



## Finisar Unveils Leading-Edge Products and Technology Solutions for Next-Generation Optical Networks at OFC 2019

March 5, 2019

SUNNYVALE, Calif. and SAN DIEGO, March 05, 2019 (GLOBE NEWSWIRE) -- Finisar (NASDAQ: FNSR), the industry leader in optical communication transceivers and components, today introduced several new products and technology demonstrations during the Optical Networking and Communication Conference & Exhibition (OFC). During the event, Finisar will showcase optical module solutions for hyperscale data centers, 5G wireless networks, and data center interconnects. The live demonstrations will include the latest form factors that will drive the next generation of optical networks. See these products in Finisar's booth #3713 at the San Diego Convention Center, March 5-7.

### **Suite of 200G, 2x200G, and 400G FR4 modules for high-speed data centers**

Finisar will display its extensive suite of FR4 optical transceivers. Building on the industry's massive adoption of 100G CWDM4 in data centers for links up to 2 km, Finisar is leading the market to extend this technology to both 200G and 400G data rates. The company will demonstrate a 200G FR4 module in a QSFP56 form factor, a 2x200G FR4 in an OSFP form factor, and a 400G FR4 in a QSFP-DD form factor, each running over single mode fiber.

Finisar is a key driver of IEEE-based and multi-source agreement (MSA) standards in the industry and was a leading contributor to the 100G FR as well as to the 200G 400G FR4 specifications. This emerging FR4 leadership, together with the high volume of 100G CWDM4 modules that the company already produces, further reinforces Finisar's strong market position in duplex single mode CWDM-based optical transceivers for large scale data centers and telecom applications.

### **400G DR4 QSFP-DD modules in break-out and shuffle configurations**

Finisar will also demonstrate its 400G DR4 QSFP-DD module in both break-out and shuffle configurations, allowing maximum deployment flexibility. In the break-out configuration, two 400G DR4 modules receiving data streams from an Ixia AresONE QSFP-DD test system, transmit four independent 100G PAM4 lanes to four separate Finisar 100G FR QSFP28 modules. In the shuffle configuration, 100G PAM4 lanes from a 400G DR4 module connect to another 400G DR4 module via shuffled lane assignments. The 400G DR4 transceiver module, compliant to the IEEE802.3bs standard, is critical not only to support the continuing growth in network bandwidth, but also to provide the flexibility needed by large scale data center customers that require 100G granularity in their architectures.

### **400G SR8 OSFP modules for multimode applications**

Finisar is unveiling 400G transceiver modules designed for short reach, multimode applications. Multimode fiber has long been a staple of data center infrastructure, especially in the enterprise and small cloud markets. This demonstration will showcase IEEE-compliant 400G SR8 optical modules in the OSFP form factor, running over 100 meters of standard OM4 multimode fiber. The modules use a 16-fiber, MPO-16 optical connector and can be deployed as point-to-point or in a break-out configuration of its 50G PAM4 lanes. They leverage VCSEL technology in the 850nm band to achieve the lowest power dissipation and lowest cost structure.

Finisar has actively participated in the definition of the QSFP-DD (Quad Small Form Factor Pluggable Interface Double Density) and OSFP (Octal Small Form Factor Pluggable) MSA modules, which are the latest form factors targeting 400G data rates. Both designs provide an eight-lane electrical interface, compared to traditional single or four-lane interfaces, thereby increasing bandwidth, channel capacity and port density. These form factors address the need for high-density, high-speed networking solutions.

### **25G Direct Detect Tunable Bidi SFP28 technology for 5G wireless networks**

Building on the success of Finisar's first-to-market 10G tunable Bidi SFP+ transceiver, the company will provide a demonstration of its next generation 25G tunable Bidi technology in an SFP28 form factor. This technology is the key building block for deploying these transceivers and will enable cost-effective next generation 5G wireless build-outs while also providing significantly more data capacity per fiber than other 25G-based optical architectures. The Bidi technology will also incorporate innovative and unique Finisar transceiver features, such as T2DOC™ and Flexitone™. These features enable transceiver-to-transceiver communications and self-wavelength tuning of remote modules during commissioning without host interaction. Both T2DOC™ and Flexitone™ simplify field installation and remote maintenance while lowering operational expenses.

### **25G LR Lite SFP28 transceiver for 5G Mobile networks**

Finisar will demonstrate a new, cost-optimized 25G SFP28 module for front-haul applications in 5G wireless networks, which uses a Fabry-Perot (FP) laser. Most single-mode 25G optical modules rely on more costly Distributed Feedback (DFB) lasers to reach the 10km distances set by the IEEE standard. Finisar's demonstration shows that low-cost FP lasers running at 25G data rates can support not only the 300 meters of reach required by the majority of 5G front-haul deployments, but also exceptional cases of 1km spans. The company has been a strong supplier of optical modules for 3G and 4G mobile infrastructure, and it is now rolling out its portfolio for 5G.

### **64Gbaud Integrated Coherent Transmit & Receive Optical Sub-Assembly**

Progressing on the path to miniaturize coherent optics, Finisar is exhibiting the industry's first technology demonstration of an Integrated Coherent Transmit & Receive Optical Sub-Assembly, designed to the current draft of the OIF IC-TROSA Type-2 requirements. The IC-TROSA Type-2 is an optical sub-assembly combining all key building blocks of a coherent optical front-end (i.e. tunable laser, optical amplifier, modulators, drivers, coherent mixer, photodiode array, and TIAs) – with internal control electronics. The device is Flexgrid® C-band tunable and supports multiple modulation formats, including QPSK, 8QAM, and 16QAM, at symbol rates up to 64Gbaud, enabling data transmission up to 400 Gb/s. The IC-TROSA's low power dissipation and miniature footprint enables small form factor Digital Coherent Optics (DCO) transceivers in a QSFP-DD or OSFP form factor, as well as very high-density coherent line card or daughtercard designs.

During OFC, Finisar will also participate in interoperability demonstrations at both Ethernet Alliance and OIF booths. In the Ethernet Alliance booth #4749, Finisar will show 400G LR8 QSFP-DD and CFP8 modules as well as 100G FR, CWDM4 and LR4 QSFP28 modules. In the OIF booth #6215, Finisar will demonstrate multiple 100G and 400G transceivers.

Finisar was recently honored by the 2019 Lightwave Innovation Reviews program with high scores for the ITTRA and WaveAnalyzer 200A products. This program celebrates innovation in optical technology and recognizes the best products and solutions newly available. Finisar will receive award recognition during the Lightwave Innovation ceremony to be held at OFC.

**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).

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The logo for Finisar, featuring the word "FINISAR" in a bold, blue, sans-serif font. The letters are all uppercase and have a slight shadow effect.

Source: Finisar Corporation