

214997-1

✓ ACTIVE

**IMPACT**

TE Internal #: 214997-1

High Speed Backplane Connectors, 144 Position, Mating  
 Alignment, Keyed Mating Alignment Type, 12 Row, 12 Column,  
 PCB Mount Header, Vertical, IMPACT

[View on TE.com >](#)

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**

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 &amp; 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**

Termination Post &amp; 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 &amp; 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

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

Operating Temperature Range	-55 - 85 °C[-67 - 185 °F]
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### Operation/Application

Circuit Application	Signal
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### Industry Standards

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

### Packaging Features

Packaging Method	Box & Tube, Tube
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### Product Compliance

For compliance documentation, visit the product page on [TE.com](http://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

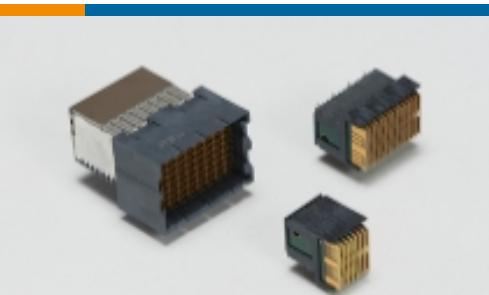
## Product Compliance Disclaimer

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

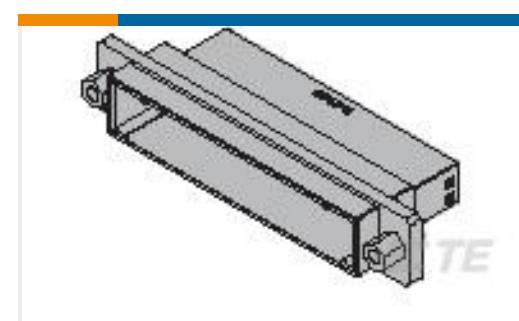


TE Part # 2057961-1  
IMP100S,R,RA4P12C,UG,39

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,SCTE Part # 50865  
SOCKET,MIN-SPR AU SER-4TE Part # 1376073-2  
DYNAMIC D-2000 TAB ASSY 50PTE Part # 4-2176230-7  
3522 5K6 5% 3WTE Part # 1-1879208-4  
CPF 0402 36R 0.1% 25PPM 1K RLTE 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