



**zQSFP+/QSFP28**

TE Internal #: 2299940-2

QSFP, QSFP+ & zQSFP+, Cage Assembly with Integrated Connector, 2 x 1, Internal/External EMI Springs, Thermally Enhanced, zQSFP+/QSFP28

[View on TE.com >](#)

Connectors > Pluggable IO Connectors & Cages > QSFP, QSFP+ & zQSFP+



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

Port Matrix Configuration: **2 x 1**

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

Thermal Accessory Type Included: **Heat Sink**

Included Lightpipe: **No**

**Features**

**Product Type Features**

Form Factor	zQSFP+
Cage Type	Stacked
Pluggable I/O Product Type	Cage Assembly with Integrated Connector
Thermal Accessory Type Included	Heat Sink
Connector System	Cable-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

**Configuration Features**

Port Matrix Configuration	2 x 1
Number of Ports	2
Number of Rear EONs per Port Column	3
Number of Positions	76

**Electrical Characteristics**

Data Rate (Max)	25 Gb/s
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### Body Features

Heat Sink Finish	Anodized Black
Heat Sink Style	Fin
Heat Sink Height Class	Custom
Heat Sink Height	6.77 mm[.266 in]

### Contact Features

Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Thickness	30 $\mu$ m[.76 $\mu$ in]
Contact Underplating Material	Tin
PCB Contact Termination Area Plating Material	Gold
Contact Current Rating (Max)	.5 A

### Termination Features

Termination Method to Printed Circuit Board	Through Hole - Press-Fit
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### 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)	1.57 mm[.062 in]
Tail Length	2 mm[.079 in]

### Usage Conditions

Operating Temperature Range	-40 – 85 °C[-40 – 185 °F]
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### Operation/Application

Heat Sink Compatible	No
For Use With Pluggable I/O Products	QSFP28 Cable Assembly, QSFP28 MSA Compatible Transceiver
Pluggable I/O Applications	Thermally Enhanced
Circuit Application	Signal

### Industry Standards

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



Packaging Method	Box & Tray
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### Other

EMI Containment Feature Type	Internal/External EMI Springs
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Included Lightpipe	No
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Enhancements	Thermally Enhanced
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## Product Compliance

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

EU RoHS Directive 2011/65/EU	Compliant
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EU ELV Directive 2000/53/EC	Compliant
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2022 (224) Candidate List Declared Against: JUL 2021 (219) SVHC > Threshold: Not Yet Reviewed
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Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
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Solder Process Capability	Not applicable for solder process capability
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#### 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



TE Part # 2829040-2  
QSFP IB EDR, 33AWG, 1.0M



TE Part # 2829040-4  
QSFP IB EDR, 30AWG, 1.0M



TE Part # 2829040-6  
QSFP IB EDR, 30AWG, 2.0M



TE Part # 2829040-7  
QSFP IB EDR, 26AWG, 2.0M



TE Part # 2829040-8  
QSFP IB EDR, 26AWG, 3.0M

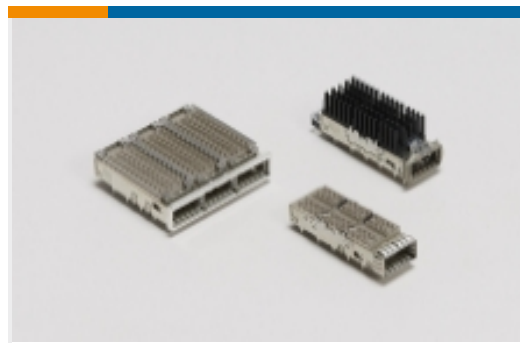


TE Part # 2821033-8  
QSFP TO [4]SFP+, 28G, 1M, 33AWG

Also in the Series | **zQSFP+/QSFP28**



Pluggable I/O Cable Assemblies(81)



QSFP, QSFP+ & zQSFP+(432)

Customers Also Bought



TE Part #2007263-1  
SFP+ 1x2 Cage Assembly



TE Part #1744426-9  
Header Housing Assy, EP 2.5 RA, 9 Pos.



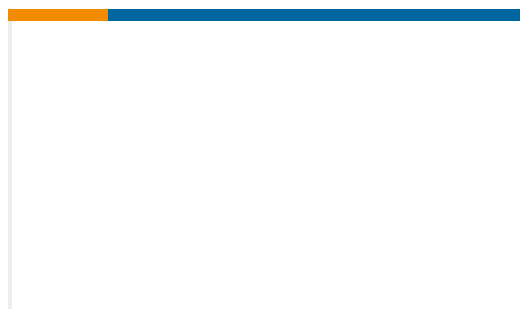
TE Part #2180850-7  
IMP,PWR,3PR,HDR,L-HLD,2X,797-3,797-6



TE Part #2180850-1  
IMP,PWR,3PR,HDR,L-HLD,1X,797-1,N/A



TE Part #4-644759-2  
12P MTA156 HDR ASSY STR LF



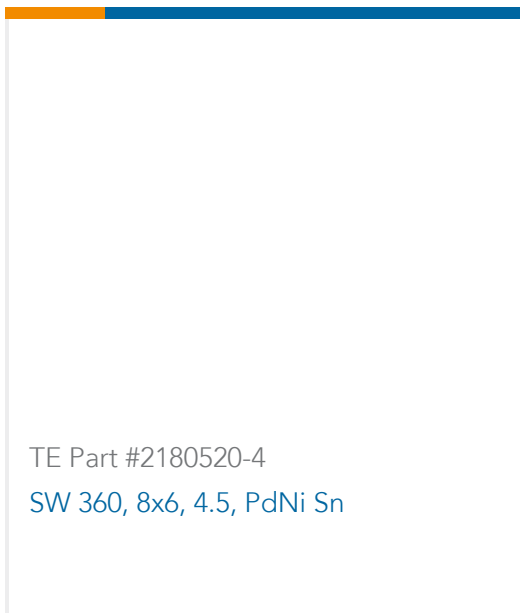
TE Part #2170453-1  
SFP+ 1x4 Cage Assy, with Heatsink



TE Part #2331511-2  
RCPT CONN R/A SMT 76 POSN QSFP-DD



TE Part #2350231-7  
SFP28 STACKED 2X1 RECEPTACLE ASSEMBLY



## Documents

### Product Drawings

[ZQSFP+ STACKED REC ASSEMBLY 2X1,HS](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_2299940-2\\_A.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2299940-2\\_A.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2299940-2\\_A.3d\\_stp.zip](#)

English

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### Product Specifications

[Application Specification](#)

English