



EXTERNAL LASER SMALL FORM-FACTOR PLUGGABLE (ELSFP) CONNECTOR AND CAGE

TE Connectivity's (TE) ELSFP product is a faceplate pluggable form-factor to address the laser packaging requirements for 102.4T co-packaged optical (CPO) systems with optical engines (OEs) according to OIF-ELSFP-01.0 implementation agreement.

The ELSFP product is targeted primarily at CPO applications, which may include but are not limited to the use of external lasers to provide optical power to the OEs incorporated in switches, network interface cards, artificial intelligent (AI) and machine learning application specific integrated circuits (ASICs).

TARGET MARKETS

- · AI / Machine learning
- Datacenters
- Edge computing
- Telecommunication

APPLICATIONS

- · Co-Packaged Optical (CPO) system
- Network interface card
- Switches
- Storage

LEARN MORE

• Landing page

KEY BENEFITS

Faceplate pluggable form factor for 102.4T co-packaged optical (CPO) system

- Meet ELSFP Implementation Agreement (IA) with a multi-sourced future-proof panel pluggable external laser source form factor to address the evolving needs of the industry.
- Targets primarily at CPO applications, which may include but are not limited to the use of external lasers to provide optical power to the Oes.

A more efficient cooling solution system

 By placing the ELSFP at the faceplate of CPO systems (removed from the heat of the co-package ASICs and OEs) a more efficient cooling solution can be designed for these systems.

Reliably provide a replaceable light source package (hot Swap)

• Greater reliability is achieved with the fail-safe of a field replaceable pluggable module in case of a laser failure.

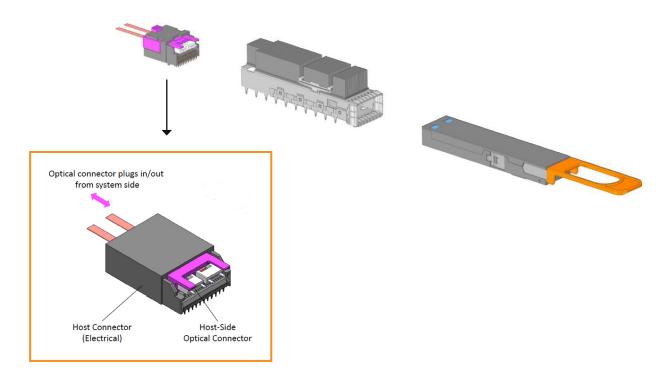
Eye safety is achieved by a blind mate optical connector

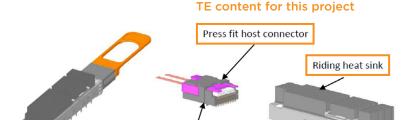
• Blind-mate optical connector can mitigate potential eye safety risks, particularly in high optical powers applications.

EXTERNAL LASER SMALL FORM-FACTOR PLUGGABLE (ELSFP) CONNECTOR AND CAGE

PRODUCT FEATURES

- Optical connector plugs in/out from system side
- Host connector (electrical)
- · Host-side optical connector
- Separately applied connector and cage





Separately applied connector and cage

Figure 4 Host connector and cage

te.com

TE, TE Connectivity, and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity plc family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2025 TE Connectivity. All Rights Reserved.

03-25

