OSFP CONNECTORS, CAGES & CABLE ASSEMBLIES

TE Connectivity's (TE) Octal Small Form Factor Pluggable (OSFP) connectors, cages and cable assemblies address next-generation data center needs by supporting aggregate data rates up to 800 Gbps. These products are designed for both 28G NRZ and 56G PAM-4 protocols, with a roadmap to 112G PAM-4 for future system upgrades. By utilizing integrated thermal heatsink technology in the plug, OSFP products provide superior thermal performance and the signal integrity needed to support 800G data rates. OSFP products offer high port density and can fit up to 36 ports of an 8 lane interface in a 1RU switch form factor, aligning with current and next-generation silicon roadmaps.

Key Features

- Designed for up to 112G PAM-4 protocols
- Designed for up to 15W thermal loads with low airflow
- Capable of fitting up to 32 ports in a 1RU switch form factor

Key Benefits

- Supports data rates up to 800 Gbps
- Superior thermal and signal integrity performance
- High port density

Applications

- Switches
- Servers
- Routers
- Storage equipment

Cage Assemblies

- 1 x 1 and 1 x 4 cages to support both multi and single port applications
- Low cost, stainless steel cage with tuned airflow venting supports module cooling and optimal system airflow
- Traditional EMI containment at the bezel and port opening
- Flat rock PCB assembly

Connector

- 8-lane high density connector, footprint and mating interface per OSFP MSA spec
- Proven .6mm pitch, 60 contacts total
- Simple, low cost wafer design with 2 rows of contacts
- Belly-to-belly capable via in-ground alignment for low PCB cost and noise
- Proven to 56G PAM-4, with roadmap to 112G PAM-4

1x1 OSFP Cage Assembly

1x4 OSFP Cage Assembly with Lightpipes

OSFP SMT Connector

Part Number Information

Description	TE Part Number
1x1 OSFP Cage Assembly	2317416-1
1x4 OSFP Cage Assembly	2338495-1
OSFP SMT, PDNI Connector Assembly	2324869-1
OSFP SMT w/ Holdown, PDNI Connector Assembly	2324869-2
1x4 OSFP Cage w/ Open Back	2338495-3
1x4 OSFP Cage w/ Grid, 1 LP Per Port	1-2338495-1
1x4 OSFP Cage w/ Open Back, 1 LP Per Port	1-2338495-3
1x4 OSFP Cage w/ Grid, 2 LP Per Port	2-2338495-1
1x4 OSFP Cage w/ Open Back, 2 LP Per Port	2-2338495-3
1x4 OSFP Cage w/ Grid, 4 LP Per Port	4-2338495-1
1x4 OSFP Cage w/ Open Back, 4 LP Per Port	4-2338495-3
1x4 Lightpipe Assembly, 4 LP Per Port	2325080-4
1x4 Lightpipe Assembly, 2 LP Per Port	2325080-5
1x4 Lightpipe Assembly, 1 LP Per Port	2325080-6
1x4 Cage for Lightpipes	2338495-5
1x4 OSFP Cage w/ Grid, No EMI Springs	2315853-2
1x4 OSFP Cage w/ Open Back, No EMI Springs	2315853-4
Dust and EMI Plug	2317857-2
Dust Plug	2324698-1

112G Cages and Connectors

OSFP 112G cages and connectors will address next-generation data center needs by supporting aggregate data rates up to 800 Gbps. Samples now available!

Description	TE Part Number
OSFP SMT Receptacle, PdNi, Au Flash, with Solder washer	2344064-1
OSFP SMT Receptacle, PdNi, Au Flash	2344064-2
OSFP SMT Receptacle, Au, with Solder washer	2344064-3
OSFP SMT Receptacle, Au	2344064-4

Cable Assemblies

- Module designed to be in the range of MSA specification impedance

- Allows airflow through the module shell to cool downstream electronics in front-to-back airflow systems, or exhaust for back-to-front airflow

Product Offering

- OSFP to OSFP straight cables

- OSFP to 2 or 4 QSFP56 breakout cables

- OSFP to 8 SFP56 breakout cables

- Other custom cable configurations will be considered

- Up to 26 AWG supported in the OSFP form factor

- Maximum cable reach of 3 meters meets IEEE 802.3cd SDD21 requirement of - 17.16 dB at 13.28 GHz

OSFP to OSFP

OSFP to 2 QSFP

OSFP to 4 QSFP

OSFP to 8 SFP

Description	TE Part Number
OSFP - OSFP, 1 meter, 30AWG	2821906-5
OSFP - OSFP, 2 meter, 30AWG	2821906-7
OSFP - OSFP, 3 meter, 26AWG	2336065-3
OSFP - 2 QSFP, 1 meter, 30AWG	2324441-2
OSFP - 2 QSFP, 2 meter, 30AWG	2324441-4
OSFP - 2 QSFP, 3 meter, 26AWG	2335033-3
OSFP - 4 QSFP, 1 meter, 30AWG	2324442-2
OSFP - 4 QSFP, 2 meter, 30AWG	2324442-4
OSFP - 4 QSFP, 3 meter, 26AWG	2336063-3
OSFP - 8 SFP, 1 meter, 30AWG	2324443-2
OSFP - 8 SFP, 2 meter, 30AWG	2324443-4
OSFP - 8 SFP, 3 meter, 26AWG	2336064-3

TE Technical Support Center

USA: 1.800.522.6752
Canada: 1 .905.475.6222
Mexico: 52.0.55.1106.0800
Latin/S. America: 54.0.11.4733.2200
Germany: 49.0.6251.133.1999
UK: 44.0.800.267666
France: 33.0.1.3420.8686
Netherlands: 31.0.73.6246.999
China: 86.0.400.820.6015