March 7, 2022

Marvell Unveils Co-Packaged Optics Technology Platform at OFC 2022

Establishing Open Ecosystem Roadmap for Switch and Optics Integration

SAN DIEGO, March 7, 2022 /PRNewswire/ -- Marvell (NASDAQ: MRVL) today announced its first-generation cloud-optimized co-packaged optics (CPO) technology platform, to enable faster connectivity while reducing power consumption. The new platform includes 2.5D/3D highly integrated silicon photonics including lasers, TIAs, drivers and its industry-leading PAM4 DSP. Marvell will showcase its CPO technology platform in a demo in its booth #2301 at the Optical Networking and Communication (OFC) Conference in San Diego, March 6-10, 2022.

As artificial intelligence (AI), machine learning (ML) and high-performance computing (HPC) applications continue to drive greater bandwidth requirements, compounded by the increasing power and physical limitations of next-generation switches used in cloud data centers, disruptive technical innovation is required. These requirements can only be met through high bandwidth connectivity offered in a small, cost-effective form factor that can lower power consumption and enable higher density systems. Marvell's CPO technology platform is the promising path to make this a reality.

The silicon photonics CPO demonstration showcases the Marvell® Teralynx® switch platform along with Marvell CPO electro-optics integrated into a standard 1 rack-unit (RU) 32 port optical switch. The demonstration is the foundation for Marvell's future 3.2T CPO platform for the 51.2T switch generation. The demonstration will also highlight laser integration into the CPO platform and ODM integration to support ecosystem readiness. Marvell's support for standards-based solutions and an open ecosystem approach for switch and optics integration and interoperability is key to these developments.

"As cloud data center bandwidth demand rapidly increases, power and operational challenges grow. CPO will become more relevant over time," said Vlad Kozlov, founder and CEO, LightCounting Market Research. "While pluggables will continue to be the dominant form factor in the next 3 to 5 years, the demand for CPO is expected to grow and will complement pluggables for next-gen data center optics."

"Marvell has the technology required to enable CPO for next-generation cloud data centers," said Radha Nagarajan, senior vice president and chief technology officer, Optical and Copper Connectivity Group, Marvell. "We are promoting standards-based interoperability so that end users can choose the very best solution for their application. CPO will start to gain traction in future switch generations but it is important to work out all the supply chain-related challenges now. By having an ODM 1RU integrated switch it showcases a platform that can solve these challenges."

About Marvell
To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for over 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

Marvell and the M logo are trademarks of Marvell or its affiliates. Please visit www.marvell.com for a complete list of Marvell trademarks. Other names and brands may be claimed as the property of others.

For further information, contact:
Kim Markle
pr@marvell.com

View original content to download multimedia:https://www.prnewswire.com/news-releases/marvell-unveils-co-packaged-optics-technology-platform-at-ofc-2022-301496296.html

SOURCE Marvell