Max Channels per Mainframe		128	320
Max Channels per System		1,536 (with four TLA7XMs)	3,840 (with ten TLA7XMs)
Pattern Speed (half/full channels)		268/134 MHz	268/134 MHz
Memory Depth (half/full channels)		512/256 Kb to 2/1 Mb	512/256 Kb to 2/1 Mb
Logic Families Supported		CMOS/TTL ECL LVCMOS PECL LVDS	CMOS/TTL ECL LVCMOS PECL LVDS

Digitizing Oscilloscope - Internal Modules

Channels per Module	2 & 4	2 & 4
Max Channels per Mainframe	8	20
Max Channels per System	96 (with four TLA7XMs)	240 (with ten TLA7XMs)
Bandwidth	500 MHz & 1 GHz	500 MHz & 1 GHz
Sample Rate	2.5 GS/s & 5 GS/s	2.5 GS/s & 5 GS/s
Vertical Resolution	8-Bits	8-Bits
Memory Depth	15 Kb	15 Kb

Digitizing Oscilloscope - External TDS

* For an up-to-date list of supported oscilloscopes, please contact your local Tektronix account manager.

TDS3000

	TLA60X/61X/62X	TLA715	TLA721
Channels	2 & 4	2 & 4	2 & 4
Max Channels per Mainframe	4	4	4
Max Channels per System	4	4	4
Bandwidth	100 MHz 300 MHz 500 MHz	100 MHz 300 MHz 500 MHz	500 MHz 300 MHz 500 MHz
Sample Rate	1.25 GS/s 2/5 GS/s 5 GS/s	1.25 GS/s 2/5 GS/s 5 GS/s	1.25 GS/s 2/5 GS/s 5 GS/s
Vertical Resolution	9-Bits	9-Bits	9-Bits
Memory Depth	10 Kb	10 Kb	10 Kb

TDS7000

	TLA60X/61X/62X	TLA715	TLA721
Channels	2 & 4	2 & 4	2 & 4
Max Channels per Mainframe	4	4	4
Max Channels per System	4	4	4
Bandwidth	500 MHz 1 GHz 4 GHz	500 MHz 1 GHz 4 GHz	500 MHz 1 GHz 4 GHz
Sample Rate	2.5 GS/s 5 GS/s 10 GS/s 20 GS/s	2.5 GS/s 5 GS/s 10 GS/s 20 GS/s	2.5 GS/s 5 GS/s 10 GS/s 20 GS/s
Vertical Resolution	8-Bits	8-Bits	8-Bits
Memory Depth	32 Mb	32 Mb	32 Mb

TDS684C/694C

	TLA60X/61X/62X	TLA715	TLA721
Channels	4	4	4
Max Channels per Mainframe	4	4	4
Max Channels per System	4	4	4
Bandwidth	1 GHz 3 GHz	1 GHz 3 GHz	1 GHz 3 GHz
Sample Rate	5 GS/s 10 GS/s	5 GS/s 10 GS/s	5 GS/s 10 GS/s
Vertical Resolution	8-Bits	8-Bits	8-Bits
Memory Depth	120 Kb	120 Kb	120 Kb

Data Analysis Tools

Standard Data Window Types	Waveform, Listing, Histogram (Performance Analysis), Source Code	Waveform, Listing, Histogram (Performance Analysis), Source Code	Waveform, Listing, Histogram (Performance Analysis), Source Code
Remote Control with Microsoft COM/DCOM	Yes	Yes	Yes
Symbols Extracted From a Variety of Object File Formats	Yes	Yes	Yes

User Interface

Operating System	Microsoft® Windows 2000 Professional	Microsoft Windows 2000 Professional	Microsoft Windows 2000 Professional
Internal Display Resolution	800x600 (TLA61x/62x only; TLA60x requires external display)	800x600	Requires external display
External Display Resolution	1280x1024	1600x1200	1600x1200
Number of External Displays	1	2	2