

Summit™ T3-8 Protocol Analyzer for PCI Express® 3.0



Key Features

• Find errors fast

- One button error check
- Fast upload speed
- Large trace memory
- Powerful triggering/filtering

• See and understand the traffic

- Get useful information
- More choices of data views
- More ways to analyze data
- Verification Script Engine included

• Accurate data capture

- 100% data capture
- Data rates of 2.5 GT/s, 5.0 GT/s and 8 GT/s
- Lane widths x1 to x16 (x16 requires two units)

• The most extensive suite of probing accessories in the PCIe protocol test industry

- Backward compatible with all existing Teledyne LeCroy PCI Express interposers and probes

The Summit T3-8 Protocol Analyzer builds on the success of two previous generations of the Summit protocol analyzer product line in providing leadership in features and performance for PCI Express protocol test equipment. For users with requirements of 8 lanes or less, the new Summit T3-8 provides the full, powerful feature set of the high-end Summit T3-16 protocol analyzer but in a much smaller form factor and at significantly lower cost. The Summit T3-8 is targeted at high speed PCI Express I/O-based applications such as servers, workstation, desktop, graphics, storage, and network card applications.

With advanced features such as support for PCI Express Spec 3.0, data rates of 2.5, 5 and 8 GT/s, lane widths from x1 to x8 (can optionally support x16 lanes by using two units), and a full 4 GB of trace memory (8 GB when used in a x16 configuration), the Summit T3-8 provides unmatched capability and flexibility for developers and users of advanced PCI Express products. The Summit T3-8 joins the Summit T3-16 as by far the most advanced and sophisticated PCI Express analyzers available in the market today.

As with other Teledyne LeCroy PCI Express analyzers, the Summit T3-8 leverages the intuitive and powerful CATC Trace analysis software system, embedding a deep understanding of the PCI Express protocol hierarchy and intricacies. The colorful, intuitive and easy to use graphical display allows you to quickly capture and validate PCI Express product designs.

All Teledyne LeCroy PCI Express protocol analyzers employ high-impedance, non-intrusive probing technology, thereby allowing fully-unaltered data pass-through.



In addition to a full suite of advanced hardware and software features, the Summit T3-8 provides user-convenience and analysis features, such as support for automatic "lane swizzling" which allows a board developer to lay out a Mid-Bus probe pad with lanes in non-standard order, simplifying the design of the board. The Summit T3-8 automatically maps the lanes back into their correct order and accurately displays the embedded bus traffic.

The Summit T3-8 also supports both a USB port and Ethernet LAN port as standard features. By connecting over a LAN, engineers can operate the system remotely (e.g., control an analyzer operating in a remote lab). Also, engineers working collaboratively can time-share use of a single analyzer, reducing the need for multiple systems, and increasing the cost effectiveness of the product.

Bit Tracer™, a raw recording mode, allows bytes to be recorded as they come across the link, allowing debugging of PHY layer problems and combining the features of a logic analyzer format with a protocol analyzer format. The new auto sense link feature monitors negotiation between devices of different speeds and lane widths, and the bifurcated link support recombines multilink PCI Express operations that have been separated into narrower links.

The Summit T3-8 is available in multiple configurations to match user requirements with available budgets. The upward compatibility and expandability of the Summit T3-8 also provide investment protection for current PCIe® 2.0 users who plan to upgrade to PCIe 3.0 devices in the future.

Specifications

Host Machine Minimum Requirements	Microsoft Windows® 8, Windows Server 2012, Windows 7, Windows Server 2008R2, Windows XP; 2 GB of RAM; Storage with at least 200 MB for the installation of the software and additional space for recorded data; display with resolution of at least 1024x768 with at least 16-bit color depth; and USB 2.0 port and/or 100/1000baseT Ethernet. For optimal performance, please refer to our recommended configuration in the product documentation.
Recording Memory Size	4 GB (8 GB when used in a x16 configuration)
Data Rates Supported	2.5 GT/s, 5 GT/s and 8.0 GT/s
Front Panel LEDs	Power, Upstream Data Activity (8 LEDs for Lane Activity, 3 LEDs for data rate), Downstream Data Activity (8 LEDs for Lane Activity, 3 LEDs for data rate)
Front Panel Connectors	Upstream & Downstream iPass x8 Ports, Trigger IN & OUT, USB 2.0, Ethernet, Expansion Card Port
Rear Panel Connectors	AC Power, x16 Expansion Port (for second T3-8 system), Sync IN & OUT, Expansion Card Port
Dimensions (W x H x D)	Metal Chassis: 395 x 89 x 367 mm (15.5" x 3.5" x 14.5") With Bumpers: 418 x 98 x 375 mm (16.5" x 3.8" 14.75")
Weight	5.9 Kg (13 lbs)
Power Requirements	100-240 VAC, 50-60 Hz, 230W
Environmental	Operating: 0 to 55°C (32 to 131°F) Non-operating: -20 to 80°C (-4 to 176°F) Humidity: 10 to 90% non-condensing

Ordering Information

Product Description	Product Code
Summit T3-8 (licensed as a Gen3 x8 analyzer, no probes or cables).....	PE060AAA-X
Summit T3-8 (licensed as a Gen3 x4 analyzer, no probes or cables).....	PE061AAA-X
Summit T3-8 (licensed as a Gen3 x1 analyzer, no probes or cables).....	PE062AAA-X
Summit T3-8 (licensed as a Gen2 x8 analyzer, no probes or cables).....	PE063AAA-X
Summit T3-8 (licensed as a Gen2 x4 analyzer, no probes or cables).....	PE064AAA-X
Summit T3-8 (licensed as a Gen2 x1 analyzer, no probes or cables).....	PE065AAA-X
Summit T3-8 x16 Expansion Cable.....	PE060ACA-X
Platform Expansion SYNC Card.....	ACC-EXP-002-X



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Local sales offices are located throughout the world.
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