



zQSFP+/QSFP28

TE Internal #: 4-2170705-4

QSFP, QSFP+ & zQSFP+, Cage Assembly, 1 x 1, Internal/External EMI Springs, Included Lightpipe, 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**
 Port Matrix Configuration: **1 x 1**
 EMI Containment Feature Type: **Internal/External EMI Springs**
 Thermal Accessory Type Included: **Heat Sink**
 Included Lightpipe: **Yes**

Features

Product Type Features

| | |
|-----------------------------------|-----------------------|
| Form Factor | QSFP28/56 |
| Cage Type | Single |
| 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 1 |
| Number of Ports | 1 |
| Lightpipe Configuration | Quad Round |
| Number of Rear EONs per Port Column | 0 |

Electrical Characteristics

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

Body Features

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



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|------------------------|-----|
| Heat Sink Height Class | PCI |
|------------------------|-----|

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|------------------|-----------------|
| Heat Sink Height | 4.2 mm[.165 in] |
|------------------|-----------------|

Contact Features

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

Termination Features

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|--------------------------------|------------------|
| Termination Post & Tail Length | 2.05 mm[.081 in] |
|--------------------------------|------------------|

| | |
|---|--------------------------|
| Termination Method to Printed Circuit Board | Through Hole - Press-Fit |
|---|--------------------------|

Mechanical Attachment

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

Housing Features

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

Dimensions

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

Usage Conditions

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

Operation/Application

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|-------------------------------------|--|
| For Use With Pluggable I/O Products | QSFP28 Cable Assembly, QSFP28 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

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

Other

| | |
|------------------------------|-------------------------------|
| EMI Containment Feature Type | Internal/External EMI Springs |
|------------------------------|-------------------------------|

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|--------------------|-----|
| Included Lightpipe | Yes |
|--------------------|-----|

| | |
|--------------|----------|
| 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) Candidate List Declared Against: JUNE 2023 (235) 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 # CAT-C11-Z806726 QSFP28 to QSFP28 Cable Assembly: 30 AWG</p> |  <p>TE Part # CAT-C11-N49 QSFP28-Two QSFP28 Cable Assembly: 30 AWG</p> |  <p>TE Part # CAT-C11-Z8 QSFP28 to QSFP28 Cable Assembly: 26 AWG</p> |  <p>TE Part # CAT-C11-N490333 QSFP28-Four SFP+ Cable Assembly: 30 AWG</p> |
|  <p>TE Part # CAT-C11-N490325 QSFP28-Four SFP+ Cable Assembly: 26 AWG</p> |  <p>TE Part # CAT-Q17-N490325 QSFP56 to QSFP56 Cable Assembly: 30 AWG</p> |  <p>TE Part # CAT-Q17-N49033 QSFP56-Two QSFP56 Cable Assembly: 30 AWG</p> |  <p>TE Part # CAT-C11-Q17 QSFP56 to QSFP56 Cable Assembly: 26 AWG</p> |



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



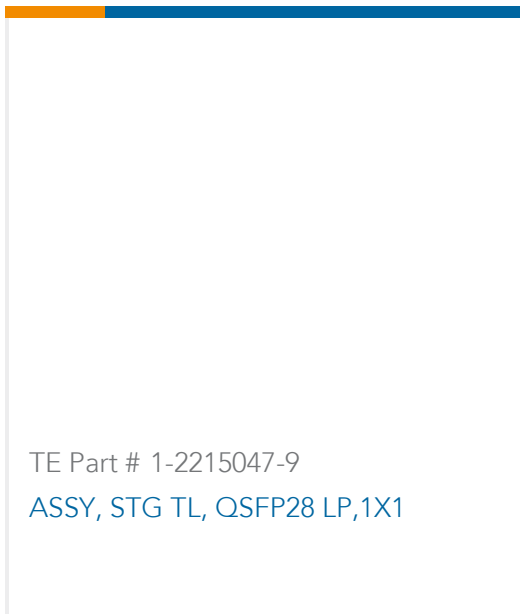
TE Part # CAT-Q17-N490333
QSFP56-Four SFP56 Cable Assembly:
26 AWG



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



TE Part # 1551920-2
zQSFP+ connector assembly



TE Part # 1-2215047-9
ASSY, STG TL, QSFP28 LP,1X1

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



Heat Sinks(1)



Pluggable I/O Cable Assemblies(81)



QSFP, QSFP+ & zQSFP+(425)

Customers Also Bought



TE Part #T4010008031-000
M8,SCREW, FEMALE,S,UNSHIELD,3P,
GOLD



TE Part #2-1473562-3
RITS CONN. PLUG ASSY 3P BLUE



TE Part #2227669-1
zQSFP+ STACKED RECEPTACLE
ASSEMBLY 2X1



TE Part #2-1473562-4
RITS CONN. PLUG ASSY 4P BLUE



TE Part #2007198-2
SFP+ 1x1 Cage Assembly, Press-Fit



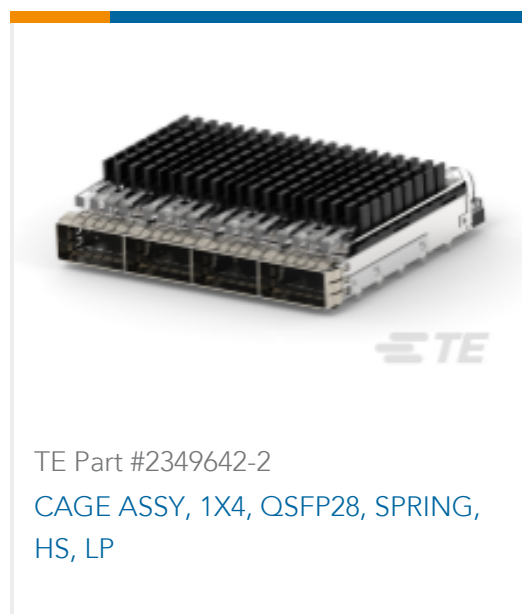
TE Part #2300275-1
zSFP+ 1x4 Cage Assembly, Press-Fit



TE Part #394811-E
M12 F 8 X H S * 301 17,0 112 * Y * C6A
P



TE Part #1367646-4
Heatsink clip Stamped and Form



Documents

CAD Files

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_4-2170705-4_A.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_4-2170705-4_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_4-2170705-4_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

Application Specification

English

Product Environmental Compliance

TE Material Declaration

English

Instruction Sheets

Instruction Sheet (U.S.)

English