SCSI Release Notes

Version 5.10

NORMAL MODE & PACKETIZED PROTOCOL This release contains many improvements to stabilize the functionality while recording SCSI 320 packetized protocol in the normal mode. Truncation of IU data payloads is now support during normal mode recording. This allows continuous recording to disk with higher utilization on the SCSI bus. The command view is now available when recording packetized protocol.

Version 5.00

- New Session file format with support for all U320 entities. Conversion capability will translate previously recorded traces to the new format (.DPT). It recognizes and enumerates each Information Unit (IU) entity as a separate event.
- Phase View now decodes IUs into LQ packets, commands and data. This simplifies state analysis by clearly delineating and displaying packet structures, including training sequences and pacing data.
- Phase View now supports searching based on IU structures with links to the Timing View. Users can easily search for LQ packets and observe the signal behavior after each LQ.
- Improved capture reliability and other enhancements for Ultra320 analysis

Version 4.04a

1. SCSI-View Version 4.04a for the SV-8320 Analyzer

Release 4.04a provides additional support for the model SV-8320 SCSI-View Analyzer and provides support for the new PCI Adapter. The SV-8320 provides 2 ns. signal change resolution and can reliably capture Fast-160 SCSI bus protocol. The SV-8320 has an internal event buffer of eight million events. This release provides improved support for packetized protocol and fixes a number of problems dealing with Paced Transfers and Packetized Protocol. Pacing, training and packetized transfers are supported in the Phase View and Data Window.

2. Ultra320 Support

This release provides Fast-160 captures at 2ns. resolution with limited software support for Packetized Protocol in the Phase View. Full software and hardware support for SPI-4 is currently under development; SV-8320 analyzers will be field-upgraded with releases in the near future. For this release, it is necessary to capture all DATA phase data bytes (Options/SCSI Capture Options/Data Capture Options).

2.1. Automatic Protocol Detection

The software will automatically attempt to detect Ultra320 protocol in all DT transfers. When capturing Ultra160m SCSI activity, disable this automatic detection process with the "Disable U320 Protocol" checkbox in the "Options/View Display Options" dialog. If it is not disabled, the software may report protocol errors that are actually not present.

2.2. Training Support

In this release, training patterns are recognized and unconditionally removed from the Phase View when the "Paced Protocol" option is enabled.

2.3. Paced Support

This release automatically detects Pacing by examining the REQUEST and ACKNOWLEDGE and P1 signal, and determining whether a free running clock of a fixed period is present with appropriate transitions of P1 coinciding with the assertion or REQUEST or ACKNOWLEDGE.

2.4. Paced Data Window Support

The Data Window can be used to display the Paced Valid and Invalid transfers. The Phase View Popup Menu "Packetized Protocol" checkbox can be used to control the rendering of Packets in IU transfers. When this checkbox is checked, a Data Window will display valid data and CRC value in the Data Window. When this checkbox is not checked, the Data Window will display both Valid and Invalid transfers. Invalid transfers will be shown using the Protocol-Anchor palette color.

2.5. Packetized Protocol Support

In this release, Packetized Protocol is automatically detected. This automatic detection will either use the Parallel Protocol Request message or use the presence of either training or pacing and a valid L_Q packet at the start of an IU phase. In addition, the "Packetized Protocol" checkbox in the Phase View's Popup Menu can be used to force the Phase View to interpret IU transfers as packets. The Data Window can be used to display all of the bytes of a packet. For example, an L_Q Last Command packet followed by a Command packet

is shown along with the results of opening two Data Windows that show the raw bytes of each packet.

2.6. Printing Of Packetized Protocol

This release supports printing of Pacing and Packetized Protocol. Selected portions can be printed by selecting the starting point with the Anchor and the ending point to be printed with a highlight.

3. PCI Adapter Interface

This release provides support for the new PCI Adapter host interface for the SV-8320 Analyzer. This interface provides the following advantages:

- Higher transfer rates (30 MB/S instead of 1.5 MB/S with existing PC Card interface)
- Long cables between host interface and analyzer pod (3' standard and 10' available)
- Improved reliability (uses LVDS signaling, and error handling and recovery)
- Ease of installation (PCI revision 2.2 compatible)
- Universal 5 volt card format (works in all 32 bit and 64 bit systems)