

Terabit BiDi MSA Releases Full Specifications of 800G and 1.6T Optical Interfaces

Dual wavelength bidirectional technology provides cost-effective upgrade for terabit short-reach MMF applications in data centers

SAN JOSE, Calif., February 27, 2023 -- The Terabit BiDi Multi-Source Agreement (MSA) group today announced the publication of release 1.0 of its optical specifications for 800 Gb/s and 1.6 Tb/s optical interfaces over 70 meters of OM4 multimode fiber (MMF). The MSA's specifications utilize the widely adopted dual wavelength bidirectional transmission technology. This provides an upgrade path to the large scale deployed parallel MMF cabling infrastructure. The specifications are built on the 100 Gb/s Ethernet MMF specifications.

The members of the Terabit BiDi MSA include Alibaba, Arista Networks, Broadcom, Cisco, Coherent, CommScope, Corning Incorporated, Dell Technologies, HGGenuine, Hisense Broadband, Lumentum, MACOM, Marvell, OFS, Panduit and Tencent.

"The transition to 100 Gb/s per lane signaling is rapidly underway, and the release of the Terabit BiDi specifications is just in time for the industry to adopt cost-effective and fast interfaces with VCSEL based solutions," said Tzu Hao Chow, MSA co-chair.

"Multimode bidirectional optical transceivers have been crucial for preserving the usefulness of already existing fiber cables in data centers as technology has progressed from 10 to 25 to 50 Gb/s per lane. The Terabit BiDi specification is a roadmap to continue this trend," said David Piehler, MSA co-chair.

The Terabit BiDi MSA specification addresses short-reach applications including the critical high-volume interconnects between switches in modern data centers. The Terabit BiDi MSA participants are responding to an industry need for lower cost and lower power consumption solutions in the 800 Gb/s and 1.6 Tb/s form factors that bidirectional MMF technology can provide. Please visit terabit-bidi-msa.com to download the specification or learn more about the Terabit BiDi MSA. Interested companies are invited to join the MSA as Contributor Members. Please reach out to info@terabit-bidi-msa.com for more information.