

SierraNet™ M648

Layer 1 Testing Auto-Negotiation and Training License Option



Key Features

- Expert Generation and Analysis**
 SierraNet offers complete physical through application layer insight to solve issues affecting performance
- Cost of Ownership**
 One tool for hardware bring-up through customer support, SierraNet ensures organizations have the diagnostic tools needed to quickly and accurately address problems
- Lifetime Support**
 Updates, service, and support are always available, free of charge, to our customers.
- One Application for all Functions**
 The Net Protocol Suite is all-inclusive for viewing, capturing, modifying and generating storage fabric traffic. No need to obtain and learn multiple applications.
- Networking Expertise**
 SierraNet is backed by an engineering and support team that are experts in network and storage fabric problem solving. This experience is reflected in the comprehensive set of tests and services supplied with each SierraNet.
- Specification Compliance**
 Never worry about being a revision down or waiting for updates. Net Protocol Suite is regularly improved to meet the latest specification revisions for all supported transport and application services.

The first step in establishing the Ethernet link is the successful completion of the Layer 1 (L1) physical layer initialization, specifically the interoperation of auto-negotiation (AN) and link training (LT) sequences between the components in today's network.

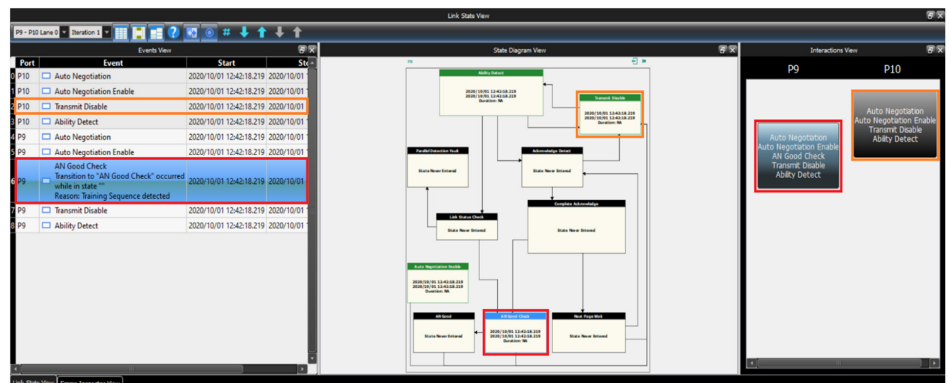
The NET-T400-P4L-A option enables the SierraNet M648 platform to capture, analyze and debug 400GbE (8x50GbE) Auto Negotiation and Link Training.

Complete AN/LT Coverage

The SierraNet M648 supports the PAM4 50/100/200/400GbE signaling requirements of Ethernet PHY communications, as well as legacy NRZ based links of 10GbE, 25GbE, 50GbE and 100GbE network components. The license gives Ethernet test and validation engineers 100% complete visibility into all AN/LT transactions.

The Net Protocol Suite software features Link Status View for presentation and review of detailed physical layer characteristics, including key Pre and Post FEC BER metrics for each lane under observation.

The Link State View breaks down the link initialization sequence by Events, Interactions, and the State Diagram views to pinpoint port by port actions.



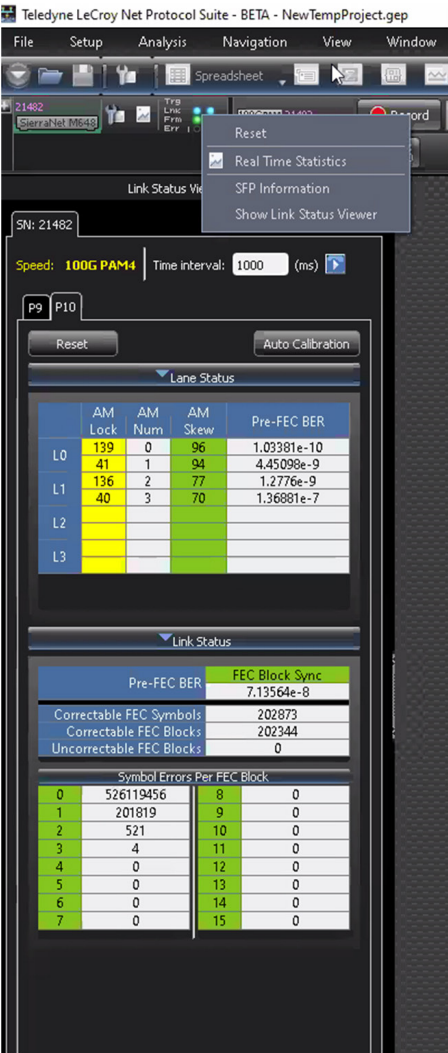
Link State View (Linked Events)

Cabling and Connectivity

The AN/LT analysis feature is targeted for Ethernet devices connected over passive (DAC) or active (AEC) copper cabling. Connection to the M648 of either QSFP or QSFP-DD cables is supported, including direct through and fanout assemblies through the Quad-Small Form Factor Pluggable Double Density-56 (QSFPDD-56) front panel mounted connectors – ports 9-10.

Coverage

The 400Gb Ethernet AN/LT option provides complete L1 insight for PAM4 50GbE, 100GbE, 200GbE and 400GbE links. NRZ based links of 10GbE, 25GbE, 50GbE and 100GbE are also supported, facilitating physical layer validation for all Ethernet configurations.



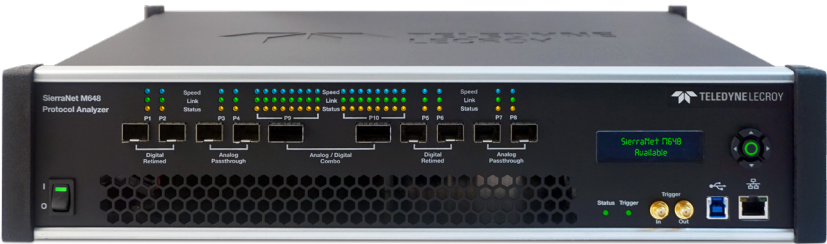
Real-Time Link Status Viewer

Net Protocol Suite™

The Net Protocol Suite™ is a completely integrated software utility for use with the SierraNet products. It provides users with the ability to capture traffic, review, examine and annotate the resulting traces, create conditional triggering, filtering, or jamming profiles, and with its API functions supports powerful Python based automation capabilities.

Net Protocol Suite provides the most advanced triggering and filtering state machines available. Up to 24 states, with four transitions per state, and multiple trigger, filter, and timer conditions per capture project are standard features. Advanced triggering enables state-specific filtering to eliminate the capture of unwanted traffic, providing users intuitive and easy navigation to the information and events of importance.

Post capture analysis is augmented with the Verification Script Engine (VSE), providing users with advanced data processing tools for extensive investigation of the fabric or network, and the components under observation.



SierraNet M648 Protocol Analyzer

Ordering Information

Base Hardware Platform

- SierraNet M648 Platform (Base HW platform with 64GB Memory)
- SierraNet M648 Platform (Base HW platform with 128GB Memory)

M648 400GbE AN/LT License Option

SierraNet M648 400G PAM4 Ethernet Phy Link Analysis License (8x50GbE) for Auto-Negotiation and Training Sequence Only License for QSFP-DD Port Pair (1-logical link)

Product Code

- HSF-M648-064-X
- HSF-M648-128-X

NET-T400-P4L-A



Local sales offices are located throughout the world.
Visit our website to find the most convenient location.
1-800-5-LeCroy • teledynelecroy.com



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