

### **TE Connectivity**

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#### 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 MCB connector module cable test boards, demonstrated in a CEI-224G channel.

Learn more at: https://www.te.com/en/products/connectors/pluggable-connectors-cages/osfp.html

## 8x224 Gbps 1.6T Direct Attach Copper Cable (DAC), 1.6T Active Copper Cable (ACC) Linear and CMIS Demonstrations

Document: draft CEI-224G-LR-PAM4

TE is demonstrating 8x224 Gbps PAM4 links with a 1 meter 1.6T OSFP passive DAC cable assembly and a 3 meter 1.6T OSFP ACC linear cable assembly. TE is participating in the OIF's CEI-224G-LR development effort, while developing low-cost methods to implement high performance 224 Gbps architectures. Bulk raw cable and integrated active and passive cable assemblies are a key component 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 linear and VSR channel specifications, the passive and active copper cables implement the OIF CMIS specification to enable easy host to module communication and control, and similar 112Gbps based OSFP & QSFP-DD cables with CMIS capability are in the OIF CMIS demo here at ECOC.

Learn more about TE's 200G/lane 1.6T solutions at: <a href="https://www.te.com/usa-en/industries/data-centers-ai/technologies/112g-gigabit-ethernet-solution.html">https://www.te.com/usa-en/industries/data-centers-ai/technologies/112g-gigabit-ethernet-solution.html</a>

#### 224 Gbps Near Chip Cabling and Cabled Backplane Solutions

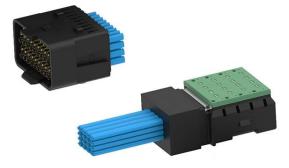
Document: draft CEI-224G-LR-PAM4

TE is demonstrating 224G PAM4 links to enable chassis-based architectures, such as those required by Al/ML applications. In the CEI-224G-LR live demo, TE is utilizing a cabled backplane architecture plus over-the-board (OTB) and near-chip connectivity to demonstrate that reach greater than 1 meter is possible with excellent BERs. The demo includes interconnects specifically developed for 224 Gbps; AdrenaLINE Catapult near-chip connector and AdrenaLINE Slingshot cabled backplane connectors (cable-to-cable and cable-to-right angle-PCB connector systems) to achieve this performance. The TE AdrenaLINE Catapult interconnect is also shown in OIF's EEI demo where it helps enable low power, low latency electrical links for Al/ML architectures.

TE is participating in the OIF's CEI-224G-LR development effort while developing low-cost methods to implement high-performance 224 Gbps architectures. New bulk cable and highly optimized interconnect systems are key elements of those channels. The cabled backplane and near-chip cable assemblies feature TE's own TurboTwin parallel pair bulk cable with optimized construction, which minimizes insertion loss, cross talk, and skew.

Learn more at: <a href="https://www.te.com/en/campaigns/consumer-solutions/adrenaline-224g-product-portfolio.html">https://www.te.com/en/campaigns/consumer-solutions/adrenaline-224g-product-portfolio.html</a>







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#### 8x112 Gbps OSFP 10 Meter Linear Active Optical Cable (AOC), Retimed Tx Linear Rx AOC and CMIS Demonstrations (LPO and RTLR)

Document: draft CEI-112G-Linear-PAM4

TE is demonstrating its 800 Gbps, 10-meter OSFP linear active optical cable assembly (AOC) in an OIF linear pluggable optics (LPO) demo. TE's linear AOC cables provide reduced operational power requirements compared to conventional retimed optical links. TE is also demonstrating retimed Tx linear Rx 10m AOC in OIF's 800G RTLR demo, showcasing power savings while delivering longer reach than LPO solutions. In this demo, OIF's power optimized linear channel definition is able to drive the TE linear AOC cable assembly and half retimed AOC cable assembly, enabling 800 Gbps operation over a 10-meter reach at lower power levels.

In addition to supporting OIF linear and VSR channel specifications, TE's active optical cable implements the OIF CMIS specification to enable easy host to module communication and control. Similar 112 Gbps based OSFP-DD AOC cables with CMIS capability can be seen in the CMIS demo here at ECOC.

Learn more about TE's active optical cables at: <a href="https://www.te.com/usa-en/products/fiber-optics/fiber-optic-cable-assemblies/active-optics.html">https://www.te.com/usa-en/products/fiber-optics/fiber-optic-cable-assemblies/active-optics.html</a>

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

Document: released OIF-ELSFP-01.0 External Laser Small Form Factor Pluggable (ELSFP) IA

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 ELSFP connectors at: <a href="https://www.te.com/en/products/connectors/pluggable-connectors-cages/intersection/elsfp.html">https://www.te.com/en/products/connectors/pluggable-connectors-cages/intersection/elsfp.html</a>

To view and learn more about TE Connectivity's innovative solutions for next-generation architectures, visit us at www.te.com/ai.

**TE Connectivity** 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**.

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