



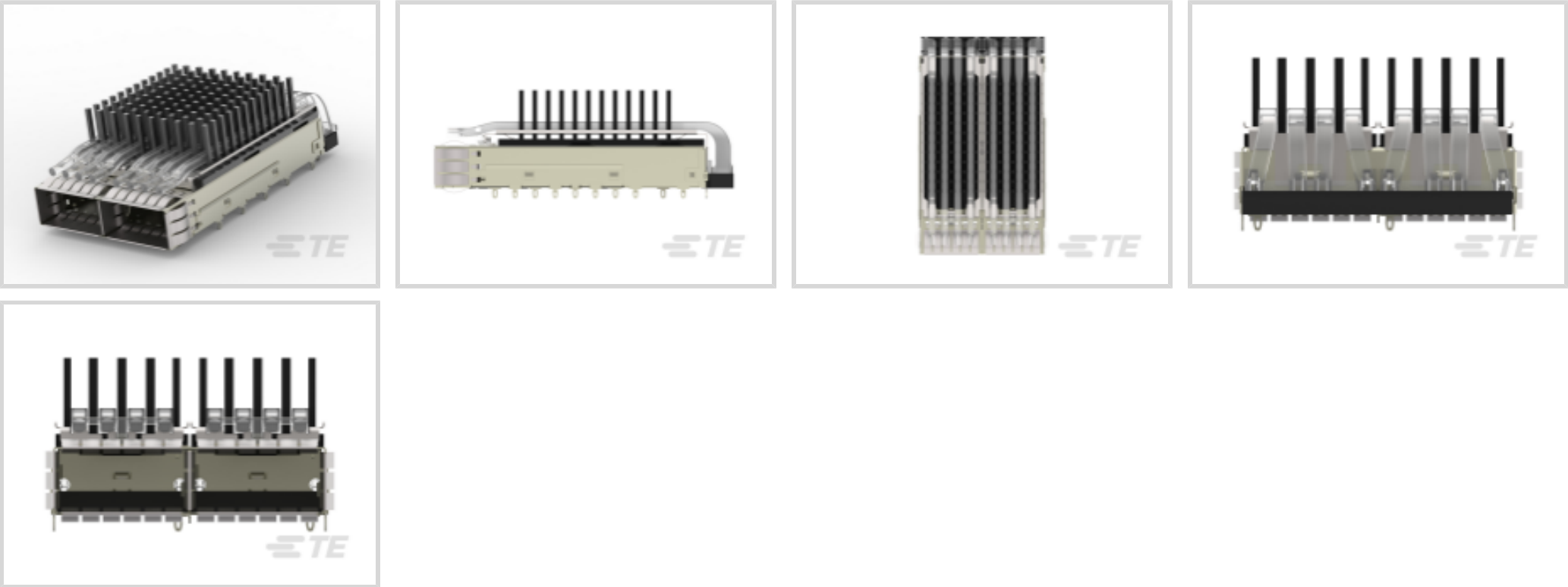
zQSFP+/QSFP28

TE Internal #: 4-2170808-6

QSFP28/56, Cage Assembly, Signal, Operating Temperature Range  
-40 – 85 °C [-40 – 185 °F], Data Rate (Max) 28 Gb/s, 2 Ports

[View on TE.com >](#)

Connectors > Pluggable IO Connectors & Cages



Form Factor: **QSFP28/56**  
Pluggable I/O Product Type: **Cage Assembly**  
Sealable: **No**  
Circuit Application: **Signal**  
Operating Temperature Range: **-40 – 85 °C [ -40 – 185 °F ]**

Features

Product Type Features

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

Configuration Features

|                                     |       |
|-------------------------------------|-------|
| Number of Rear EONs per Port Column | 0     |
| Number of Ports                     | 2     |
| Port Matrix Configuration           | 1 x 2 |

Electrical Characteristics

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

Body Features

|                  |                |
|------------------|----------------|
| Heat Sink Style  | Pin            |
| Heat Sink Finish | Anodized Black |



|                        |                  |
|------------------------|------------------|
| Heat Sink Height       | 13.5 mm[.531 in] |
| Heat Sink Height Class | Networking       |

Contact Features

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

Termination Features

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

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 |
| Circuit Application        | Signal                      |

Industry Standards

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

Packaging Features

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

Other

|                              |                               |
|------------------------------|-------------------------------|
| Included Lightpipe           | Yes                           |
| 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: JAN 2025 (247) |



