



## **Finisar Introduces 400G QSFP-DD DR4 Transceiver for Data Center Applications and the Industry's First 64 Gbaud Coherent Integrated Assembly at ECOC 2018**

September 24, 2018

### **Also Announces Demonstrations of 200G/400G Extended Reach Technologies and new Flextune™ Self-Tuning Capability**

SUNNYVALE, Calif. and ROME, Sept. 24, 2018 (GLOBE NEWSWIRE) -- Finisar (NASDAQ: FNSR) today introduced several new product and technology demonstrations taking place this week at ECOC, the European Conference on Optical Communications in Rome, Italy. Several 200G and 400G transceivers will be demonstrated, including 400G QSFP-DD DR4, 400G QSFP-DD eLR8 (extended-reach), 200G QSFP56 FR4 and 200G QSFP56 eFR4. In addition, Finisar will demonstrate the industry's first 64 Gbaud Integrated Tunable Transmitter and Receiver Assembly (ITTRA) and a new Flextune™ self-tuning feature for tunable DWDM modules. See these market-leading product demonstrations in Finisar's booth #400 from September 24 through 26.

The QSFP-DD (Quad Small Form Factor Pluggable Interface Double Density) is the latest module form factor targeting 400G data rates. The design provides an eight-lane electrical interface, compared to traditional single or four-lane interfaces, thereby increasing bandwidth, channel capacity and port density. Defined by the QSFP-DD MSA Group, this form factor addresses the need for high-density, high-speed networking solutions in a module host that's backwards compatible with QSFP28 and QSFP56.

The QSFP56 is a form factor supporting 200G data rates. This module has the same mechanical design and electrical connector as a QSFP28 but provides a four-lane electrical interface running at 50G PAM4 per channel, instead of 25G NRZ.

#### **400G QSFP-DD DR4 Transceivers**

Finisar is unveiling a 400G QSFP-DD DR4 transceiver, targeting parallel single mode fiber (SMF) links in hyperscale cloud data center applications. The demonstration will show an optical module transmitting data point-to-point over parallel single mode fiber (SMF) using four 100G PAM4 optical lanes, per the IEEE 802.3bs 400GBASE-DR4 standard. These DR4 modules can also be used in break-out applications to four 100G QSFP28 DR transceivers.

#### **400G QSFP-DD eLR8 Transceivers**

Finisar is performing the industry's first public demonstration of a 400G QSFP-DD eLR8 extended-reach transceiver, transmitting data over 30km of duplex SMF. These modules provide a cost-effective option for router-to-router, or router-to-transport interconnections and use a DML-based 8x50G PAM4 optical architecture. This demonstration shows an extension of the technology which is already in production in Finisar's 400G CFP8 LR8 modules and which has been demonstrated in Finisar's 400G QSFP-DD LR8 modules over 10km at OFC 2018.

#### **200G QSFP56 FR4 and eFR4 Transceivers**

For applications in hyperscale cloud data centers that require 200G optical connectivity, Finisar is demonstrating both an IEEE Standard-based 200G QSFP56 FR4 module operating over 2km of duplex SMF and an extended-reach eFR4 version operating over 10km of duplex SMF. Both types of modules employ low-cost DML transmitters, providing cost-effective options for both standard and longer reaches.

All QSFP-DD and QSFP56 demonstrations showing error-free post-FEC transmission over fiber at the Finisar booth will be using Ixia's second generation 400GE AresONE Test System, which is capable of generating 3.2 Tbps of Ethernet test traffic and is based on the field-proven K400 test system.

#### **64 Gbaud ITTRA Demonstration**

Deployment of coherent optical technology is taking an increasingly important role in data center interconnect applications. In order to support the market trend toward higher port densities, Finisar will be demonstrating a 64 Gigabaud Integrated Tunable Transmitter and Receiver Assembly (ITTRA), transmitting and receiving data error-free at 400 Gbps using DP-16QAM modulation. The ITTRA is a complete coherent optics assembly, which integrates a transmitter and a receiver into the smallest 64 Gbaud footprint in the market. It can be easily integrated into coherent line cards or 400G Digital Coherent Optics (DCO) transceivers, accelerating time to market and decreasing development and manufacturing labor costs due to fewer assembly steps and lower test times. This 64 Gbaud ITTRA product complements the 32 Gbaud ITTRA introduced by Finisar earlier this year at OFC.

#### **Flextune™ Automatic Wavelength Tuning Feature Demonstration**

Flextune™ is an automatic transceiver wavelength tuning feature which can significantly reduce provisioning time and operating expenses when deploying tunable DWDM transceivers. Using Finisar-patented technology, each transceiver on a DWDM optical link can self-tune to the correct wavelength determined by its physical connection to the passive mux/demux infrastructure, and without intervention by the host system or technicians. Finisar will perform a functional demonstration of Flextune™ on duplex Tunable SFP+ transceivers this week, and the feature is also being implemented on bidirectional Tunable SFP+ as well as on coherent transceivers.

#### **Measurement Capabilities Added to Optical Instrumentation Portfolio**

During ECOC, Finisar is also demonstrating new capabilities of the WaveShaper and WaveAnalyzer optical instrumentation portfolio. The new WaveAnalyzer GUI release 1.8 supports measurements of the Side Mode Suppression Ratio (SMSR) of lasers, an important performance characteristic for such devices operating in optical communication systems. Also, release 1.8 provides an in-channel Optical Signal to Noise Ratio

(OSNR) measurement technique which is important in networks with filter elements like ROADMs.

**About Finisar**

Finisar Corporation (NASDAQ: FNSR) is a global technology leader in optical communications, providing components and subsystems to networking equipment manufacturers, data center operators, telecom service providers, consumer electronics and automotive companies. Founded in 1988, Finisar designs products that meet the increasing demands for network bandwidth, data storage and 3D sensing subsystems. The company is headquartered in Sunnyvale, California, USA with R&D, manufacturing sites, and sales offices worldwide. Visit our website at [www.finisar.com](http://www.finisar.com).

**MEDIA CONTACT:**

Victoria McDonald, Director of Corporate Communications, Finisar

[press@finisar.com](mailto:press@finisar.com)

+1 408-542-4261



Source: Finisar Corporation