

#### IMPACT

TE Internal #: 2007705-1 High Speed Backplane Connectors, 90 Position, Mating Alignment, Polarization Mating Alignment Type, 9 Row, 10 Column, PCB Mount Receptacle, IMPACT

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



#### Connector System: Board-to-Board

Number of Positions: 90

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

Mating Alignment: With

Mating Alignment Type: Polarization

#### Features

#### Product Type Features

Signal Arrangement

Connector System

PCB Connector Assembly Type

Differential

Board-to-Board

PCB Mount Receptacle

| Shroud Style                      | Unshrouded            |
|-----------------------------------|-----------------------|
| Connector & Contact Terminates To | Printed Circuit Board |
| Configuration Features            |                       |
| Number of Ground Positions        | 30                    |
| Number of Pairs                   | 30                    |
| Stackable                         | No                    |
| Number of Signal Positions        | 60                    |
| Number of Positions               | 90                    |
| Number of Rows                    | 9                     |
| Number of Columns                 | 10                    |
| PCB Mount Orientation             | Right Angle           |
| Guide Location                    | Unguided              |
| Electrical Characteristics        |                       |
| Impedance                         | 100 Ω                 |
| Operating Voltage                 | 30 VAC                |

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## Signal Characteristics

| Number of Differential Pairs per Column                 | 3               |
|---|-----------------|
| Data Rate   | 20 – 25 Gb/s    |
| Body Features   |                 |
| Primary Product Color                                   | Black           |
| Contact Features  |                 |
| PCB Contact Termination Area Plating Material Thickness | 1.27 μm[50 μin] |
| Contact Layout  | Inline          |
| Contact Type  | Socket          |
| Contact Underplating Material Thickness                 | 1.27 μm[50 μin] |
| Contact Mating Area Plating Material Thickness          | .762 μm[30 μin] |
| Contact Mating Area Plating Material                    | Gold            |
| 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              | 1.2 mm[.047 in]                   |
|---|-----------------------------------|
| Termination Method to Printed Circuit Board | Through Hole - Press-Fit          |
| Mechanical Attachment                       |                                   |
| Guide Hardware                              | Without                           |
| Mating Retention                            | Without                           |
| PCB Mount Retention                         | With                              |
| PCB Mount Retention Type                    | Action/Compliant Tail             |
| Mating Alignment                            | With                              |
| Mating Alignment Type                       | Polarization                      |
| Connector Mounting Type                     | Board Mount                       |
| Housing Features                            |                                   |
| Number of Shrouded Sides                    | 0                                 |
| End Wall Location                           | None                              |
| Housing Material                            | LCP - GF (Liquid Crystal Polymer) |
|   |                                   |

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| Centerline (Pitch)          | 1.9 mm[.075 in]           |
|-----------------------------|---------------------------|
| Dimensions                  |                           |
| Connector Length            | 19 mm[.748 in]            |
| Connector Height            | 15 mm[.59 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] |
| Operation/Application       |                           |
| Circuit Application         | Signal                    |
| Industry Standards          |                           |
| Approved Standards          | CSA Certified, UL E28476  |
| UL Flammability Rating      | UL 94V-0                  |
| Packaging Features          |                           |
| Packaging Method            | Box & Tube, Package       |

## **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 2023<br>(235)<br>Candidate List Declared Against: JAN 2023<br>(233)<br>Does not contain REACH SVHC |  |
| Halogen Content                               | Low Halogen - Br, Cl, F, I < 900 ppm per<br>homogenous material. Also BFR/CFR/PVC<br>Free  |  |
| Solder Process Capability                     | Not applicable for solder process capability   |  |
| Product Compliance Disclaimer                 |  |  |

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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   | TE   | TE   | ETA  |
|--|--|--|--|
| TE Part # 2007781-2<br>IMP100S,H,V3P10C,RG,OEW39,4.9 | TE Part # 2007784-3<br>IMP100S,H,V3P10C,UG,OEW46,5.5 | TE Part # 2007788-3<br>IMP100S,H,V3P10C,UG,OEW39,5.5 | TE Part # 2007776-1<br>IMP100S,H,V3P10C,LG,OEW46,4.5 |
|  |  |  |  |



IMP100S,H,V3P10C,LG,REW46,5.5

TE Part # 2007778-3

| - 1 E                         |  |
|-------------------------------|--|
|                               |  |
| TE Part # 2007791-1           |  |
| IMP100S,H,V3P10C,UG,REW39,4,5 |  |





IMP100S,H,V3P10C,UG,DEW46,5.5

TE Part # 2007786-3



TE Part # 2007777-2

IMP100S, H, V3P10C, LG, OEW39, 4.9



TE Part # 2007788-1 IMP100S,H,V3P10C,UG,OEW39,4.5

TE Part # 2007788-2 IMP100S,H,V3P10C,UG,OEW39,4.9

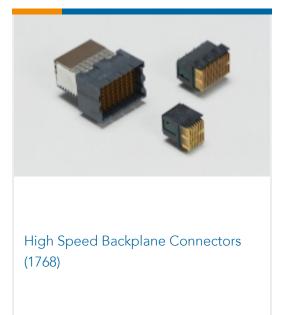
TE Part # 2007789-1 IMP100S,H,V3P10C,UG,LEW39,4.5 TE Part # 2007790-1 IMP100S,H,V3P10C,UG,DEW39,4.5

