



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 System | Board-to-Board |
| Connector & Contact Terminates To | Printed Circuit Board |
| PCB Connector Assembly Type | PCB Mount Receptacle |
| Shroud Style | Unshrouded |

Configuration Features

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

Electrical Characteristics

| | |
|--|--|
| | |
|--|--|



| | |
|-----------|-------|
| Impedance | 100 Ω |
|-----------|-------|

| | |
|-------------------|--------|
| Operating Voltage | 80 VAC |
|-------------------|--------|

Signal Characteristics

| | |
|------------------------|-------|
| Differential Impedance | 100 Ω |
|------------------------|-------|

| | |
|---|---|
| Number of Differential Pairs per Column | 8 |
|---|---|

| | |
|-----------|---------|
| Data Rate | 56 Gb/s |
|-----------|---------|

Body Features

| | |
|-----------------|--------------|
| Shield Material | Copper Alloy |
|-----------------|--------------|

| | |
|-----------------------|-------|
| Primary Product Color | Black |
|-----------------------|-------|

Contact Features

| | |
|--------------|------------|
| Contact Type | Receptacle |
|--------------|------------|

| | |
|--------------------------------------|------------|
| Contact Mating Area Plating Material | Gold Flash |
|--------------------------------------|------------|

| | |
|----------------------|-----------|
| Contact Shape & Form | Dual Beam |
|----------------------|-----------|

| | |
|-------------------------------|------------------|
| Contact Underplating Material | Palladium Nickel |
|-------------------------------|------------------|

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

| | |
|-----------------------|--------------|
| Contact Base Material | Copper Alloy |
|-----------------------|--------------|

| | |
|------------------------------|------|
| Contact Current Rating (Max) | .4 A |
|------------------------------|------|

Termination Features

| | |
|---------------------------|--------------------------|
| Termination Method to PCB | Through Hole - Press-Fit |
|---------------------------|--------------------------|

Mechanical Attachment

| | |
|----------------|---------|
| Guide Hardware | Without |
|----------------|---------|

| | |
|------------------|---------|
| Mating Retention | Without |
|------------------|---------|

| | |
|---------------------|------|
| PCB Mount Retention | With |
|---------------------|------|

| | |
|--------------------------|-----------------------|
| 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

| | |
|------------------|--------------------|
| Connector Length | 34.05 mm[1.341 in] |
|------------------|--------------------|



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

Usage Conditions

| | |
|-----------------------------|----------------------------|
| Operating Temperature Range | -55 – 105 °C[-67 – 221 °F] |
|-----------------------------|----------------------------|

Operation/Application

| | |
|---------------------|------------|
| Durability Rating | 200 Cycles |
| Circuit Application | Signal |

Industry Standards

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

Packaging Features

| | |
|------------------|------|
| Packaging Method | Tube |
|------------------|------|

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 2024 (241) 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 #DT04-2P
REC, 2P, GRY, N

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

TE Part #W2S
Wedgelocks: DEUTSCH DT

TE Part #0460-202-16141
DEUTSCH Solid Contacts

TE Part #282104-1
AMP SUPERSEAL 1.5MM, CONNECTOR HOUSING

TE Part #281934-2
SINGLE WIRE SEAL

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