



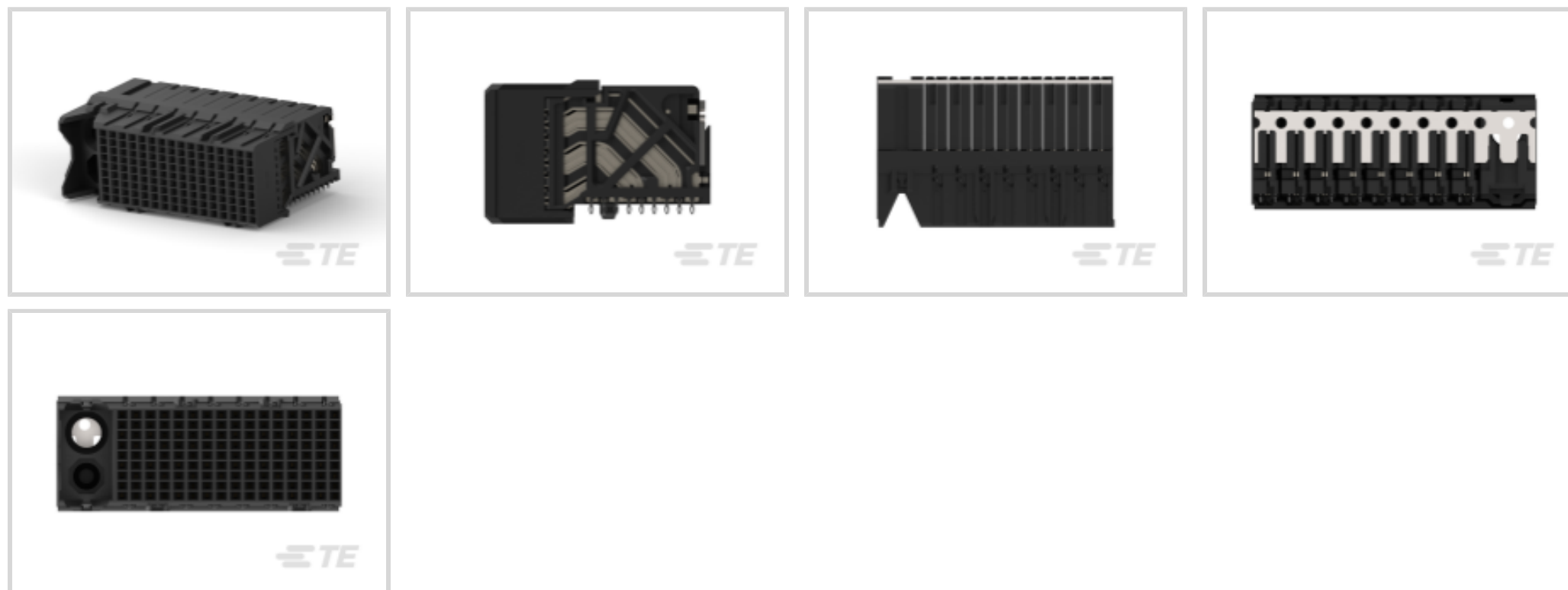
IMPACT

TE Internal #: 2007709-1

High Speed Backplane Connectors, Board-to-Board, 144 Position,
Mating Alignment, Keyed Mating Alignment Type, 9 Row, 16
Column, IMPACT

[View on TE.com >](#)

Connectors > PCB Connectors > Backplane Connectors > High Speed Connectors



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

Number of Positions: **144**

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 Receptacle
Shroud Style	Unshrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

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	9
Number of Columns	16



PCB Mount Orientation	Right Angle
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Guide Location	Left
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Electrical Characteristics

Impedance	100 Ω
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Operating Voltage	30 VAC
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Signal Characteristics

Number of Differential Pairs per Column	3
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Data Rate	20 – 25 Gb/s
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Contact Features

Contact Layout	Inline
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PCB Contact Termination Area Plating Material Thickness	1.27 μm [50 μin]
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Contact Type	Socket
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Contact Underplating Material Thickness	1.27 μm [50 μin]
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Contact Mating Area Plating Material Thickness	.762 μm [30 μin]
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Contact Mating Area Plating Material	Gold
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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	1.2 mm[.047 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	Keyed
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Connector Mounting Type	Board Mount
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Housing Features

Number of Shrouded Sides	0
Housing Material	LCP - GF (Liquid Crystal Polymer)
Housing Color	Black
Centerline (Pitch)	1.9 mm[.075 in]

Dimensions

Connector Length	38 mm[1.496 in]
Stack Height	13.3 mm
Connector Height	13.3 mm[.524 in]
Connector Width	24.2 mm[.953 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

UL File Number	E28476
UL Rating	Recognized
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 # 2007804-2
IMP100S,H,V3P16C,UG,OEW39,4.9



TE Part # 2018381-1
TOOL, SEAT 3 PR 16 COL, BP CONN

Also in the Series | IMPACT



High Speed Backplane Connectors
(1769)

Documents

Product Drawings
IMP100S,R,RA3P16C,LG,39
English



CAD Files

Customer View Model

[ENG_CVM_CVM_2007709-1_D.2d_dxf.zip](#)

English

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_2007709-1_D.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_2007709-1_D.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

Product Specifications

[Application Specification](#)

English

Product Environmental Compliance

[Product Compliance](#)

English

[Product Compliance](#)

English

Agency Approvals

[Agency Approval Document](#)

English