

2143252-2 ✓ ACTIVE

## IMPACT

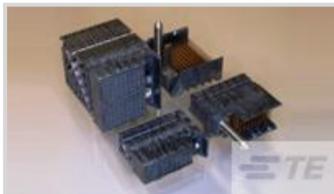
TE Internal #: 2143252-2

High Speed Backplane Connectors, Board-to-Board, 180 Position, Mating Alignment, Guide Pin Mating Alignment Type, 18 Row, 12 Column, IMPACT

[View on TE.com >](#)



Connectors > PCB Connectors > Backplane Connectors > High Speed Connectors



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

Number of Positions: **180**

Row-to-Row Spacing: **1.15 mm [ .045 in ]**

Mating Alignment: **With**

Mating Alignment Type: **Guide Pin**

### Features

#### Product Type Features

Signal Arrangement	Differential
Connector System	Board-to-Board
PCB Connector Assembly Type	PCB Mount Header
Shroud Style	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

#### Configuration Features

Number of Ground Positions	36
Number of Pairs	72
Stackable	No
Number of Signal Positions	120
Number of Positions	180
Number of Rows	18
Number of Columns	12
Backplane Architecture	Orthogonal
PCB Mount Orientation	Vertical
Guide Location	Right

#### Electrical Characteristics



Impedance	100 $\Omega$
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Operating Voltage	30 VAC
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### Signal Characteristics

Number of Differential Pairs per Column	6
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Data Rate	20 – 25 Gb/s
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### Contact Features

Contact Layout	Inline
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Contact Mating Area Length	5.5 mm[.217 in]
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PCB Contact Termination Area Plating Material Thickness	1.27 $\mu\text{m}$ [50 $\mu\text{in}$ ]
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Contact Type	Pin
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Contact Underplating Material Thickness	1.27 $\mu\text{m}$ [50 $\mu\text{in}$ ]
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Contact Mating Area Plating Material Thickness	.76 $\mu\text{m}$ [29.92 $\mu\text{in}$ ]
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Contact Mating Area Plating Material	Gold
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PCB Contact Termination Area Plating Material Finish	Matte
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Contact Shape & Form	Dual Beam
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Contact Underplating Material	Nickel
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PCB Contact Termination Area Plating Material	Tin
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Contact Base Material	Copper Alloy
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Contact Current Rating (Max)	.75 A
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### Termination Features

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

PCB Mount Alignment Type	Locating Posts
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Mating Retention	Without
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Guide Hardware	With
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PCB Mount Retention	With
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PCB Mount Retention Type	Action/Compliant Tail & Screw
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Mating Alignment	With
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Mating Alignment Type	Guide Pin
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Connector Mounting Type	Board Mount
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### Housing Features



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

### Dimensions

Connector Length	28.4 mm[1.118 in]
Connector Height	11.95 mm[.47 in]
Connector Width	28.9 mm[1.138 in]
PCB Thickness (Recommended)	3 mm[.118 in]
PCB Hole Diameter	.39 mm[.015 in]
Row-to-Row Spacing	1.15 mm[.045 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

UL Rating	Recognized
UL File Number	E28476
CSA Certified	Yes
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>](#)

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 2022 (224) Candidate List Declared Against: JUNE 2022 (224) 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 # 2132720-1  
IMP1000,R,RA6P10C,UG,39

## Also in the Series | IMPACT



High Speed Backplane Connectors  
(1769)

## Documents

## Product Drawings

IMP1000,HMP,V6P10C,RG,LEW39,5.5

English

## CAD Files

3D PDF



3D

Customer View Model

[ENG\\_CVM\\_CVM\\_2143252-2\\_D.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2143252-2\\_D.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2143252-2\\_D.3d\\_stp.zip](#)

English

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### Product Specifications

[Application Specification](#)

English

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### Agency Approvals

[Agency Approval Document](#)

English