



TE Connectivity

Visit us at booth **6035**



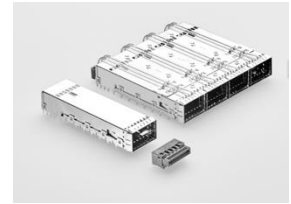
8x224 Gbps, 1.6T OSFP Connector Demonstration

Document: draft CEI-224G-VSR-PAM4

TE Connectivity (TE) is demonstrating a prototype of its octal small form-factor pluggable (OSFP) input/output (I/O) connector in the form of two mated PCB-based connector evaluation boards which is demonstrated in a CEI-224G channel.

Developing and delivering 224G PAM4 based channel definitions is a challenging task for the OIF and TE is in the forefront of supporting that effort by providing simulations and measurements such as shown in this demo.

Learn more at: <https://www.te.com/usa-en/campaigns/consumer-solutions/224g-portfolio-solutions.html>



8x112 Gbps OSFP and QSFP-DD Connector Demonstrations

Document: released CEI-112G-VSR-PAM4 and released CEI-112G-LR-PAM4

TE is demonstrating the octal small form-factor pluggable (OSFP) connector and cage as well as the quad small form factor double density (QSFP-DD) 800G connector and cage in the form of two PCB-based module compliance board (MCBs) in two LR (long reach) applications at 8x112 Gbps which is demonstrated in a CEI-112G-LR lossy channel and a OSFP passive direct attach copper (DAC) cable architecture.



TE was 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'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 [OSFP Interconnects](#) and [QSFP-DD Interconnects](#)

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

Document: released CEI-112G-VSR-PAM4 and released CEI-112G-LR-PAM4

As shown here at OFC 2023, TE is demonstrating 8x112 Gbps PAM4 links with a 2 meter OSFP passive direct attach copper cable assembly and a QSFP-DD passive direct attach copper cable assembly.

TE participated in the OIF's CEI-112G-LR development effort while developing low-cost methods to implement high performance 112 Gbps architectures. Bulk raw cable and integrated cable assemblies are a key part of systems. These cable assemblies feature TE's own TurboTwin parallel pair bulk cable with optimized construction which minimizes insertion loss, cross talk, and skew.



In addition to supporting OIF CEI channel specifications, the passive copper cables implement the OIF CMIS specification to enable easy host to module communication and control as seen in the CMIS demo here at OFC 2023.

Learn more about TE's 800G solutions at: <https://www.te.com/usa-en/campaigns/consumer-solutions/112g.html>

8X112 Gbps OSFP 10 Meter Active Optical Cable Demonstration

Document: released CEI-112G-VSR-PAM4

TE is demonstrating its 800 Gbps, 10 meter OSFP active optical cable assembly (AOC) in an OIF VSR chip to module demo. TE's AOC cables provide longer reach and improved flexibility compared to passive copper cable solutions and the emerging active copper cable solutions, supporting high performance computing, data center and networking applications.

In this demo OIF's power optimized VSR channel definition is able to drive the TE AOC cable assembly, enabling 800 Gbps operation over a 10 meter reach.



In addition to supporting OIF CEI channel specifications, TE's active optical cable implements the OIF CMIS specification to enable easy host to module communication and control as seen in the CMIS demo here at OFC 2023..

Learn more about TE's Active Optical Cables at: <https://www.te.com/usa-en/products/fiber-optics/fiber-optic-cable-assemblies/active-optics.html>



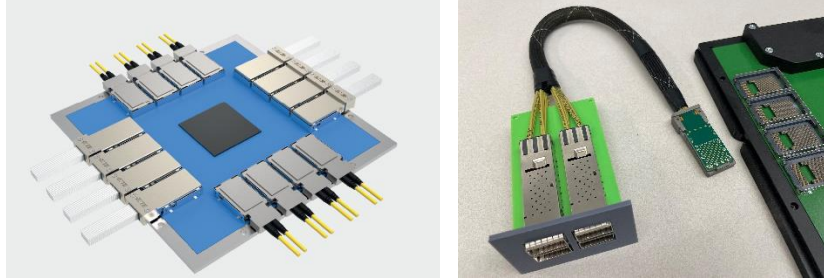
www.oiforum.com

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

Document: draft 3.2T Co-Packaging Module

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 co-packaging demo, TE is also providing a live co-package copper cable assembly demo aligned to the OIF draft specification capable of interoperating with the 3.2T 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.



Learn more about TE's

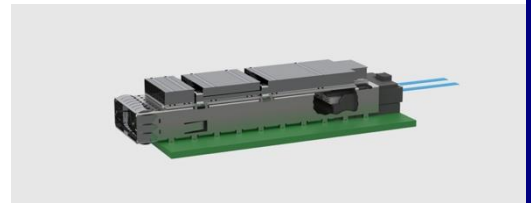
800G solutions at: <https://www.te.com/usa-en/videos/consumer/co-packaging-socket-technology-overview.html>

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

Document: draft ELSFP External Laser Project

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.



Learn more about TE's 800G solutions at: <https://www.te.com/usa-en/campaigns/consumer-solutions/112g.html>



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.

To view and learn more about TE Connectivity's innovative solutions for your next-generation architectures, visit us at booth **6035**

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