

2170704-8 ✓ ACTIVE

zQSFP+/QSFP28

TE Internal #: 2170704-8

QSFP28/56, Cage Assembly, Signal, Operating Temperature Range  
-40 – 85 °C [-40 – 185 °F], Data Rate (Max) 28 Gb/s, 1 Ports

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Connectors > Pluggable IO Connectors & Cages



Pluggable I/O Product Type: **Cage Assembly**

Sealable: **No**

Circuit Application: **Signal**

Operating Temperature Range: **-40 – 85 °C [-40 – 185 °F]**

Data Rate (Max): **28 Gb/s**

## Features

### Product Type Features

|                                 |               |
|---------------------------------|---------------|
| Thermal Accessory Type Included | Heat Sink     |
| Cage Type                       | Single        |
| Pluggable I/O Product Type      | Cage Assembly |
| Sealable                        | No            |
| Form Factor                     | QSFP28/56     |

### Configuration Features

|                                     |       |
|-------------------------------------|-------|
| Number of Rear EONs per Port Column | 1     |
| Number of Ports                     | 1     |
| Port Matrix Configuration           | 1 x 1 |

### Electrical Characteristics

|                 |         |
|-----------------|---------|
| Data Rate (Max) | 28 Gb/s |
|-----------------|---------|

### Body Features

|                        |                |
|------------------------|----------------|
| Heat Sink Finish       | Anodized Black |
| Heat Sink Height Class | SAN            |
| Heat Sink Style        | Pin            |

### Contact Features

|   |     |
|---|-----|
| PCB Contact Termination Area Plating Material | Tin |
|---|-----|



### Termination Features

|                                |                          |
|--------------------------------|--------------------------|
| Termination Post & Tail Length | 2.05 mm[.081 in]         |
| Termination Method to PCB      | Through Hole - Press-Fit |

### Housing Features

|               |               |
|---------------|---------------|
| Cage Material | Nickel Silver |
|---------------|---------------|

### Dimensions

|                             |                  |
|-----------------------------|------------------|
| PCB Thickness (Recommended) | 1.57 mm[.062 in] |
|-----------------------------|------------------|

### Usage Conditions

|                             |                           |
|-----------------------------|---------------------------|
| Operating Temperature Range | -40 – 85 °C[-40 – 185 °F] |
|-----------------------------|---------------------------|

### Operation/Application

|                            |                             |
|----------------------------|-----------------------------|
| Pluggable I/O Applications | SFP+ Stacked Belly-to-Belly |
| Heat Sink Compatible       | Yes                         |
| Circuit Application        | Signal                      |

### Industry Standards

|                        |          |
|------------------------|----------|
| UL Flammability Rating | UL 94V-0 |
|------------------------|----------|

### Packaging Features

|                  |            |
|------------------|------------|
| Packaging Method | Box & Tray |
|------------------|------------|

### Other

|                              |                               |
|------------------------------|-------------------------------|
| Included Lightpipe           | No                            |
| EMI Containment Feature Type | Internal/External EMI Springs |

### 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 2024 (241)<br>Candidate List Declared Against: JUNE 2024 (241)<br>Does not contain REACH SVHC |
| Halogen Content                               | Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free   |










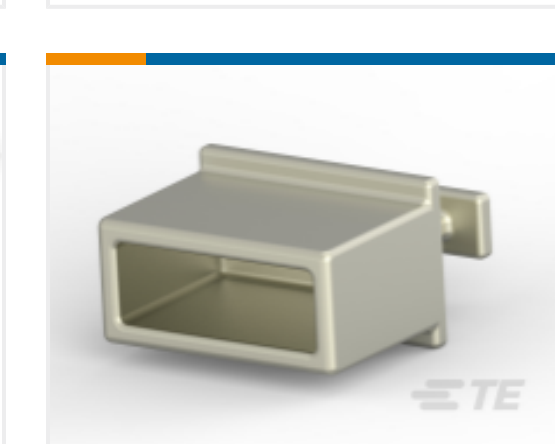


Solder Process Capability

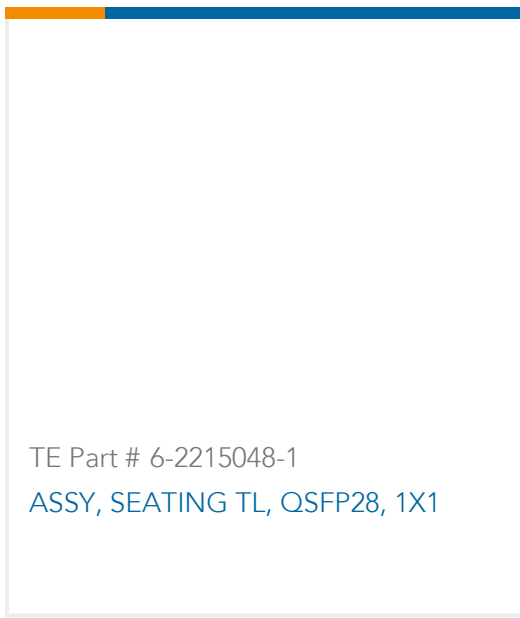
Not applicable for solder process capability

