

Impulse Direct Backplane Connector System and Cable Assemblies

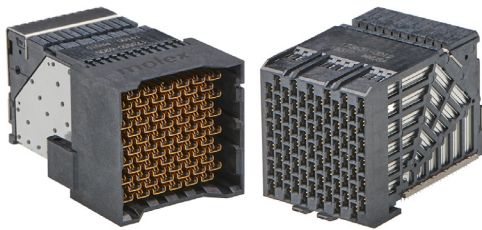
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Impulse Backplane Connector System and Cable Assemblies support data rates of 56 (NRZ) or 112 Gbps (PAM-4) with superior signal integrity, making them ideal for high-density applications

Features and Advantages



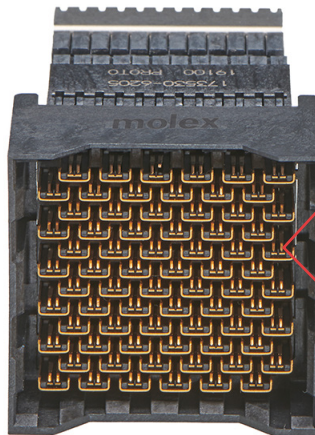
Supports data rates of 56 (NRZ) or 112 Gbps (PAM-4)
Meets data speed requirements for switches and routers



Impulse 6-by-12 Connector System

2.00mm column-to-column pitch

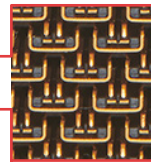
Delivers one of the highest density solutions in the market. Delivers design flexibility. 3- to 8-pair versions available upon customer request



Impulse 6-by-12 Orthogonal Direct Module

U-shaped ground blades

Provides robust mechanical isolation between signal pins. Mitigate risk for bent pins in the field. Provide first-mate-last-break capabilities



Long mechanical mating wipe

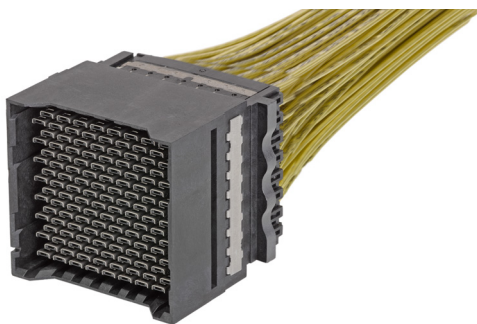
Offers increased contact area for clean signal transmission and enhanced performance

Hermaphroditic signal beam design

Innovative signal interface improves insertion loss over traditional beams, pushing interface resonances far beyond 35 GHz. Lowers mating force

Orthogonal direct connector eliminates need for mid-plane connections

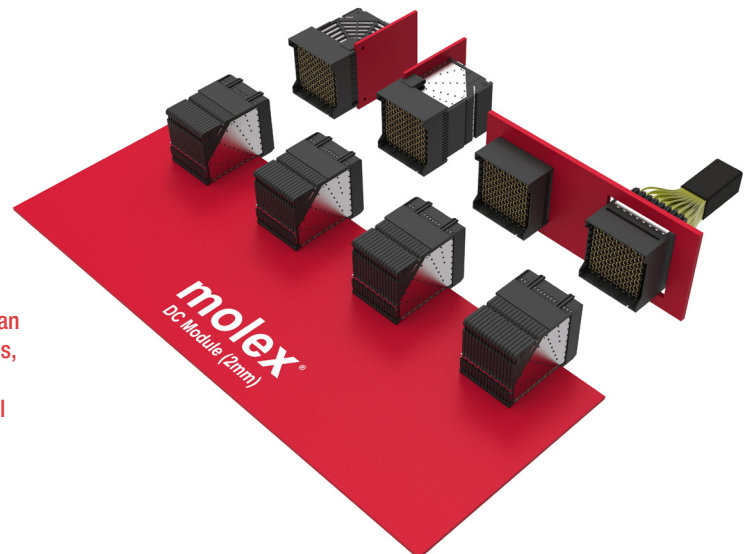
- Delivers superior signal integrity performance
- Reduces cost by avoiding the need for a mid-plane structure
- Improves airflow by creating an open structure without mid-plane PCB
- Easy to upgrade



Custom cable assemblies with Temp-Flex Twinax Cables (28 or 30 AWG)

Delivers 56 (NRZ) or 112 Gbps (PAM-4) data rates required by networking, data center, computing and storage applications

Same daughtercard can mate cable assemblies, vertical headers and right-angle orthogonal headers
Offers design flexibility



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Specifications

REFERENCE INFORMATION

Packaging: Tray
UL File No.: E28179
Mates With: Impulse Daughtercard mates with Impulse Header
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

ELECTRICAL

Voltage (max.): 150V AC RMS
Current (max.): 0.75A
Contact Resistance: 100mA; 20mV
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500V
Impedance: 90 Ohms
Frequency: 0 to 35 GHz

MECHANICAL

Insertion Force to PCB (nominal): 13.34N (3 lb) per tail
Retention Force to PCB (nominal): 6.67N (1.5 lb) per tail
Mating Force (max.): 1.96N (200g) per differential pair
Unmating Force (min.): 1.77N (180g) per differential pair
Durability: 200 cycles
Gatherability: 1.20mm in all 4 directions
Wipe (min.): 2.00mm (2.50mm nominal)

PHYSICAL

Housing: LCP, 30% Glass Filled
Contact: Copper Alloy
Contact Area — 0.76 μm (30 μ) Gold
Solder Tail Area — Select Matte Tin
Underplating — Nickel
PCB Thickness: 1.00mm
Refer to Application Specifications for Back Drilling Information
Operating Temperature: -40 to +105°C

www.molex.com/link/impulse.html

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