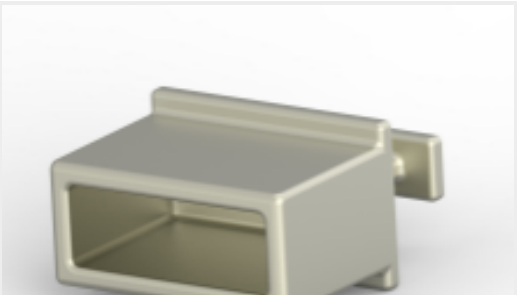
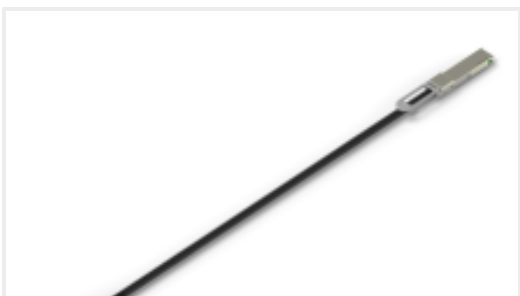
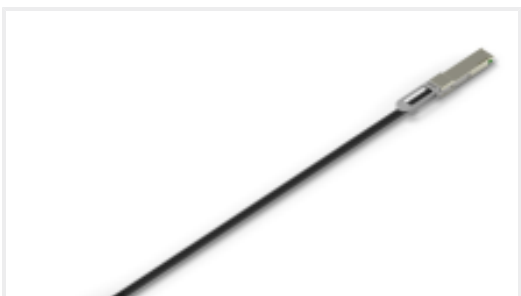
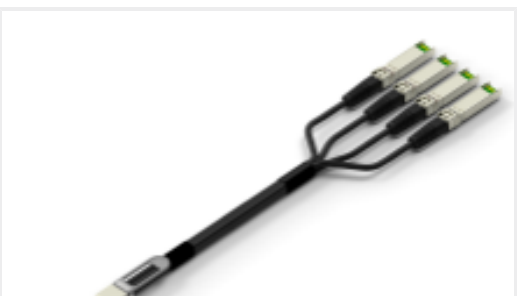
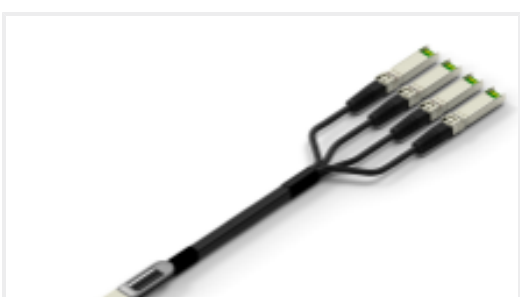
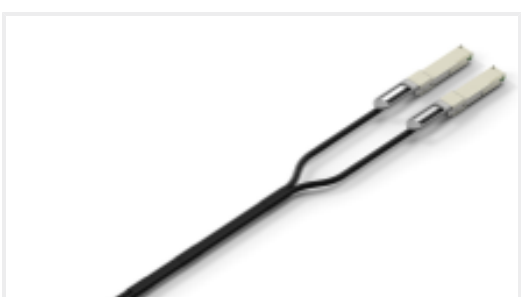
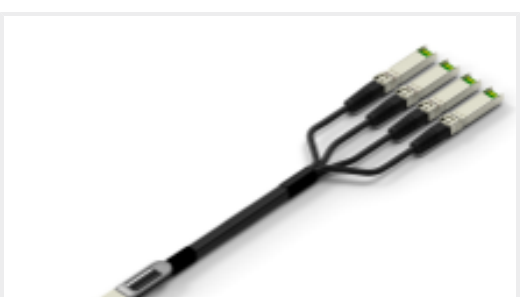
Candidate List Declared Against: JUNE 2024 (241)  
Does not contain REACH SVHC

|                           |                                                |
|---------------------------|------------------------------------------------|
| 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 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 # 2829040-4<br/>QSFP IB EDR, 30AWG, 1.0M</p>                          |  <p>TE Part # 1551920-2<br/>zQSFP+ connector assembly</p>                      |  <p>TE Part # CAT-Q17-N490325<br/>QSFP56 to QSFP56 Cable Assembly:<br/>30 AWG</p>  |  <p>TE Part # 1888810-2<br/>EMI/Dust Cover,XFP And QSFP</p>                       |
|  <p>TE Part # CAT-C11-Z8<br/>QSFP28 to QSFP28 Cable Assembly:<br/>26 AWG</p>      |  <p>TE Part # CAT-C11-Q17<br/>QSFP56 to QSFP56 Cable Assembly:<br/>26 AWG</p>  |  <p>TE Part # CAT-Q17-N49033<br/>QSFP56-Two QSFP56 Cable<br/>Assembly: 30 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-C11-N49<br/>QSFP28-Two QSFP28 Cable<br/>Assembly: 30 AWG</p> |  <p>TE Part # CAT-Q17-N490333<br/>QSFP56-Four SFP56 Cable Assembly:<br/>26 AWG</p> |  <p>TE Part # 2829040-2<br/>QSFP IB EDR, 33AWG, 1.0M</p>                          |



TE Part # 3-2215047-2  
ASSY, STG TL, QSFP28 LP,1X2

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

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

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

Pluggable I/O Cable Assemblies(78)

Pluggable IO Connectors & Cages(424)

QSFP, QSFP+ & zQSFP+(424)

Customers Also Bought

TE Part #434179-000  
22759/34-24-5

TE Part #2-5530843-3  
CONN SEC II 35 POS 100C/L

TE Part #2-2176406-8  
3560 13R 1%

TE Part #1-532431-3  
HDI RECP ASSY 3 ROW 240 POS

TE Part #1-2176526-1  
3503G 2B 64R9 1% 5K RL

TE Part #867824-1  
LGH SGL LINE MICRO-MIN RECEPT

TE Part #1-2176458-5  
CPF 1206 1R4 0.1% 25ppm 1K RL

TE Part #4-2176619-4  
SMQF2W 20K 5%

TE Part #1-2176429-4  
MPT100 15R 5%

TE Part #8-2176407-4  
3560 12R 5%



Documents

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_4-2170808-6\_A.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_4-2170808-6\_A.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_4-2170808-6\_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

Product Specification

English

Instruction Sheets

Instruction Sheet (U.S.)

English