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>

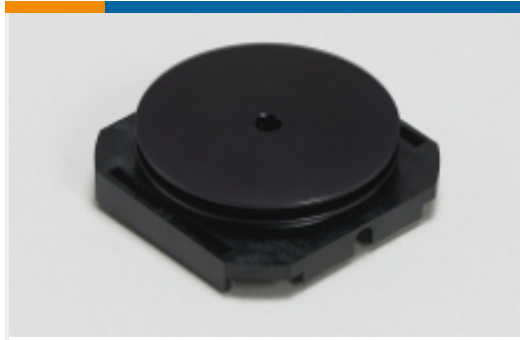
## Compatible Parts

|   |   |  |  |
|---|---|--|--|
|  <p>TE Part # CAT-C11-Z806726<br/>QSFP28 to QSFP28 Cable Assembly:<br/>30 AWG</p>  |  <p>TE Part # CAT-C11-N49<br/>QSFP28-Two QSFP28 Cable<br/>Assembly: 30 AWG</p>    |  <p>TE Part # CAT-C11-Z8<br/>QSFP28 to QSFP28 Cable Assembly:<br/>26 AWG</p>      |  <p>TE Part # CAT-C11-N490333<br/>QSFP28-Four SFP+ Cable Assembly:<br/>30 AWG</p> |
|  <p>TE Part # CAT-C11-N490325<br/>QSFP28-Four SFP+ Cable Assembly:<br/>26 AWG</p>  |  <p>TE Part # CAT-Q17-N490325<br/>QSFP56 to QSFP56 Cable Assembly:<br/>30 AWG</p> |  <p>TE Part # CAT-Q17-N49033<br/>QSFP56-Two QSFP56 Cable<br/>Assembly: 30 AWG</p> |  <p>TE Part # CAT-Q17-N49011<br/>QSFP56-Four SFP56 Cable Assembly:<br/>30 AWG</p> |
|  <p>TE Part # CAT-Q17-N490333<br/>QSFP56-Four SFP56 Cable Assembly:<br/>26 AWG</p> |  <p>TE Part # 1888810-2<br/>EMI/Dust Cover,XFP And QSFP</p>                       |  <p>TE Part # 1551920-2<br/>zQSFP+ connector assembly</p>                         |  <p>TE Part # CAT-C11-Q17<br/>QSFP56 to QSFP56 Cable Assembly:<br/>26 AWG</p>     |



TE Part # 6-2215048-1  
ASSY, SEATING TL, QSFP28, 1X1

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



Heat Sinks(7)



Pluggable I/O Cable Assemblies(78)

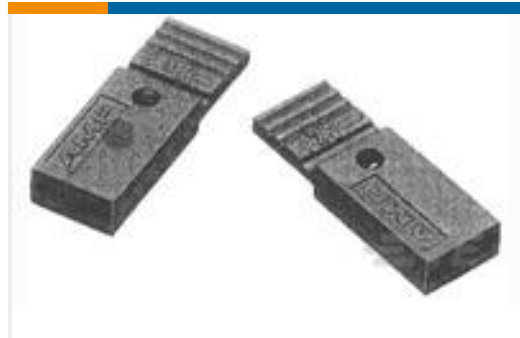


Pluggable IO Connectors & Cages(424)

### Customers Also Bought



TE Part #2198235-3  
SFP+ Enhanced 1x6, Networking Heatsink



TE Part #881545-2  
SHUNT LP W/HANDLE 2 POS 30AU



TE Part #1734101-6  
Champ050 series,60pos,Au over PdNi



TE Part #1551920-2  
zQSFP+ connector assembly



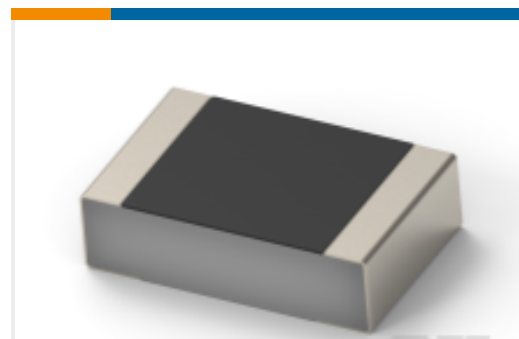
TE Part #1734101-4  
Champ050 series,40pos,Au over PdNi



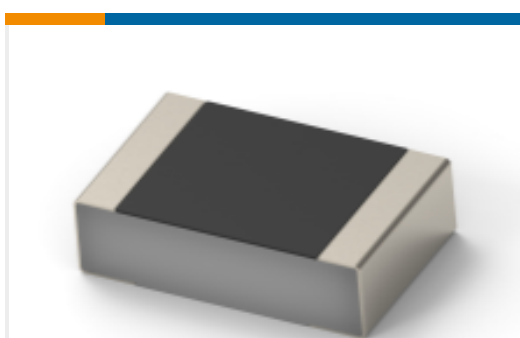
TE Part #1-1410297-2  
MULTIGIG RT KEY/ESD .8" 45 DEG



TE Part #2-2013289-3  
EMBOSS TAPE DDR3 204P 5.2H STD Au 0.76



TE Part #5-2176453-6  
CPF 0201 21K5 0.1% 25ppm 1K RL



TE Part #9-2176451-2  
CPF 0201 442R 0.1% 25ppm 1K RL



TE Part #2170292-2  
2MM H.M. TYPE "A" PIN ASSY.



## Documents

### CAD Files

#### 3D PDF

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_2170704-8\\_A.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2170704-8\\_A.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2170704-8\\_A.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