



## IMPACT

TE Part # 2007816-1

TE Internal #: 2007816-1

[View on TE.com >](#)

Connectors > PCB Connectors > Backplane Connectors > High Speed 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: **Polarization**

## Features

### Product Type Features

Make First / Break Last	No
Product Type	Connector
Signal Arrangement	Differential
Connector Type	Header
Connector System	Board-to-Board
Row-to-Row Spacing	1.35 mm[.053 in]
Connector Style	Plug
Shrouded	Partially Shrouded
Sealable	No
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
Board-to-Board Configuration	Right Angle, Vertical
PCB Mount Orientation	Vertical

Guide Location Unguided

### Electrical Characteristics

Operating Voltage 30 VDC

Impedance 100  $\Omega$

### Signal Characteristics

Number of Differential Pairs per Column 4

Data Rate 20 – 25 Gb/s

### Contact Features

Contact Type Pin

Underplate Material Thickness 1.27  $\mu\text{m}$ [50  $\mu\text{in}$ ]

Contact Transmits (Typical) Signal (Data)

Contact Layout Inline

PCB Contact Termination Area Plating Material Thickness .76 – 1.52  $\mu\text{m}$ [30 – 60  $\mu\text{in}$ ]

Contact Design Dual Beam

Contact Termination Area Plating Material Tin

Contact Mating Area Plating Thickness .76  $\mu\text{m}$ [29.92  $\mu\text{in}$ ]

PCB Contact Termination Area Plating Material Finish Matte

Contact Mating Area Plating Material Gold

Contact Length 4.5 mm[.177 in]

Contact Underplating Material Nickel

Contact Base Material Copper Alloy

Contact Current Rating (Max) .75 A

### Termination Features

Termination Method to Printed Circuit Board Through Hole - Press-Fit

### Mechanical Attachment

Mating Retention Without

Guide Hardware 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

End Wall Location	Open
Housing Material	LCP - GF (Liquid Crystal Polymer)
Housing Color	Black
Centerline (Pitch)	1.9 mm[.075 in]

### Dimensions

Height	11.95 mm[.47 in]
PCB Thickness (Recommended)	1 mm
Stack Height	11.95 mm
Width	20.8 mm[.819 in]
Tail Length	1.4 mm[.055 in]
Length	18.9 mm[.744 in]
PCB Hole Diameter	.46 mm[.018 in]

### Usage Conditions

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

For Use With	Receptacle Assembly
Circuit Application	Signal

### Industry Standards

UL File Number	E28476
UL Rating	Recognized
CSA Certified	Yes
UL Flammability Rating	UL 94V-0

### Packaging Features

Packaging Method	Box & 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: JAN 2019 (197)

Not Yet Reviewed

Halogen Content

Not Yet Reviewed for halogen content

Solder Process Capability

Not applicable for solder process capability

Product Compliance Disclaimer

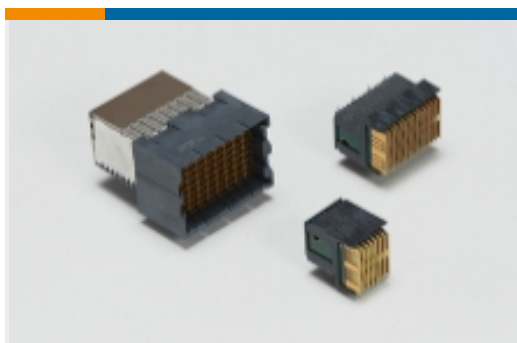
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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 Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles' (Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

## Compatible Parts



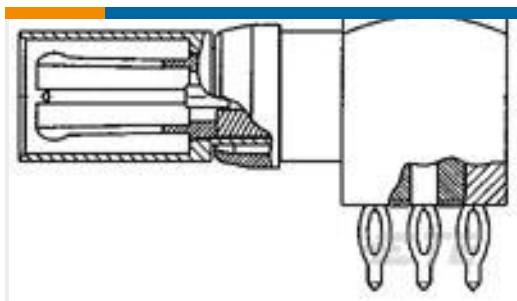
TE Part # 2007711-1  
IMP100S,R,RA3P16C,UG,39

