



TE CONNECTIVITY

8x112 Gbps OSFP and QSFP-DD Connector

Demonstrations

Document draft CEI-112G-VSR-PAM4 and CEI-112G-LR-PAM4 demonstrations

TE Connectivity (TE) is demonstrating the octal small form-factor pluggable (OSFP) input/output (I/O) connector and cage in a VSR (chip-to-module) application at 8x112 Gbps on a PCB-based module compliance board (MCB) and the quad small form factor double density (QSFP-DD) 800G connector and cage configuration in the form of an MCB which is demonstrated in a CEI-112G-LR passive copper cable architecture.

TE is an active participant in the OIF's CEI-112G-VSR-PAM4 chip-to-module development project by providing measured channel data for the working group's analysis. TE has demonstrated that 112G serial electrical signaling can be successfully implemented on traditional host PCB applications.

TE's OSFP and QSFP-DD connectors were initially developed for 400 Gbps applications using CEI-56G-VSR-PAM4 8x56 Gbps signaling. This 112 Gbps per channel development work shared with the OIF demonstrates TE's ability to enable next generation solutions. TE's QSFP-DD 800G ports are available with TE's high performance heat sinks to enable optical modules greater than 20W of power dissipation.

Learn more about TE's 400G and 800G solutions at: www.te.com/400g



8X112 Gbps OSFP and QSFP-DD Direct Attach Copper Cable Demonstrations

Document draft CEI-112G-VSR-PAM4 and CEI-112G-LR-PAM4 demonstrations

As shown here at OFC2022, TE is demonstrating 8x112 Gbps PAM4 links with a QSFP-DD passive direct attach copper cable assembly with 28AWG cable and a 2m OSFP passive direct attach copper cable assembly with 26AWG cable. TE is participating in the OIF's draft CEI-112G-LR development effort while developing low-cost methods to implement high performance 112 Gbps architectures. Bulk raw cable and integrated cable assemblies will be a key part of those systems. These cable assemblies feature TE's own

TurboTwin parallel pair bulk cable with optimized construction which minimizes insertion loss, cross talk, and skew. It is anticipated that various market applications at 112 Gbps may demand a wide range of cable lengths and diameters (wire gauges).

Learn more about TE's 400G and 800G solutions at: www.te.com/400g



Co-Packaging Socket and Co-Package Copper Cable Products for OIF 3.2T Module Project Demonstration

Document draft 3.2T Co-Packaging Module demonstration

TE is showing its micro land grid array (microLGA) socket technology in the OIF 3,2T Module form factor. This 0.6x0.6mm pitch metal contact socket product enables a separable mating interface for both optical modules and copper cables aligning to the OIF draft module documentation. Electrical performance is fully capable of supporting 112 Gbps signaling and has a roadmap to 224 Gbps. In the same display, TE is also showing a co-package copper cable assembly aligned to the OIF draft specification capable of interoperating with the optical module form factor. An interoperable copper cable assembly can enable both pluggable optical modules at the face plate as well as cabled backplane modular chassis.





TE Connectivity

Co-Packaging ELSFP Connector and Cage for OIF External Laser Project Demonstration

Document draft External Laser Project demonstration

TE is participating in the operating external laser small form factor pluggable (ELSFP) demo by providing the ELSFP electrical connector, cage, and heat sink prototype hardware. The ELSFP port and module enables face plate pluggable laser modules via a blind mate electrical and optical interface.



Co-package optical architectures can require external laser sources to drive co-package optical engines and the ELSFP pluggable laser form factor can provide a field serviceable solution that has features enabling it to address a wide range of architectural needs including multiple optical ferrules and a wide power envelope.

ABOUT TE CONNECTIVITY

TE Connectivity is a global industrial technology leader creating a safer, sustainable, productive, and connected future. Our broad range of connectivity and sensor solutions, proven in the harshest environments, enable advancements in transportation, industrial applications, medical technology, energy, data communications, and the home. With more than 85,000 employees, including over 8,000 engineers, working alongside customers in approximately 140 countries, TE ensures that EVERY CONNECTION COUNTS. Learn more at www.te.com and on LinkedIn, Facebook, WeChat and Twitter.

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