

OSFP

Amphenol ICC's OSFP interconnect system has 60 contacts per port, with a 0.6mm contact pitch and 8 high speed channels. The OSFP footprint is optimized for signal integrity performance and built for use in high speed serial applications. The connector is enhanced for low crosstalk and has ground commoning for resonance dampening. It is also designed for 1U applications. An integrated heat sink is featured on the module side for optimal thermal performance.

- Operating at 56Gb/s PAM-4 for up to 400Gb/s aggregated bandwidth solution
- 60 contacts per port supports 16 high speed pairs and 10 power/control pins
- Supports power up to 16W per port
- Advanced internal ground features provide improved crosstalk performance
- Supports passive copper as well as short and long range optics



FEATURES

- Enables 25Gb/s NRZ and 56Gb/s PAM4 per channel transmission
- Compatible with all mating connector & cage configurations – single port, ganged and stacked
- System design enables up to 16 watts per port independent of cage configuration
- Advanced internal ground features provide improved crosstalk performance over QSFP28
- Designed with considerations to support next generation operating speeds: 112Gb/s PAM4
- Custom solutions supported
- Part of Amphenol's overall OSFP interconnect system
- RoHS compliant

BENEFITS

- 200G / 400G aggregate bandwidth capacity
- Allows for maximization of linear port to port density
- Allows for use of DAC, short range and long range optical devices without concern for proper heat management
- Better signal integrity (SI) performance
- Potential to upgrade to 112Gb/s PAM4
- Custom solutions from adapter cables to loopback cables and beyond
- Comprehensive OSFP product family offering cable and connector solutions for copper or optical based applications
- Environmentally friendly

TECHNICAL INFORMATION

MATERIAL

- Housing: Black color, Glass reinforced, Lead Free Solder Reflow Process Compatible Thermo Plastic
- Contacts Base Material: Phosphor Bronze
- Plating Solder Tails: Matte tin over Nickel
- Plating Mating Area: Gold
- Resonance Dampening Feature: Carbon fibre reinforced

MECHANICAL PERFORMANCE

- Durability: 250 mating cycles
- Mating Force: 40 N max.
- Unmating Force: 40 N max.
- Contact Normal Force: 40 grams min.

ELECTRICAL PERFORMANCE

- Operating Voltage: 30 VDC per contact
- Operating Current:
 - 0.5 A per signal contact
 - 1.5 A per low speed power contact
- Differential Impedance: $100\Omega \pm 10\Omega$

ENVIRONMENTAL

- Operating and (Storage) Temperature: -20° to $+85^{\circ}$ C
- RoHS & Halogen-Free

TOOLING INFORMATION

- Configurations:
 - 1x1, 1x2, 1x4
 - 2x1, 2x4, 2x6

PACKAGING

- Tape and Reel or Tray

TARGET MARKETS/APPLICATIONS



Cellular infrastructure
Network Interface Cards



Hubs
Switch
Storage Systems
Servers



Test and Measurement Equipment

PART NUMBER SELECTOR

UE62A

1011

OSFP Series

A1X1 SMT Connector

Number of Ports in row

1Single Connector

Options

0Standard

Termination

1SMT

Options

1Standard

X

X

00

T

Packaging

Tape & Reel

Options

00Standard

Connector Plating

0Standard SMT Connector

1Connector with Solder Ring for B-B Application

Plating for Mating Contact

230 u" Gold Mating, Gold Flash on Terminals

330 u" Gold Mating, 120-300 u" Matte Tin on Terminals

515 u" Gold Mating, Gold Flash on Terminals

615 u" Gold Mating, 120-300 u" Matte Tin on Terminals

UE62B

XX20

OSFP Series

B1XN Inline Cages

Number of Ports in row

11X1 Cage

21X2 Cage

41X4 Cage

Cage EMI Options

6Spring Fingers

Cage Pin Style

2Press Fit

Options

0Standard

X

X

01

1

Packaging

1Tray Packaging

Options

01Standard

Cage Plating

2Nickel Plating

Options

0Standard

UE62M

XX20

OSFP Series

M2XN Press Fit Combo

Number of Ports in row

12X1 Cage

42X4 Cage

62X6 Cage

Cage EMI Options

6Spring Fingers

Termination

2Press Fit

Options

0Standard

X

X

X1

1

Packaging

1Tray Packaging

Cage Plating

21Nickel Plating

31Matte Tin Plating

Connector Plating

330 u" Gold Mating, 120-300 u" Matte

615 u" Gold Mating, 120-300 u" Matte

Combo Style

0Std 0.25 Thick Cage

BOverhanging/Recessed