



**zQSFP+/QSFP28**

TE Internal #: 2227103-1

zQSFP+/QSFP28, QSFP/QSFP+/zQSFP+, Cage Assembly, Port Matrix Configuration 1 x 2, Customer Applied Gasket, Standard, Data Rate (Max) 28 Gb/s, 2 Port

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



Pluggable I/O Product Type: **Cage Assembly**  
 Port Matrix Configuration: **1 x 2**  
 EMI Containment Feature Type: **Customer Applied Gasket**  
 Thermal Accessory Type Included: **Heat Sink**  
 Included Lightpipe: **No**

**Features**

**Product Type Features**

Form Factor	QSFP28/56
Cage Type	Ganged
Pluggable I/O Product Type	Cage Assembly
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	1 x 2
Number of Ports	2
Lightpipe Configuration	Single Round
Number of Rear EONs per Port Column	1

**Electrical Characteristics**

Data Rate (Max)	28 Gb/s
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**Body Features**

Heat Sink Finish	Anodized Black
Heat Sink Style	Pin



Heat Sink Height Class	PCI
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Heat Sink Height	4.2 mm[.165 in]
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### Contact Features

PCB Contact Termination Area Plating Material	Tin
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### 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
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### Dimensions

Tail Length	2.2 mm[.086 in]
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PCB Thickness (Recommended)	1.45 mm[.057 in]
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### Usage Conditions

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

For Use With Pluggable I/O Products	QSFP Cable Assembly, QSFP MSA Compatible Transceiver
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Pluggable I/O Applications	SFP+ Stacked Belly-to-Belly
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Circuit Application	Signal
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### 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	Customer Applied Gasket
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Included Lightpipe	No
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Enhancements	Standard
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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
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: JUL 2017 (174) SVHC > Threshold: Not Yet Reviewed
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Reflow solder capable to 260°C

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



TE Part # CAT-C11-Z8  
 QSFP28 to QSFP28 Cable Assembly:  
 26 AWG



TE Part # CAT-C11-Z806726  
 QSFP28 to QSFP28 Cable Assembly:  
 30 AWG



TE Part # CAT-C11-N49  
 QSFP28-Two QSFP28 Cable  
 Assembly: 30 AWG



TE Part # CAT-C11-N490333  
 QSFP28-Four SFP+ Cable Assembly:  
 30 AWG




TE Part # CAT-C11-N490325  
QSFP28-Four SFP+ Cable Assembly:  
26 AWG



TE Part # CAT-Q17-N490325  
QSFP56 to QSFP56 Cable Assembly:  
30 AWG



TE Part # CAT-Q17-N49033  
QSFP56-Two QSFP56 Cable  
Assembly: 30 AWG



TE Part # CAT-C11-Q17  
QSFP56 to QSFP56 Cable Assembly:  
26 AWG



TE Part # CAT-Q17-N49011  
QSFP56-Four SFP56 Cable Assembly:  
30 AWG



TE Part # CAT-Q17-N490333  
QSFP56-Four SFP56 Cable Assembly:  
26 AWG



TE Part # 1551920-2  
zQSFP+ connector assembly



TE Part # 1888810-2  
EMI/Dust Cover, XFP And QSFP

TE Part # 2370595-1  
ASSY, SEATING TOOL

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



Pluggable I/O Cable Assemblies(84)



QSFP/QSFP+/zQSFP+(430)

