



OneChip Photonics Unveils Photonic Integrated Circuit-Based EPON Transceivers

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OneChip Photonics has reportedly unveiled its new family of high-performance, low-cost Photonic Integrated Circuit-based Ethernet Passive Optical Network transceivers. OneChip believes that these new products will help the company to capture a considerable share of the FTTx optical transceiver market.

The company's new optical modules offer a 1.25 Gb/s or 2.5 Gb/s downstream and a 1.25 Gb/s or 2.5 Gb/s upstream data link in a single fiber. For this purpose, these modules make use of a 1490 nm optical wavelength continuous-mode transmitter and a 1310 nm optical wavelength burst-mode receiver. These new EPON ONU transceivers are compliant with IEEE Standard 802.3ah-2004 1000BASE-PX20-U and its extensions, SFF MSA2000 and FCC 47 CFR Part 15, Class B standards.

Currently, there are many technological barriers in the widespread implementation of Fiber-to-the-Home technology. OneChip said it can remove these barriers with its breakthrough approach and technology.

"OneChip's new EPON transceivers are the first fully integrated optical access transceivers on the market," said Jim Hjartarson, CEO of OneChip Photonics, in a statement. "They will give system providers and carriers the ability to significantly lower the cost and boost the performance of their FTTP networks, while meeting business and consumer demand for high-bandwidth voice, data and video services."

These new transceivers will help service provider central offices and at customer premises as they are designed for Optical Line Terminals and Optical Network Units, states the company. The new products monolithically integrate all the functions required for an optical transceiver onto a single, Indium Phosphide-based chip. According to the company, its monolithic Photonic Integrated Circuits have the smallest footprint on the market.

In March, the company secured \$19.5 million in venture capital financing from Canadian and U.S. investors. According to OneChip, this funding would enable the company to expand its operations globally and deliver the only fully integrated Fiber-to-the-Home transceiver technology on the market, which will provide higher performance than competing solutions at significantly lower cost.

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