



Connectors > PCB Connectors > Backplane Connectors > High Speed Backplane Connectors



Number of Positions: 180

Row-to-Row Spacing: 1.15 mm [.045 in]

Mating Alignment: With

Mating Alignment Type: Polarization

Number of Rows: 18

Features

Product Type Features

Signal Arrangement	Differential
Connector & Contact Terminates To	Printed Circuit Board
Connector System	Board-to-Board
PCB Connector Type	PCB Mount Header
Shroud Style	Partially Shrouded

Configuration Features

Number of Pairs	60
Number of Ground Positions	36
Number of Signal Positions	120
Backplane Architecture	Orthogonal
Stackable	No
Number of Positions	180
Number of Rows	18
Number of Columns	10
PCB Mount Orientation	Vertical
Guide Location	Unguided

Electrical Characteristics

Operating Voltage	30 VDC
Impedance	100 Ω

Signal Characteristics

Data Rate	20 – 25 Gb/s
Number of Differential Pairs per Column	6

Body Features

Primary Product Color	Black
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Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1.27 µm[50 µin]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Mating Area Plating Material Thickness	.76 µm[29.92 µin]
PCB Contact Termination Area Plating Material Thickness	.76 – 1.52 µm[30 – 60 µin]
Contact Shape & Form	Dual Beam
Contact Layout	Inline
Contact Mating Area Plating Material	Gold (Au)
Contact Mating Area Length	5.5 mm[.217 in]
Contact Base Material	Copper Alloy
PCB Contact Termination Area Plating Material	Tin
Contact Type	Pin
Contact Current Rating (Max)	.75 A

Termination Features

Termination Method to PCB	Through Hole - Press-Fit
Termination Post & Tail Length	1.4 mm[.055 in]

Mechanical Attachment

Guide Hardware	Without
PCB Mount Retention	With
Mating Retention	Without
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	2
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End Wall Location	Open
Housing Material	LCP
Centerline (Pitch)	1.9 mm[.075 in]

Dimensions

Connector Width	28.9 mm[1.138 in]
PCB Thickness (Recommended)	3 mm[.118 in]
PCB Hole Diameter	.46 mm[.018 in]
Connector Height	11.95 mm[.47 in]
Connector Length	20.1 mm[.791 in]
Row-to-Row Spacing	1.15 mm[.045 in]

Operation/Application

Circuit Application	Signal
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Industry Standards

UL Flammability Rating	UL 94V-0
Compatible With Approved Standards Products	UL E28476

Packaging Features

Packaging Method	Box & Tube, Tube
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Product Compliance

For compliance documentation, visit the product page on TE.com>

EU RoHS Directive 2011/65/EU	Not Yet Reviewed
EU ELV Directive 2000/53/EC	Not Yet Reviewed
China RoHS 2 Directive MIIT Order No 32, 2016	Not reviewed for China RoHS compliance
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JAN 2025 (247) Not Yet Reviewed
Halogen Content	Not Yet Reviewed for halogen content
Solder Process Capability	Not reviewed 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 Regulations, TE’s information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) ‘Guidance on requirements for substances in articles’(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of ‘complex object’, the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA “Guidance on requirements for substances in articles” (June 2017, version 4.0) and will be updating its statements accordingly.

Also in the Series | IMPACT

High Speed Backplane Connectors
(149)

Customers Also Bought

TE Part #50865
SOCKET,MIN-SPR AU SER-4

TE Part #861647-6
RECPT FLANGED H.V. 7 CONTACTS

TE Part #1376073-2
DYNAMIC D-2000 TAB ASSY 50P

TE Part #8-1622796-9
YR1 0.1% 191K

TE Part #9-1734774-3
PCI EXP 2.3L 64 POS BLK 30u"

TE Part #1735482-3
0.8FH,R17H.5,080,08/Sn,TR,SC

TE Part #1735482-4
0.8FH,R17H.5,100,08/Sn,TR,SC

TE Part #8-1879160-5
RN 0805 8R66 0.1% 10PPM 1K RL

TE Part #1-1879208-4
CPF 0402 36R 0.1% 25PPM 1K RL

TE Part #4-2176230-7
3522 5K6 5% 3W



Documents

Product Specifications

Product Specification

English

Agency Approvals

Agency Approval Document

English