NeoPhotonics Ships Initial Units of Extended Tuning Range 400G Capable ClearLight™ CFP2-DCO Coherent Transceivers for End Customer Trials

January 6, 2020

Featuring NeoPhotonics Expanded Tuning C++ LASER™ Micro-ITLA with Industry Leading 64 Gbaud Optics to Maximize Data Capacity Over Distance in Cloud, DCI and Telecom Applications

SAN JOSE, Calif., Jan. 6, 2020 /PRNewswire/ -- NeoPhotonics Corporation (NYSE: NPTN), a leading designer and manufacturer of advanced hybrid photonic integrated circuit based modules and subsystems for bandwidth-intensive, high speed communications networks, today announced that it has shipped its new 400G capable ClearLight™CFP2-DCO transceiver for end customer trials. This is the industry's first transceiver module able to deliver as much as 32 Terabits of capacity per fiber – significantly higher than today's 200G CFP2-DCO capacity or the emerging 400G CFP2-DCO capacity-- by using internal optics that can support 80 channels of 64 Gbaud data at 75 GHz wavelength channel spacing combined with the latest generation of 7 nm node DSP (digital signal processing) technology for superior OSNR and power consumption. This new product effectively increases the capacity of an optical fiber by as much as 50 percent over standard systems at comparable distances.

This ClearLight CFP2-DCO is the first in a series of coherent module solutions based on NeoPhotonics' patented Photonic Integrated Circuit (PIC) platform, which will enable cloud operators and carriers to create optical interconnects with significantly greater capacity and density with reduced complexity in the high-capacity DWDM (“dense wavelength division multiplex”) optical networks used in hyper-scale cloud and telecom infrastructure applications.

NeoPhotonics ClearLight CFP2-DCO module incorporates several industry leading coherent solutions from NeoPhotonics in a pluggable module, including its new extended tuning range Ultra-Narrow Linewidth Tunable C++ LASER™Micro-ITLA. It also features the company's leading high bandwidth 64 Gbaud C++ ICR™ Receiver and C++ ODM™ Modulator. This module supports tuning across the full “Super C-band” and provides up to 50 percent more spectrum and resulting capacity than standard modules.

The ClearLight CFP2-DCO module tunes to 75 GHz spaced wavelength channels when operating at 64 Gbaud and 16 QAM to support 400G transmission in 400ZR and 400Z+ modes for Cloud DCI (data center interconnect) and Metro telecom applications. NeoPhotonics also provides arrayed waveguide gratings for multiplexing and de-multiplexing with 75GHz channel spacings and filter responses optimized for 64 Gbaud coherent signals, including for “Super C-band” use.

For Long Haul and Regional applications, this CFP2-DCO module utilizes 64 Gbaud and QPSK modulation to deliver 200G per wavelength transmission. This is made possible by an industry-leading OSNR of less than 14 dB and enhanced performance to enable substantially longer reaches than standard 32 Gbaud, 16 QAM systems.

If the application requires that a 50 GHz channel wavelength spacing be used, this CFP2-DCO module can tune over 120 channels and operate at 200G with an OSNR of less than 16 dB, again substantially better than today's standard CFP2-DCO transceivers. The module is compliant with the OIF-CFP2-DCO-01.0-Implementation Agreement and has a superior watt per gigabit performance. The module will also be available in standard C-band tuning range for applications that do not require the significantly higher capacity per fiber that this module enables.

“This new module joins our ClearLight™CFP-DCO transceiver line, which has been shipping since 2017, and is our first in a series of DCO Modules for 400G transmission and providing the benefits of extended C++ tuning range. We are pleased to announce these initial shipments of our ClearLight CFP2-DCO coherent transceiver modules to customers,” said Tim Jenks, Chairman and CEO of NeoPhotonics. “This new series will utilize our leading 64 Gbaud Silicon Photonics or Indium Phosphide PICs, together with our new Tunable C++ LASER Micro-ITLA. This will increase the capacity and distance performance in a network well above that available in systems today,” concluded Mr. Jenks.

About NeoPhotonics

NeoPhotonics is a leading designer and manufacturer of optoelectronic solutions for the highest speed communications networks in Cloud, data center and telecom applications. The Company's products enable cost-effective, high-speed data transmission and efficient allocation of bandwidth over communications networks. NeoPhotonics maintains headquarters in San Jose, California and ISO 9001:2015 certified engineering and manufacturing facilities in Silicon Valley (USA), Japan and China. For additional information visit www.neophotonics.com.

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This press release includes statements that qualify as forward-looking statements under the Private Securities Litigation Reform Act of 1995, including anticipated performance of NeoPhotonics' products. Readers are cautioned that these forward-looking statements involve risks and uncertainties and are only predictions based on the company's current expectations, estimates and projections. The actual company results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks, uncertainties and assumptions. Certain risks and uncertainties that could cause the company's results to differ materially from those expressed or implied by such forward-looking statements as well as other risks and uncertainties relating to the company's business, are described more fully in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, as well as in the Company's Quarterly Reports on Form 10-Q for the three month periods ended March 31, 2019, June 30, 2019 and September 30, 2019, filed with the Securities and Exchange Commission.

SOURCE NeoPhotonics Corp