



Connectors > PCB Connectors > Backplane Connectors > High Speed Connectors



Connector System: **Board-to-Board**

Number of Positions: **192**

Row-to-Row Spacing: **1.25 mm [.05 in]**

Mating Alignment: **With**

Mating Alignment Type: **Polarization**

Features

Product Type Features

Backplane Module Type	Center
Connector System	Board-to-Board
PCB Connector Assembly Type	PCB Mount Header
Shroud Style	Unshrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Configuration Features

Pairs per Column	8
Number of Pairs	96
Stackable	Yes
Number of Signal Positions	192
Number of Positions	192
Number of Rows	8
Number of Columns	12
PCB Mount Orientation	Right Angle

Electrical Characteristics

Impedance	30 Ω
Operating Voltage	30 VAC



Signal Characteristics

Data Rate	3.5 Gb/s
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Body Features

Shield Material	Copper Alloy
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Contact Features

PCB Contact Termination Area Plating Material Thickness	.5 – 2.5 µm[20 – 100 µin]
Contact Type	Pin
Contact Shape & Form	Dual Beam
Contact Underplating Material	Nickel
PCB Contact Termination Area Plating Material	Tin
Contact Base Material	Copper Alloy
Contact Current Rating (Max)	.5 A

Termination Features

Termination Post & Tail Length	1.6 mm[.493 in]
Termination Method to Printed Circuit Board	Through Hole - Press-Fit

Mechanical Attachment

Mating Retention	Without
PCB Mount Alignment	With
Guide Hardware	Without
PCB Mount Retention	With
PCB Mount Retention Type	Action/Compliant Tail
Mating Alignment	With
Mating Alignment Type	Polarization
Connector Mounting Type	Board Mount

Housing Features

Number of Shrouded Sides	0
End Wall Location	None
Housing Material	LCP (Liquid Crystal Polymer)
Housing Color	Natural
Centerline (Pitch)	1.45 mm[.057 in]

Dimensions

Connector Length	17.3 mm[.681 in]
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Stack Height	1.6 mm
Connector Height	9.5 mm[.374 in]
Connector Width	12.51 mm[.493 in]
PCB Thickness (Recommended)	1.2 mm
PCB Hole Diameter	.4 mm[.016 in]
Row-to-Row Spacing	1.25 mm[.05 in]

Usage Conditions

Operating Temperature Range	-55 – 105 °C[-67 – 221 °F]
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Operation/Application

Durability Rating	250 Cycles
Circuit Application	Signal

Industry Standards

UL Flammability Rating	UL 94V-0
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Packaging Features

Packaging Method	Tray
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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 2021 (211) Candidate List Declared Against: JUN 2020 (209) SVHC > Threshold: Not Yet Reviewed
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

TE Part # 1982738-2
Female Connector IEC

TE Part # 1857657-2
Female Connector

Also in the Series | Z-PACK Slim UHD

Hard Metric Backplane Connectors(2)

High Speed Backplane Connectors(14)

Customers Also Bought

TE Part #2287841-1
SW PIR/DPO RA ASSY 8P8C 85 OHM 90 GR

TE Part #2274730-1
SW RA RCP ASM, 8P, 8C, 85O, PIC, 90 GR

TE Part #2198724-1
zSFP+ Cage Assembly: Elastomeric Gasket

TE Part #2293156-2
zSFP+ Cage Assembly: EMI Springs

TE Part #2007863-1
IMP100S,H,V5P16C,RG,LEW39,4.5

TE Part #2185223-1
ASSY, SEATING TOOL, QSFP

TE Part #2226412-1
ASSY PIN MODULE, 16-02 PCB RA, STD

TE Part #4-2170740-1
QSFP28, 1X3, CAGE ASSY, SPRING, HS, LP



Documents

Product Drawings

RA Male Connector, IEC L3

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_2042139-2_1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_2042139-2_1.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_2042139-2_1.3d_stp.zip

English

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Product Specifications

Application Specification

English

Product Environmental Compliance

TE Material Declaration

English

Agency Approvals

UL Report

English