



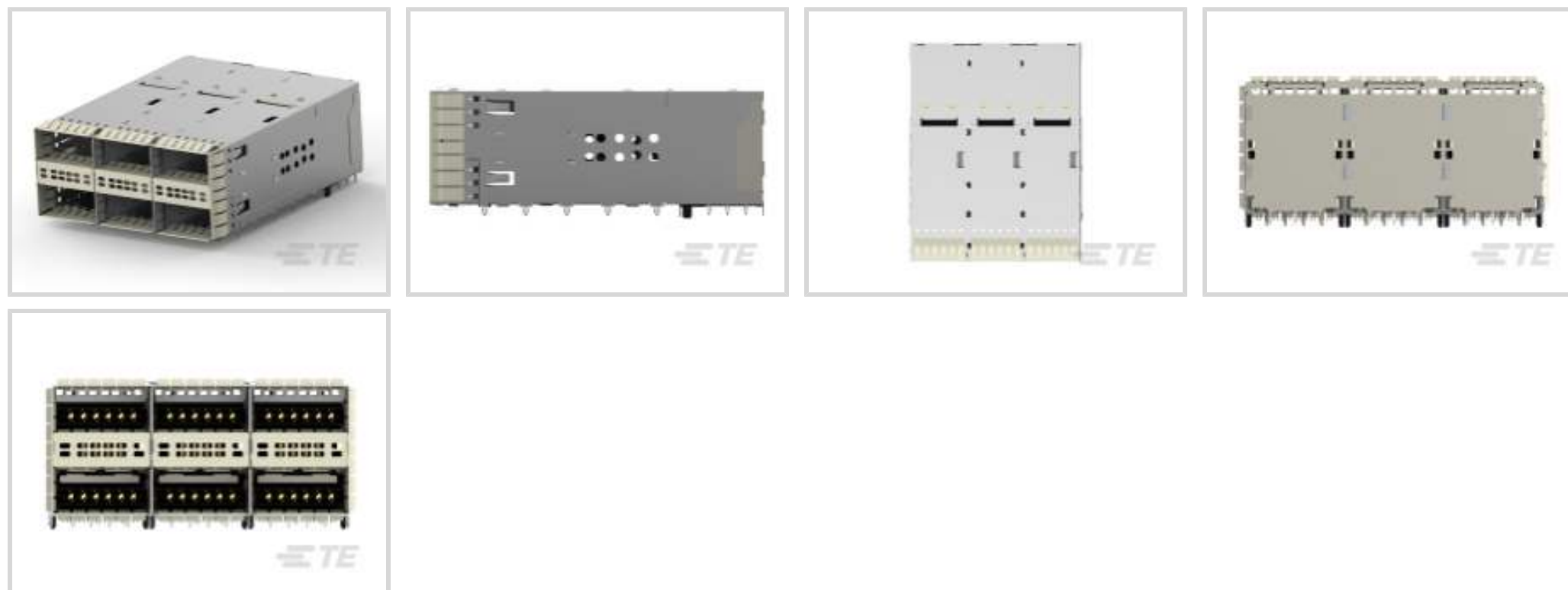
**zQSFP+/QSFP28**

TE Internal #: 2227671-1

QSFP, QSFP+ & zQSFP+, Cage Assembly with Integrated Connector, 2 x 3, Internal/External EMI Springs, Standard, Data Rate (Max) 28 Gb/s, 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 3**

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

Included Lightpipe: **No**

Enhancements: **Standard**

**Features**

**Product Type Features**

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

**Configuration Features**

|                                     |       |
|-------------------------------------|-------|
| Port Matrix Configuration           | 2 x 3 |
| Number of Ports                     | 6     |
| Number of Rear EONs per Port Column | 3     |
| Number of Positions                 | 228   |

**Electrical Characteristics**

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

**Contact Features**



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

### Termination Features

|   |                          |
|---|--------------------------|
| Termination Post & Tail Length              | 2 mm[.079 in]            |
| Termination Method to Printed Circuit Board | Through Hole - Press-Fit |

### Mechanical Attachment

|                         |             |
|-------------------------|-------------|
| Connector Mounting Type | Board Mount |
|-------------------------|-------------|

### Housing Features

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

### Dimensions

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

### Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -55 – 105 °C[-67 – 221 °F] |
|-----------------------------|----------------------------|

### Operation/Application

|                                     |  |
|-------------------------------------|--|
| Heat Sink Compatible                | No   |
| For Use With Pluggable I/O Products | QSFP Cable Assembly, QSFP MSA Compatible Transceiver |
| Pluggable I/O Applications          | SFP+ Stacked Belly-to-Belly                          |
| Circuit Application                 | Signal   |

