



STRADA | STRADA Whisper 3.9mm

TE Part # 2287841-1

TE Internal #: 2287841-1

[View on TE.com >](#)

Connectors > PCB Connectors > Backplane Connectors > High Speed Connectors



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

Number of Positions: **128**

Row-to-Row Spacing: **2.5 mm [.098 in]**

Mating Alignment: **With**

Mating Alignment Type: **Keyed**

Features

Product Type Features

Make First / Break Last	Yes
Product Type	Connector
Post Type	Through Hole - Press-Fit
Signal Arrangement	Differential
Connector Type	Header
Module Type	Center
Connector System	Board-to-Board
Row-to-Row Spacing	2.5 mm[.098 in]
Connector Style	Header
Shrouded	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Configuration Features

Pairs per Column	8
Number of Ground Positions	72
Preloaded	Yes
Number of Pairs	64
Stackable	No
Number of Signal Positions	128



Number of Positions	128
Number of Rows	8
Number of Columns	8
Board-to-Board Configuration	Orthogonal
PCB Mount Orientation	Right Angle

Electrical Characteristics

Operating Voltage	80 VDC
UL Voltage Rating	80 VAC
Impedance	85 Ω

Signal Characteristics

Differential Impedance	85 Ω
Number of Differential Pairs per Column	12
Data Rate	56 Gb/s

Body Features

Shield Material	Copper Alloy
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Contact Features

Contact Type	Pin
Contact Transmits (Typical)	Signal (Data)
Contact Design	Dual Beam
Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold Flash
Contact Length	4.38 mm [.172 in]
Contact Underplating Material	Palladium Nickel
Contact Base Material	Copper Alloy
Contact Current Rating (Max)	.4 A

Termination Features

Termination Type	Without
Interface Type	3.9mm Whisper
Termination Method to Printed Circuit Board	Through Hole - Press-Fit

Mechanical Attachment

PCB Mount Alignment Type	Action/Compliant Tail
Mating Retention	Without



Guide Hardware	No
PCB Mount Retention	With
PCB Mount Retention Type	Action/Compliant Tail
Mating Alignment	With
Mating Alignment Type	Keyed

Housing Features

Housing Material	LCP (Liquid Crystal Polymer)
Housing Color	Black
Centerline (Pitch)	3.9 mm[.154 in]

Dimensions

PCB Thickness (Recommended)	1 mm[.039 in]
PCB Hole Diameter	1 mm[.039 in]

Usage Conditions

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

For Use With	Receptacle Assembly
Durability Rating	200 Cycles
Circuit Application	Signal

Industry Standards

UL File Number	E28476
UL Rating	Recognized
Agency/Standard	UL

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 2019 (197)



Candidate List Declared Against: JUN 2016
(169)

Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Not applicable for solder process capability

Product Compliance Disclaimer

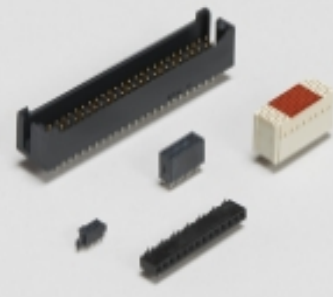
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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 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.

Compatible Parts

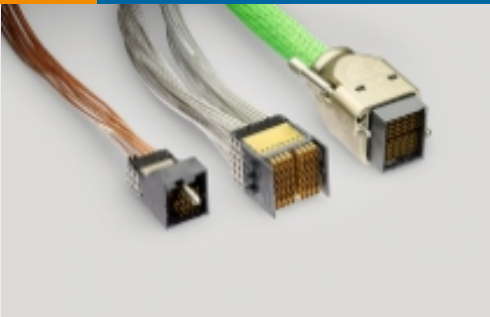


TE Part # 2274730-1
SW RA RCP ASM, 8P, 8C,
85O, PIC,

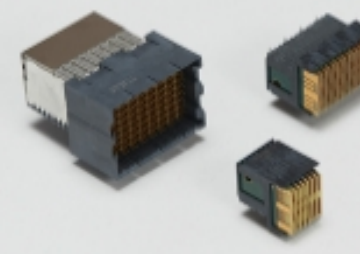
Also in the Series | STRADA Whisper 3.9mm



Board-to-Board Headers & Receptacles(1)



High Speed Backplane Cable Assemblies(15)



High Speed Backplane Connectors(41)

Customers Also Bought



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



TE Part #2294408-1
ZSFP+ 1X8 CAGE ASSY,
PRESS-FIT, LP, HS



TE Part #1888971-4
QSFP TB CAGE ASSY, W
/LP, NO HS




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



TE Part #2042139-2
RA Male Connector, IEC L3



TE Part #2198724-1
CAGEASSY,PRESSFIT,1X6,
zSFP+



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



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



TE Part #4-2170740-2
QSFP28, 1X3, CAGE ASSY,
SPRING, HS, LP



TE Part #
ZPF000000000167184
732-8311-16

Documents

Product Drawings

SW PIR/DPO RA ASSY 8P8C 85 OHM 90 GR

English

CAD Files

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_2287841-1_A.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_2287841-1_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_2287841-1_A.3d_stp.zip](#)

English

Datasheets & Catalog Pages

[STRADA Whisper PiR 85-Ohm Daughtercard Routing Guide](#)



English

[Product Specifications](#)

[Application Specification](#)

English