## Also in the Series | IMPACT



High Speed Backplane  
Connectors(1824)

## Customers Also Bought



TE Part #148386-1  
TYPE C,PIN ASSY.RTANG,  
RF



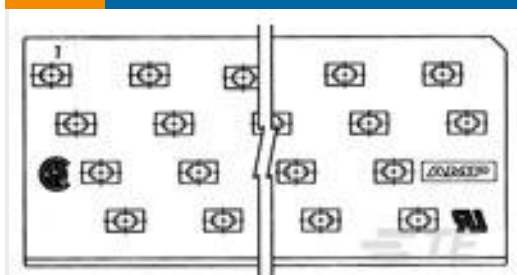
TE Part #1-103673-0  
11 MTE HDR SRRRA LATCH  
W/HLDWN



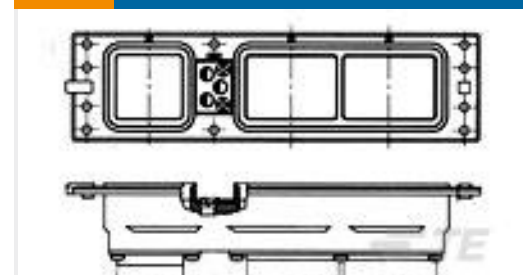
TE Part #1-103945-1  
2X12 MTE SHRD PIN SR  
LATCH.100



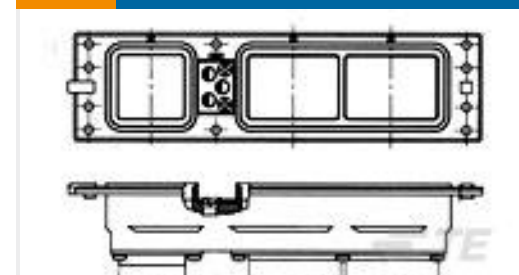
TE Part #623160-000  
D-148-0204



TE Part #111359-5  
26 PDL BRD COVER



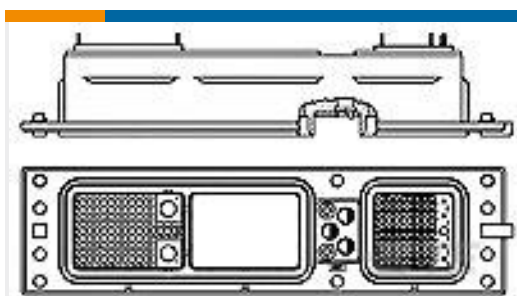
TE Part #1996164-1  
ARINC 600,SZ 2,RCPT



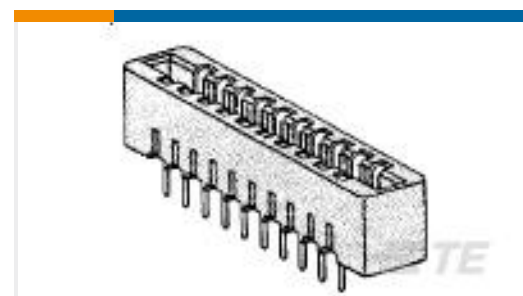
TE Part #1996253-1  
A600,SZ2R,120T/BLNK/85,  
eNi,10



TE Part #2-102617-8  
60 MODII HDR DRRA  
SHRD .100CL



TE Part #2101650-1  
A600R,Sz2,12072 / 85 all  
FR



TE Part #7-530666-3  
CONN LOW PRO 12 POS  
156X200C/

## Documents

### Product Drawings

[IMP100S,H,V4P10C,UG,OEW46,4.5](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_2007816-1\\_1.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2007816-1\\_1.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2007816-1\\_1.3d\\_stp.zip](#)

English

### Product Specifications

[Application Specification](#)



English