



SFP28

TE Internal #: 2169788-5

SFP/SFP+/zSFP+, Cage Assembly with Integrated Connector, Data Rate (Max) 16 Gb/s, Elastomeric Gasket, SFP+, Included Lightpipe

[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: **Elastomeric Gasket**

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

Included Lightpipe: **Yes**

[All SFP+ Stacked Cage Assemblies \(122\)](#)

Features

Product Type Features

Form Factor	SFP+
Cage Type	Stacked
Pluggable I/O Product Type	Cage Assembly with Integrated Connector
Integrated Lightpipes	Yes
Connector System	Cable-to-Board
Sealable	Yes
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 Thickness	.76 µm



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

Termination Method to Printed Circuit Board	Through Hole - Press-Fit
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Mechanical Attachment

PCB Mounting Style	Through Hole - Press-Fit
Connector Mounting Type	Board Mount

Housing Features

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

Dimensions

Tail Length	3 mm[.118 in]
PCB Thickness (Recommended)	1.5 mm[.059 in]

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	Elastomeric Gasket
Included Lightpipe	Yes

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: JAN 2021 (211) Candidate List Declared Against: JUN 2015 (163) SVHC > Threshold: Not Yet Reviewed
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 Regulations, TE’s information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) ‘Guidance on requirements for substances in articles’(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of ‘complex object’, the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA “Guidance on requirements for substances in articles” (June 2017, version 4.0) and will be updating its statements accordingly.

Compatible Parts

 <p>TE Part # CAT-C11-H50626 SFP+ to SFP+ I/O Cable Assembly: 30 AWG</p>	 <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-N49011142 SFP28 to SFP28 Cable Assembly: 32 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 # CAT-C11-G28037 SFP56 to SFP56 Cable Assembly: 30 AWG</p>	 <p>TE Part # CAT-C11-G28 SFP56 to SFP56 Cable Assembly: 26 AWG</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-H506 SFP+ to SFP+ I/O Cable Assembly: 26 AWG</p>	 <p>TE Part # CAT-C11-H5062 SFP+ to SFP+ I/O Cable Assembly: 28 AWG</p>	 <p>TE Part # 2142970-1 CABLE ASSY, MICRO SFP+ TO STD SFP+, 0.5M</p>	 <p>TE Part # 2142970-2 CABLE ASSY, MICRO SFP+ TO STD SFP+, 1M</p>
 <p>TE Part # 2142970-3 CABLE ASSY, MICRO SFP+ TO STD SFP+, 2M</p>	 <p>TE Part # 2142970-4 CABLE ASSY, MICRO SFP+ TO STD SFP+, 3M</p>	 <p>TE Part # 2142970-5 CABLE ASSY, MICRO SFP+ TO STD SFP+, 4M</p>	 <p>TE Part # 2142970-6 CABLE ASSY, MICRO SFP+ TO STD SFP+, 5M</p>

Customers Also Bought

 <p>TE Part #2007626-2 1x4 QSFP Kit Assy Sqr LP, Networking</p>	 <p>TE Part #1648360-1 708-0134-01109=SA CONTACT,SKT</p>	 <p>TE Part #2007788-2 IMP100S,H,V3P10C,UG,OEWS39,4.9</p>	 <p>TE Part #4-2170705-5 CAGE ASSY, QSFP28 1X1, SPRING, HS, LP</p>
 <p>TE Part #2288218-6 HEAT SINK,FRONT TO BACK AIREFLOW,CFP2</p>	 <p>TE Part #3-1437665-5 JC6-P207-04=JC6 ASSEMBLY</p>	 <p>TE Part #7-1761614-5 STEP-Z PLUG 25MM 200P LF ST</p>	 <p>TE Part #2-6450880-0 MBXL R/A RCPT 1LP + 16S + 1LP</p>



Documents

Product Drawings

SFP+ Assy 2x8 Gskt 4 Lp Sn

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_2169788-5\_D.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_2169788-5\_D.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_2169788-5\_D.3d\_stp.zip

English

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

Product Specifications

Application Specification

English

Product Environmental Compliance

TE Material Declaration

English

Instruction Sheets

Instruction Sheet (U.S.)

English

Instruction Sheet (U.S.)

English