



**IMPACT**

TE Internal #: 2007809-1

High Speed Backplane Connectors, 120 Position, Mating Alignment, Keyed Mating Alignment Type, 12 Row, 10 Column, PCB Mount Header, Vertical, IMPACT

[View on TE.com >](#)

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



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

Number of Positions: **120**

Row-to-Row Spacing: **1.35 mm [ .053 in ]**

Mating Alignment: **With**

Mating Alignment Type: **Keyed**

**Features**

**Product Type Features**

Signal Arrangement	Differential
Connector System	Board-to-Board
PCB Connector Assembly Type	PCB Mount Header
Shroud Style	Partially Shrouded
Connector & Contact Terminates To	Printed Circuit Board

**Configuration Features**

Number of Ground Positions	40
Number of Pairs	40
Stackable	No
Number of Signal Positions	80
Number of Positions	120
Number of Rows	12
Number of Columns	10
PCB Mount Orientation	Vertical



Guide Location	Left
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### Electrical Characteristics

Impedance	100 $\Omega$
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
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### Contact Features

Contact Mating Area Length	4.5 mm[.177 in]
PCB Contact Termination Area Plating Material Thickness	.76 – 1.52 $\mu\text{m}$ [30 – 60 $\mu\text{in}$ ]
Contact Layout	Inline
Contact Type	Pin
Contact Underplating Material Thickness	1.27 $\mu\text{m}$ [50 $\mu\text{in}$ ]
Contact Mating Area Plating Material Thickness	.76 $\mu\text{m}$ [29.92 $\mu\text{in}$ ]
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

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

### Mechanical Attachment

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
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Connector Mounting Type	Board Mount
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### Housing Features

Number of Shrouded Sides	2
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End Wall Location	Open
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Housing Material	LCP - GF (Liquid Crystal Polymer)
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Centerline (Pitch)	1.9 mm[.075 in]
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### Dimensions

Connector Length	25.5 mm[1.004 in]
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Connector Height	24.6 mm[.969 in]
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Connector Width	20.8 mm[.819 in]
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PCB Thickness (Recommended)	1 mm
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PCB Hole Diameter	.39 mm[.015 in]
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Row-to-Row Spacing	1.35 mm[.053 in]
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### 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

Approved Standards	CSA Certified, UL E28476
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UL Flammability Rating	UL 94V-0
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### 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
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EU ELV Directive 2000/53/EC	Compliant
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2023 (235) Candidate List Declared Against: JAN 2023 (233)
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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

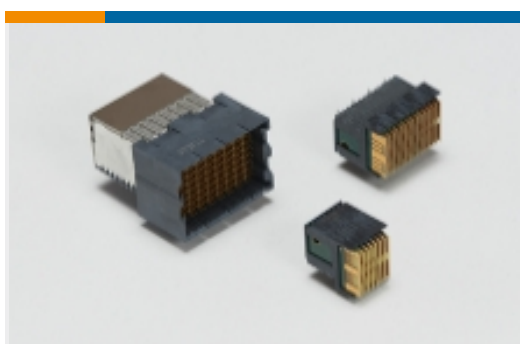


TE Part # 2007711-1  
IMP100S,R,RA3P16C,UG,39



TE Part # 2018524-1  
TOOL, SEAT 4 PR 10 COL,BP CONN

### Also in the Series | IMPACT

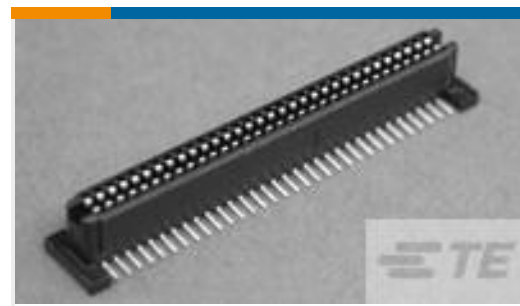


High Speed Backplane Connectors  
(1768)

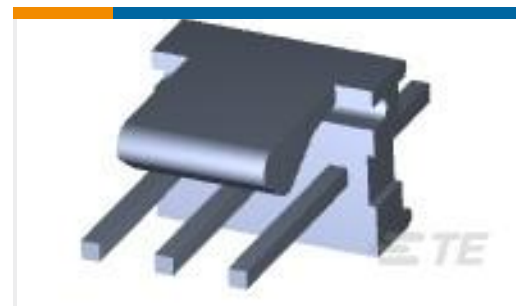
### Customers Also Bought



TE Part #120527-1  
1FHP,64,30A/P,S,N,S10,12,13,15



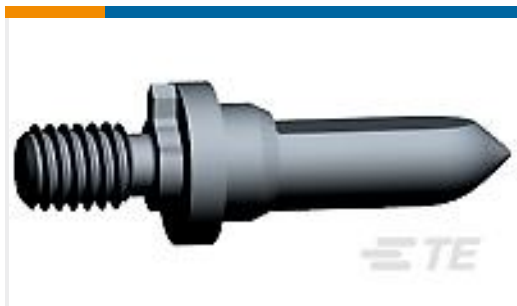
TE Part #5120521-1  
1FHR,64,30A/S,S,N,S08,09,10



TE Part #3-641215-3  
03P MTA100 HDR ASSY FL/ST 30AU



TE Part #1410188-3  
MULTIGIG RT T2 7RW DC DF F-RGT



TE Part #2000676-2  
Keyed Guide Pin, Machined, Vita 46



TE Part #1-1469492-8  
MULTIGIG RT 9MM GUIDE/ESD 315 DEG



TE Part #5535032-4  
ASSY, RECEPTACLE, EUROCARD, TYPE



TE Part #535074-1  
EURO SHROUD 96 POS



TE Part #1-6609032-9  
20VR6=F7312 S0



TE Part #1544970-3  
SEAL, NG9K

## Documents

### Product Drawings

[IMP100S,H,V4P10C,LG,OEWS39,4.5](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_2007809-1\\_A\\_c-2007809-1-a.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2007809-1\\_A\\_c-2007809-1-a.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2007809-1\\_A\\_c-2007809-1-a.3d\\_stp.zip](#)

English

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

## Datasheets & Catalog Pages





[7-1773458-1\\_IMPACT\\_BACKPLANE\\_CONNECTOR\\_SYSTEM\\_CATALOG](#)

English

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[Product Specifications](#)

[Application Specification](#)

English

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[Product Environmental Compliance](#)

[Product Compliance](#)

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[Product Compliance](#)

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[Agency Approvals](#)

[Agency Approval Document](#)

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