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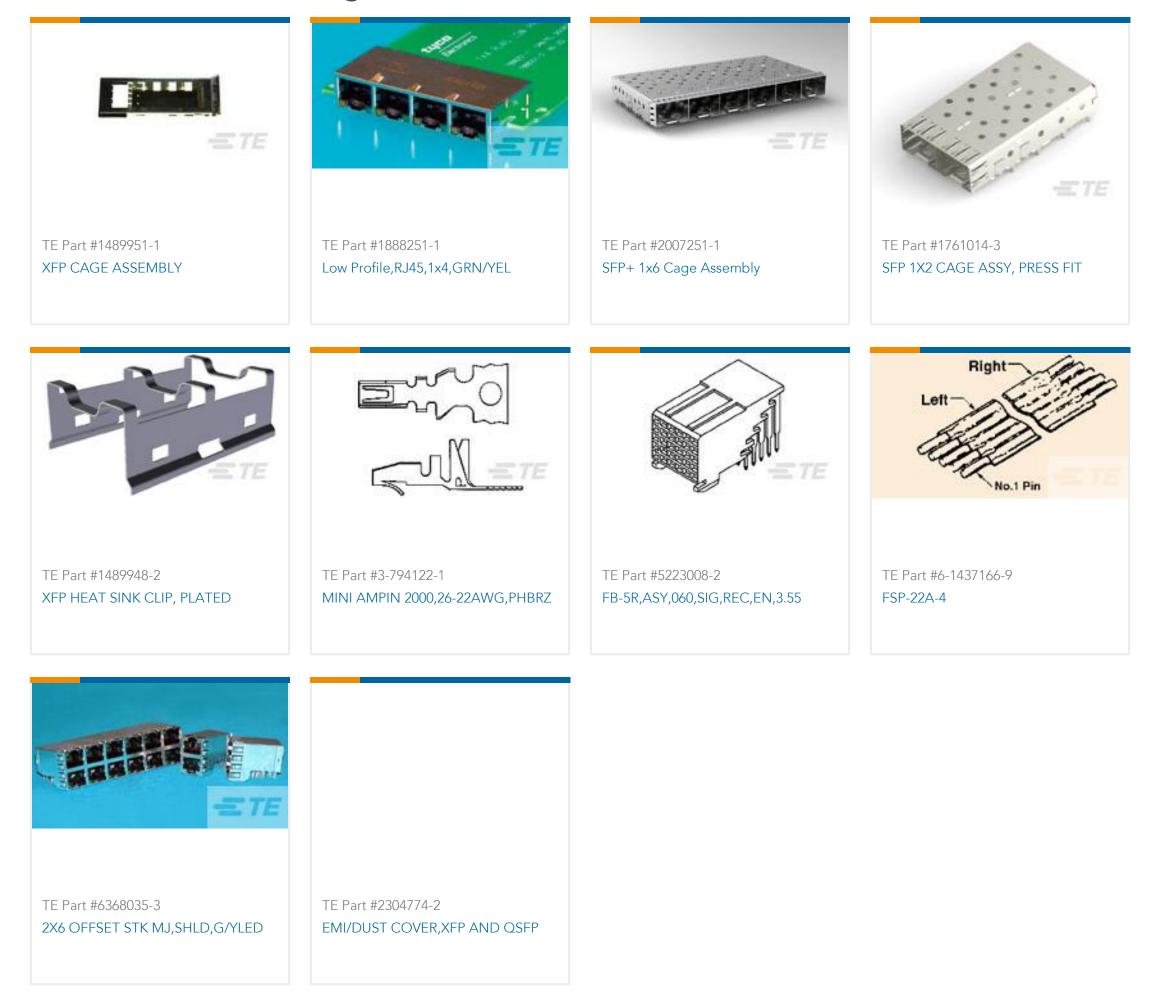




# Also in the Series IMPACT



# Customers Also Bought



High Speed Backplane Connectors, 90 Position, Mating Alignment, Polarization Mating Alignment Type, 9 Row, 10 Column, PCB Mount Receptacle, IMPACT



## Documents

**Product Drawings** IMP100S,R,RA3P10C,UG,39

English

#### **CAD** Files

**Customer View Model** ENG\_CVM\_CVM\_2007705-1\_B.2d\_dxf.zip

English

3D PDF

3D

**Customer View Model** ENG\_CVM\_CVM\_2007705-1\_B.3d\_igs.zip

English

**Customer View Model** 

ENG\_CVM\_CVM\_2007705-1\_B.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** 

MD\_2007705-1\_02202014141\_dmtec

English

MD\_2007705-1\_02202014141\_dmtec

English

Agency Approvals Agency Approval Document

English