



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



Number of Positions: 144
Row-to-Row Spacing: 3.9 mm [.154 in]
Mating Alignment: With
Mating Alignment Type: Keyed
Number of Rows: 6

Features

Product Type Features

Signal Arrangement	Differential
Connector & Contact Terminates To	Printed Circuit Board
Connector System	Board-to-Board
PCB Connector Type	PCB Mount Receptacle
Shroud Style	Unshrouded

Configuration Features

Number of Pairs	72
Number of Ground Positions	84
Number of Signal Positions	144
Backplane Architecture	Orthogonal, Traditional Backplane
Stackable	No
Pairs per Column	6
Number of Positions	144
Number of Rows	6
Number of Columns	12
PCB Mount Orientation	Right Angle

Electrical Characteristics

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Operating Voltage	80 VDC
Impedance	100 Ω

Signal Characteristics

Data Rate	56 Gb/s
Differential Impedance	100 Ω
Number of Differential Pairs per Column	8

Body Features

Shield Material	Copper Alloy
Primary Product Color	Black

Contact Features

Contact Underplating Material	Palladium Nickel
Contact Shape & Form	Dual Beam
Contact Mating Area Plating Material	Gold Flash
Contact Base Material	Copper Alloy
PCB Contact Termination Area Plating Material	Tin
Contact Type	Receptacle
Contact Current Rating (Max)	.4 A

Termination Features

Termination Method to PCB	Through Hole - Press-Fit
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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	Keyed

Housing Features

Number of Shrouded Sides	0
Housing Material	LCP (Liquid Crystal Polymer)
Centerline (Pitch)	2.5 mm[.098 in]

Dimensions

PCB Thickness (Recommended)	1 mm[.039 in]
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PCB Hole Diameter	1 mm[.039 in]
Connector Height	26.5 mm[1.043 in]
Connector Length	34.05 mm[1.341 in]
Row-to-Row Spacing	3.9 mm[.154 in]

Usage Conditions

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

Durability Rating	200 Cycles
Circuit Application	Signal

Industry Standards

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

Packaging Features

Packaging Method	Tube
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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 2025 (247) Candidate List Declared Against: JAN 2021 (211) Does not contain REACH SVHC
Halogen Content	BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.
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 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 # 2198200-1
Headr Assy, 6P12C, Ortho, SW, 30PdNi, Sn

TE Part # 2274518-1
SW PIR/DPO RA ASSY 12P6C 100 OHM 90 GR

Also in the Series | STRADA Whisper 3.9mm

High Speed Backplane Cable Assemblies(16)

High Speed Backplane Connectors(41)

Customers Also Bought

TE Part #CAT-AM71-CH8172
AMP SUPERSEAL 1.5MM, CONNECTOR HOUSING

TE Part #281934-2
SINGLE WIRE SEAL

TE Part #CAT-D48-ST273
DEUTSCH Solid Contacts

TE Part #DT04-2P
REC, 2P, GRY, N

TE Part #DT06-2S
PLG, 2P, GRY, N

TE Part #CAT-D487-W416
Wedgelocks: DEUTSCH DT

TE Part #114017-ZZ
SEALING PLUG, SIZE 12/16, WHT

Documents



Product Drawings

[SWO, Recep Assy, 6P12C, 30PdNi, Sn](#)

English

CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_2198174-1_A.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_2198174-1_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_2198174-1_A.3d_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

[STRADA Whisper 3.9mm Pair-In-Column\(PiC\) 100 Ohm Connector Routing Guide](#)

English

Product Specifications

[Application Specification](#)

English