

Sierra™ M124

SAS 3.0 12Gb/s Protocol Test System



Key Features

- **12 Gb/s and legacy SAS data rates supported**
- **SATA 3.1 data rates (6 Gb/s)**
- **Multifunction platform (Analyzer, Traffic Generator, and /or Jammer)**
- **Linear signal probing technology**
- **Auto speed detection**
- **Intelligent triggering**
- **Hardware filtering**
- **Raw bit detection**
- **Error detection**
- **Transparent post-processing**
- **Memory segmentation**
- **SAS & SATA decoding (SATA is decoded via STP)**
- **Logical and chronological displays**
- **Statistical reporting**
- **Expansion port (on back panel)**
- **Cascading up to 32 ports**
- **Up to 64 GB trace memory**
- **USB 3.0 and Gigabit Ethernet host interfaces**

The Sierra M124 is the next generation platform in the industry-leading Sierra family of SAS & SATA protocol analyzers from Teledyne LeCroy. As the first SAS 3.0 protocol analyzer platform to implement linear probing technology and a non-retimed pass-through signal, the Sierra M124 provides transparent and advanced simultaneous protocol analysis of up to four 12 Gb/s SAS ports. The Sierra M124 is a complete data traffic analysis system, and supports protocol analysis, traffic generation (Trainer™) and jammer (InFusion™).

The linear probing technology developed for the Sierra M124 ensures SAS 3.0 developers can capture and analyze their traffic, including Back Channel Communication (used for 12 Gb/s link training), without significantly affecting the behavior of the products under test. Combined with Teledyne LeCroy's multi-state advanced triggering & filtering logic and deep capture buffers, the Sierra M124 is the most efficient tool on the market to help capture, focus and identify precisely what information engineers need to solve problems, while filtering out the excess data that they don't want.

The Sierra M124's ability to configure features to developers' and test engineers' requirements enables users to fit their current needs to available budgets, while still allowing easy upgrade paths to advanced features needed at a later date. Additional options that can be added later include increased capture memory and new functionality (such as traffic generation or jamming).



Specifications

Host Machine Minimum Requirements Microsoft Windows® 8, Windows 7, Windows XP, Server 2008R2 or Server 2012; 2GB of RAM; hard drive with at least 200 MB of free space for the installation of the software and additional space for storing recorded data; display with resolution of at least 1024x768 with at least 16-bit color depth; USB 2.0 port and/or 100/1000 Mbps Ethernet network interface. For optimal performance, please refer to our recommended configuration in the product documentation.

Recording Memory Size 16 GB, 32 GB or 64 GB

Data Rates Supported 12 Gb/s, 6 Gb/s, 3 Gb/s and 1.5 Gb/s

Number of Ports Supported Up to 4 ports

Cascading Up to 32 ports

Data Bus Interface MiniSAS HD Connectors

Host Machine Interfaces USB 3.0 and Gigabit Ethernet

Front Panel Connectors MiniSAS HD Initiator (up to four ports), MiniSAS HD Target (up to four ports), External Trigger IN/OUT, USB 3.0 and Gigabit Ethernet

Front Panel Indicators LEDs for Trigger, Error, Link, Speed, Frame/OOB; LCD Status Panel; Power

Front Panel Controls Power ON/OFF, IP Connection Settings

Rear Panel Controls Expansion Slot for Cascading or optional switched DC power connector for target under test, AC power

Dimensions 418 x 98 x 375 mm (16.5" x 14.75" x 3.8")

Weight 3.6 Kg (8.5 lbs)

Power Requirements 90-254 VAC, 47-63 Hz universal input, 200W maximum



Ordering Information

Product Description

Sierra M124 Hardware Platform
(4 ports, 32G Memory – Hardware Only)

Sierra M124 Hardware Platform
(4 ports, 16G Memory – Hardware Only)

SAS 3.0 Protocol Analysis Licensing Options

License for 4 ports

License for 2 ports

Product Code

SAS-M012-324-X

SAS-M012-164-X

SAS-T012-004-A

SAS-T012-002-A

Product Description

12G InFusion (Jammer) Licensing Options

License for 4 ports

License for 2 ports

License for 1 port

12G Trainer (Generator) Licensing Options

License for 4 ports

License for 2 ports

License for 1 port

Product Code

SAS-J012-004-A

SAS-J012-002-A

SAS-J012-001-A

SAS-ZG012-004-A

SAS-ZG012-002-A

SAS-ZG012-001-A



1-800-909-7211
teledynelecroy.com

Local sales offices are located throughout the world.
Visit our website to find the most convenient location.