### Industry Standards

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

### Packaging Features

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

### Other

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



## 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)<br>Candidate List Declared Against: JAN 2023 (233)<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>

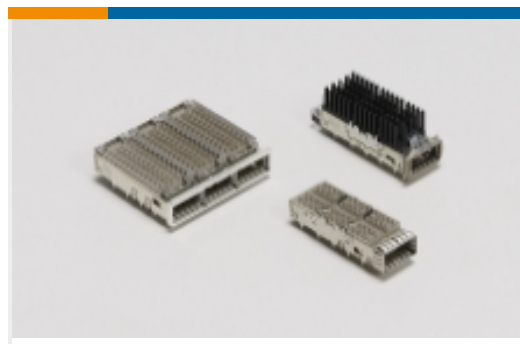
## Compatible Parts



Also in the Series | [zQSFP+/QSFP28](#)



Pluggable I/O Cable Assemblies(81)



QSFP, QSFP+ & zQSFP+(432)

## Customers Also Bought



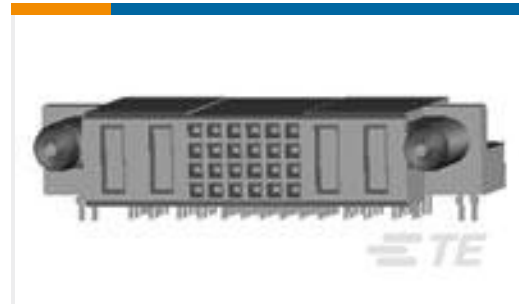
TE Part #2007394-6  
SFP+ assy2x4 Spring FingersInner LP Sn



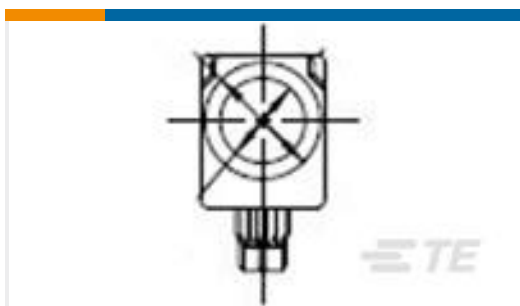
TE Part #2227838-7  
2X12 ZSFP+ CONNECTOR ASSEMBLY



TE Part #292336-1  
Std USB Type A, Flag, T/H



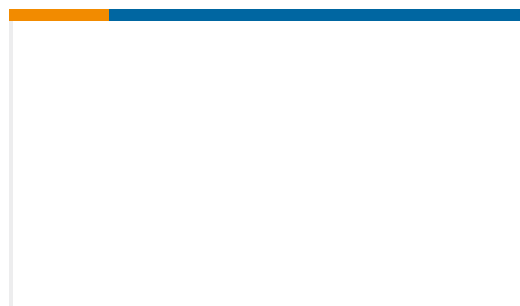
TE Part #1-6450160-0  
MBXL R/A RCPT 2P+24S+2P



TE Part #5223979-2  
UPM GUIDE MODULE



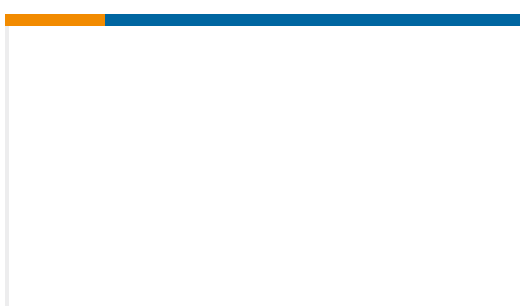
TE Part #2170775-4  
CAGE ASSY, 1X4, QSFP28, GASKET, HS, LP



TE Part #2007400-1  
SFP+ 1x2 Cage Assy with Light Pipe



TE Part #2149782-1  
STRADA Whisper Guide Module



TE Part #2302014-1  
ZSFP+ 1X8 CAGE ASSY, PRESS-FIT, LP, HS

## Documents

### Product Drawings

[zQSFP+ STACKED RECEPTACLE ASSEMBLY 2X3](#)

English

### CAD Files

[3D PDF](#)

[3D](#)

[Customer View Model](#)

[ENG\\_CVM\\_CVM\\_2227671-1\\_A.2d\\_dxf.zip](#)



English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_2227671-1\\_A.3d\\_igs.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_2227671-1\\_A.3d\\_stp.zip](#)

English

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## Datasheets & Catalog Pages

[QSFP28/56 and zQSFP+ Interconnects](#)

English

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## Product Specifications

[Application Specification](#)

English

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## Product Environmental Compliance

[TE Material Declaration](#)

English