NEWS RELEASE

QSFP-DD MSA Announces Initial Release of 1.6 Tbps Pluggable QSFP-DD Specification

9/29/2023

GLASGOW, Scotland--(BUSINESS WIRE)-- The Quad Small Form Factor Pluggable Double Density (QSFP-DD) Multi-Source Agreement (MSA) group announced today at the European Conference on Optical Communications (ECOC 2023) the release of a hardware specification revision 7.0. This new release updates the existing QSFP-DD MSA specification and introduces the QSFP-DD1600 module variant to drive further improvements in performance, scalability and power handling.

The new specification maintains the form factor's eight electrical lanes with each lane operating at the new higher 200 Gbps rate to provide an aggregate module bandwidth capacity of 1.6 Tbps. The 1.6 Tbps host port maintains backwards compatibility with the entire family of QSFP and QSFP-DD modules and cables. This provides the high degree of flexibility that end users and system designers have come to expect from QSFP and QSFP-DD, easing their network port speed migrations.

This new release includes enhancements to further improve the power handling capability of QSFP and QSFP-DD form factor's small faceplate profile and the QSFP-DD's riding heatsink feature. The combination of these features enables system designers to more efficiently cool the majority of modules as well as support even higher power modules that may be required in next-generation high-density Ethernet switch platforms, supporting all module variants such as coherent 1600ZR modules.

The new QSFP-DD1600 specification maintains the current port density enjoyed by systems utilizing QSFP-DD today, and fully utilizes the faceplate to efficiently use the rack-space that is expected from next-generation capacity switches.

“Network operators are continuing to push the QSFP-DD form factor to meet the expectations of next generation system while maintaining backward compatibility,” says Scott Sommers, MSA co-chair. “This is a critical step for the operational strategy of next generation deployments.”

“The design flexibility that the QSFP-DD form factor enables with its riding heatsink and small faceplate profile maximizes the available air flow and provides engineers the flexibility to meet the challenges for the next-generation of system design,” says Mark Nowell, MSA co-chair. “QSFP-DD continues to be the cornerstone of high-performance, high-density pluggable optics for the foreseeable future.”

This new specification extends the QSFP-DD leadership to 1.6 Tbps with broad support from component manufacturers to end users and continues the market leadership for QSFP-DD from its original 400G and now 800G adoption.

A new whitepaper focusing on the thermal enhancements, including the resulting reduction of system power of QSFP-DD1600 is available on the QSFP-DD MSA website: **www.qsfp-dd.com**.

The QSFP-DD MSA is supported by more than 60 companies addressing the technical challenges of achieving a double-density interface and ensuring mechanical, electrical, thermal, and signal integrity interoperability for the next-generation of networking equipment.

For more information, visit the QSFP-DD MSA website, **www.qsfp-dd.com**.

QSFP-DD MSA PR Contact
Jennifer Mewett
Pacific Bridge Marketing
714-452-4507 / **jymewett@pacificbridgemarketing.com**

Source: QSFP-DD Multi Source Agreement (MSA)