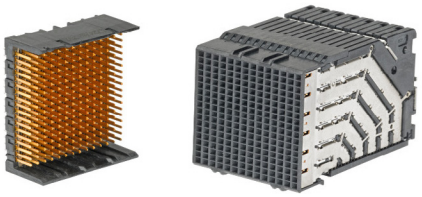
Impact™ zX2 Backplane Connector System

molex®

Anticipating next-generation high-speed application demands, the Impact™ zX2 Backplane Connector System features industry-leading density and signal integrity (SI), supporting data rates up to 28 Gbps in a modular design



Impact™ zX2
Daughtercard and Header

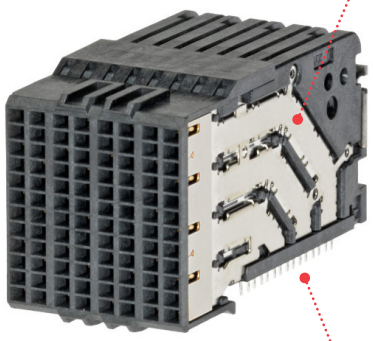
Features and Benefits

95 Ohms nominal impedance (on signal pins)
Minimize impedance discontinuities throughout signal channels

Impact™ Connector System design incorporating ground-shielding and footprint technology from Impel™ connectors
Provides optimal signal integrity (SI) and mechanical density through the connector at up to 28 Gbps data rates

Ground shielding
Enhances crosstalk isolation. Provides broadside and edge coupling via dual ground structure

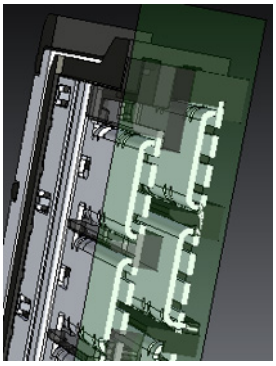
Inter-mateable with existing Impact™ Backplane Headers
Protects end user's current Impact™ infrastructure investment with backward compatibility



Common-ground structure
Minimizes crosstalk interference, resulting in increased near-end crosstalk (NEXT) margin

95 Ohms nominal impedance (on signal pins)
Minimize impedance discontinuities throughout signal channels

Reduced-size compliant pins (0.36mm) on both backplane and daughtercard modules
Optimizes PCB footprint space. Opens up additional space for efficient routing



CROSS SECTION

Applications

Telecommunication Applications

Hubs, switches, routers

Central office, cellular infrastructure and multi-platform service (DSL, cable data)

Data Networking Equipment

Servers

Storage systems

Aerospace and Defense Equipment

Industrial Equipment

Telecommunications Routers

Impact™ zX2 Backplane Connector System

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Specifications

REFERENCE INFORMATION
Packaging: Tray
UL File No.: E29179
Mates with: See Reference Ordering Information Chart for multiple options
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

MECHANICAL
Insertion Force to PCB:
- Backplane Header — 26.69N
- Daughtercard Receptacle — 17.80N

Mating Force: 45g per pin
Unmating Force (min.): 15g
Durability (min.): 200 cycles

ELECTRICAL
Voltage —
- Daughtercard Receptacle (max.): 150 VAC RMS
- Cable Assembly (max.): 30 VAC RMS

Current (max.): 0.75A
Contact Resistance (max.): 100mA; 20mV
Dielectric Withstanding Voltage:
- Headers/Receptacles: 500 VAC
- Cable Assembly: 300 VDC

Insulation Resistance — Daughtercard: 1000 Megohms

PHYSICAL
Housing: LCP
Contact: Copper Alloy
Plating:
- Contact Area — 30µ" Min. Selective Gold
- Compliant Pin Area — Select Matte Tin
- Underplating — Nickel

PCB Thickness (min.): 1.00mm
Operating Temperature: -55 to +85°C

Ordering Information

Headers

Series No.	Application	Number of Pairs
172550	Orthogonal Direct	6
172375	Vertical Header	
172810	Orthogonal Direct	4

Daughtercards

Series No.	Applications	Number of Pairs
172540	Orthogonal	6
172374	Standard (non-stackable)	
173092	Standard	
172700	Orthogonal	4
172699	Standard	

www.molex.com/link/impact.html