



IMPACT

TE Internal #: 2149997-1
High Speed Backplane Connectors, 144 Position, Mating Alignment, Keyed Mating Alignment Type, 12 Row, 12 Column, PCB Mount Header, Vertical, IMPACT

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



Number of Positions: 144
Row-to-Row Spacing: 1.35 mm [.053 in]
Mating Alignment: With
Mating Alignment Type: Keyed
Number of Rows: 12

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 Header |
| Shroud Style | Fully Shrouded |

Configuration Features

| | |
|----------------------------|----------|
| Number of Ground Positions | 48 |
| Number of Pairs | 48 |
| Stackable | No |
| Number of Signal Positions | 96 |
| Number of Positions | 144 |
| Number of Rows | 12 |
| Number of Columns | 12 |
| PCB Mount Orientation | Vertical |



| | |
|----------------|-------|
| Guide Location | Right |
|----------------|-------|

Electrical Characteristics

| | |
|-------------------|--------|
| Impedance | 100 Ω |
| Operating Voltage | 30 VAC |

Signal Characteristics

| | |
|---|--------------|
| Number of Differential Pairs per Column | 4 |
| Data Rate | 20 - 25 Gb/s |

Body Features

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

Contact Features

| | |
|---|----------------------------|
| Contact Mating Area Length | 4.5 mm[.177 in] |
| PCB Contact Termination Area Plating Material Thickness | .76 - 1.52 μm[30 - 60 μin] |
| Contact Layout | Inline |
| Contact Type | Pin |
| Contact Underplating Material Thickness | 1.27 μm[50 μin] |
| Contact Mating Area Plating Material Thickness | .76 μm[29.92 μin] |
| Contact Mating Area Plating Material | Gold |
| PCB Contact Termination Area Plating Material Finish | Matte |
| 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) | .75 A |

Termination Features

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|---|--------------------------|
| Termination Post & Tail Length | 1.4 mm[.055 in] |
| Termination Method to Printed Circuit Board | Through Hole - Press-Fit |

Mechanical Attachment

| | |
|--------------------------|-------------------------------|
| PCB Mount Alignment Type | Locating Posts |
| Guide Hardware | With |
| Mating Retention | Without |
| PCB Mount Retention | With |
| PCB Mount Retention Type | Action/Compliant Tail & Screw |



| | |
|-------------------------|-------------|
| Mating Alignment | With |
| Mating Alignment Type | Keyed |
| Connector Mounting Type | Board Mount |

Housing Features

| | |
|--------------------------|------------------------------|
| Number of Shrouded Sides | 3 |
| End Wall Location | Left |
| Housing Material | LCP (Liquid Crystal Polymer) |
| Centerline (Pitch) | 1.9 mm[.075 in] |

Dimensions

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|-----------------------------|-------------------|
| Connector Length | 30.7 mm[1.209 in] |
| Connector Height | 11.95 mm[.47 in] |
| Connector Width | 20.8 mm[.819 in] |
| PCB Thickness (Recommended) | 1 mm |
| PCB Hole Diameter | .39 mm[.015 in] |
| Row-to-Row Spacing | 1.35 mm[.053 in] |

Usage Conditions

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|-----------------------------|---------------------------|
| Operating Temperature Range | -55 - 85 °C[-67 - 185 °F] |
|-----------------------------|---------------------------|

Operation/Application

| | |
|---------------------|--------|
| Circuit Application | Signal |
|---------------------|--------|

Industry Standards

| | |
|---|--------------------------|
| Compatible With Approved Standards Products | CSA Certified, UL E28476 |
| UL Flammability Rating | UL 94V-0 |

Packaging Features

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|------------------|------------------|
| Packaging Method | Box & Tube, 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: JAN 2024 (240) |



Candidate List Declared Against: JAN 2024 (240)
Does not contain REACH SVHC

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

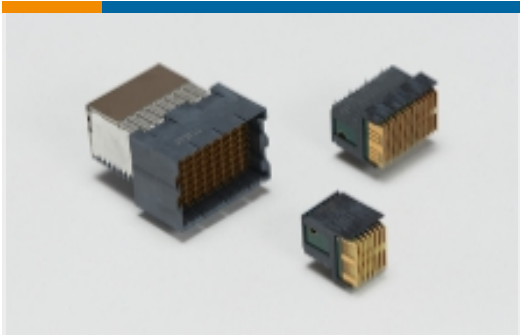
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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 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 # 2057961-1
IMP100S,R,RA4P12C,UG,39

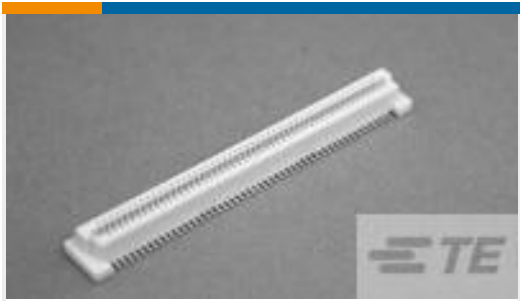
Also in the Series | IMPACT




High Speed Backplane Connectors
(1318)

Customers Also Bought

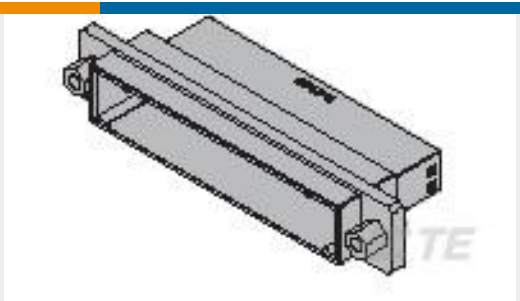





TE Part # 1735482-4
0.8FH,R17H.5,100,08/Sn,TR,SC




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




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



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



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



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

Documents

Product Drawings
IMP100S,H,V4P12C,RG,LEW39,4.5

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_2149997-1_A.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_2149997-1_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_2149997-1_A.3d_stp.zip

English

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

Product Specifications

Application Specification

English

Agency Approvals

Agency Approval Document

English