Customers Also Bought



TE Part #1419111-2  
20C217=SPRING,HOLD-DOWN,KH,.03



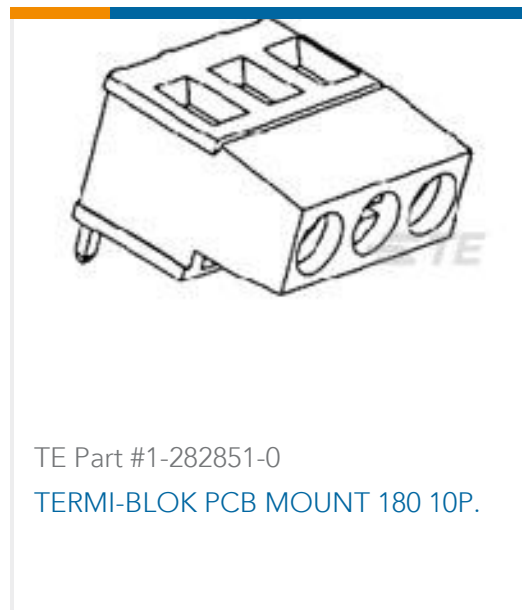
TE Part #1761014-3  
SFP 1X2 CAGE ASSY, PRESS FIT



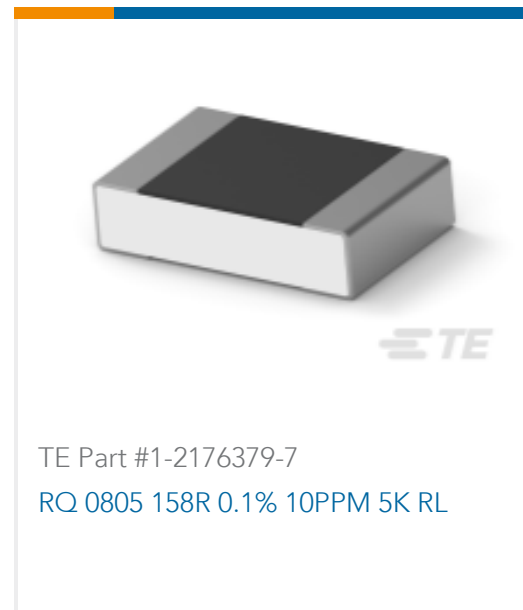
TE Part #1658043-1  
MSB0.80RC-ASY040FL,-,F,-TY



TE Part #1825095-2  
TP11CGPC204



TE Part #1-282851-0  
TERMI-BLOK PCB MOUNT 180 10P.



TE Part #1-2176379-7  
RQ 0805 158R 0.1% 10PPM 5K RL



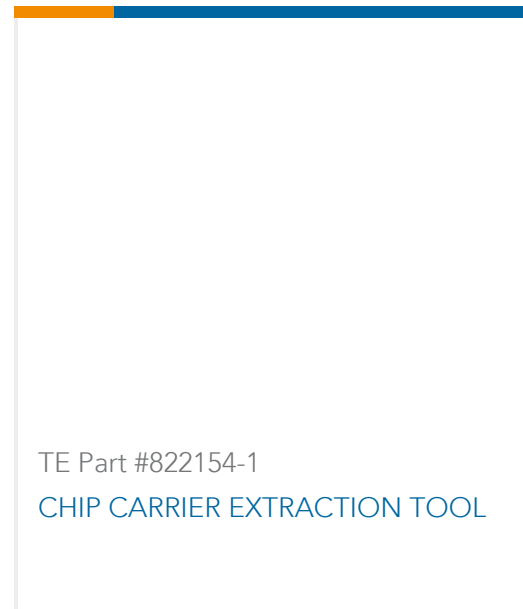
TE Part #1622847-1  
CRG0603 1% 140R



TE Part #102974-6  
06 MODII HDR SRRA B/A .100CL



TE Part #1776346-2  
JC6-P107-06-220=JC6 ASSEMBLY



TE Part #822154-1  
CHIP CARRIER EXTRACTION TOOL

## Documents

### Product Drawings

#### 1X2 CAGE ASSY BHND BZL QSFP28

English

### CAD Files

#### 3D PDF

3D

#### Customer View Model

[ENG\\_CVM\\_CVM\\_2227103-1\\_B.2d\\_dxf.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_2227103-1\\_B.3d\\_igs.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_2227103-1\\_B.3d\\_stp.zip](#)

English

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

### Datasheets & Catalog Pages

#### QSFP28/56 and zQSFP+ Interconnects

English

### Product Specifications

#### Application Specification

English