



SFP28

TE Internal #: 2149490-5

SFP, SFP+ & zSFP+, Cage Assembly with Integrated Connector, Data Rate (Max) 16 Gb/s, Internal/External EMI Springs, SFP+, With Lightpipe, 2 x 8

[View on TE.com >](#)

Connectors > Pluggable IO Connectors & Cages > SFP, SFP+ & zSFP+ > SFP+ Stacked Cage Assemblies



Pluggable I/O Product Type: **Cage Assembly with Integrated Connector**

Data Rate (Max): **16 Gb/s**

EMI Containment Feature Type: **Internal/External EMI Springs**

Pluggable I/O Applications: **SFP+**

Lightpipe Options: **With Lightpipe**

[All SFP+ Stacked Cage Assemblies \(125\)](#)

## Features

### Product Type Features

Form Factor	SFP+
Cage Type	Stacked
Pluggable I/O Product Type	Cage Assembly with Integrated Connector
Lightpipe Options	With Lightpipe
Connector System	Cable-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

Port Matrix Configuration	2 x 8
Lightpipe Configuration	Four Triangular (Inner & Outer)
Number of Ports	16
Number of Positions	320

### Electrical Characteristics

Data Rate (Max)	16 Gb/s
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### Contact Features

Tail Plating Material	Tin
Contact Mating Area Plating Material Thickness	.76 µm



Contact Mating Area Plating Material	Gold or Gold Flash over Palladium Nickel
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### Termination Features

Termination Post & Tail Length	3 mm[.118 in]
Termination Method to Printed Circuit Board	Through Hole - Press-Fit

### Mechanical Attachment

Connector Mounting Type	Board Mount
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### Housing Features

Cage Material	Nickel Silver
Centerline (Pitch)	.8 mm[.032 in]

### Dimensions

PCB Thickness (Recommended)	1.5 mm[.059 in]
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### Usage Conditions

Operating Temperature Range	-55 – 105 °C[-65 – 221 °F]
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### Operation/Application

Heat Sink Compatible	No
Pluggable I/O Applications	SFP+
Circuit Application	Signal

### Industry Standards

UL Flammability Rating	UL 94V-0
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### Packaging Features

Packaging Method	Package
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### Other

EMI Containment Feature Type	Internal/External EMI Springs
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### Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2023 (235)















Candidate List Declared Against: JUNE 2023 (235)  
Does not contain REACH SVHC

Halogen Content	Not Low Halogen - contains Br or Cl > 900 ppm.
Solder Process Capability	Not applicable for solder process capability

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

## Compatible Parts

 <p>TE Part # CAT-C11-N490333 QSFP28-Four SFP+ Cable Assembly: 30 AWG</p>	 <p>TE Part # CAT-C11-N490325 QSFP28-Four SFP+ Cable Assembly: 26 AWG</p>	 <p>TE Part # CAT-C11-N4901114 SFP28 to SFP28 Cable Assembly: 30 AWG</p>	 <p>TE Part # CAT-C11-N49011 SFP28 to SFP28 Cable Assembly: 26 AWG</p>
 <p>TE Part # CAT-Q17-N49011 QSFP56-Four SFP56 Cable Assembly: 30 AWG</p>	 <p>TE Part # CAT-Q17-N490333 QSFP56-Four SFP56 Cable Assembly: 26 AWG</p>	 <p>TE Part # 4-2821222-5 SFP56 DIRECT ATTACH CA, 2M, 30AWG</p>	 <p>TE Part # 4-2821224-5 SFP56 DIRECT ATTACH CA, 3M, 26AWG</p>
 <p>TE Part # 4-2334985-2 SFP56 DIRECT ATTACH CA, 1M, 32AWG</p>	 <p>TE Part # CAT-C11-H5 SFP+ to SFP+ I/O Cable Assembly: 24 AWG</p>	 <p>TE Part # CAT-C11-H50626 SFP+ to SFP+ I/O Cable Assembly: 30 AWG</p>	 <p>TE Part # CAT-C11-H506 SFP+ to SFP+ I/O Cable Assembly: 26 AWG</p>




TE Part # CAT-C11-H5062  
SFP+ to SFP+ I/O Cable Assembly: 28 AWG



TE Part # 2334985-2  
SFP28 DIRECT ATTACH CA, 1M, 32AWG



TE Part # 2018280-5  
KIT, SEAT TL SFP PLUS 2X8



TE Part # 2063048-5  
SFP EXTRACTION KIT ASM, 5 POS



TE Part # 2142970-1  
CABLE ASSY, MICRO SFP+ TO STD SFP+, 0.5M



TE Part # 2142970-2  
CABLE ASSY, MICRO SFP+ TO STD SFP+, 1M



TE Part # 2142970-3  
CABLE ASSY, MICRO SFP+ TO STD SFP+, 2M



TE Part # 2142970-4  
CABLE ASSY, MICRO SFP+ TO STD SFP+, 3M

### Customers Also Bought



TE Part #1932626-1  
MJ, 10MM, 8P, BEZEL PNL TABS, SN



TE Part #6473649-1  
025/040 200POS CAP ASSY H



TE Part #2061433-2  
FOAC FULLAXS BULKHEAD HOUSING

TE Part #1554570-2  
MODULE FEMALE GUIDE, UNIVERSAL POWER

TE Part #1746986-2  
GROUND RETURN LOWER SHIELD TYPE B, PB-FRE

TE Part #2361314-5  
SFP56 STACKED 2X4 RECEPTACLE ASSEMBLY

TE Part #353830-7  
040 III HD 72POS CAP ASSY H TIN

TE Part #8-2355644-1  
DDR5 DIMM SMT\_blue hsg&blue latch



TE Part #176416-1  
U-M-N-L D-TYPE CAP KIT 4P

### Documents



## Product Drawings

### SFP+ Assy 2x8 Sprg 4 Lp Sn

English

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## CAD Files

### 3D PDF

3D

### Customer View Model

[ENG\\_CVM\\_CVM\\_2149490-5\\_B.2d\\_dxf.zip](#)

English

### Customer View Model

[ENG\\_CVM\\_CVM\\_2149490-5\\_B.3d\\_igs.zip](#)

English

### Customer View Model

[ENG\\_CVM\\_CVM\\_2149490-5\\_B.3d\\_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

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## Datasheets & Catalog Pages

### 4-1773455-3 - Quick Reference Guide SFP+ Solutions

English

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## Product Specifications

### Application Specification

English

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## Product Environmental Compliance

### TE Material Declaration

English

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## Instruction Sheets

### Instruction Sheet (U.S.)

English

### Instruction Sheet (U.S.)

English