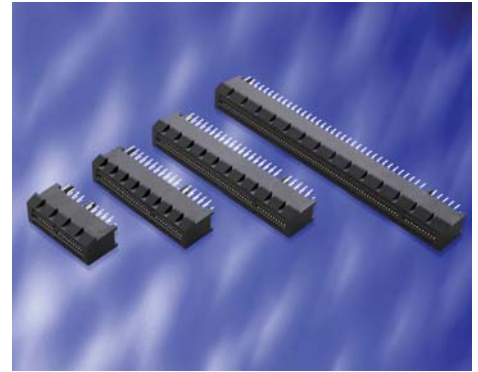# molex® PCI Express*

PCI Express increases signaling speed and bandwidth of the PCI interface for today's desktop and server applications.

PCI Express is a third generation I/O architecture. PCI-SIG recently released the PCI Express specification to move the PCI interface to faster signaling speeds and provide greater bandwidth. PCI Express incorporates point-to-point signaling using low voltage differential pairs operating at 2.5 Gbps each direction. This version of PCI Express is expected to be used in desktop PCs, workstations and servers.

PCI Express provides scaleable bandwidth. A 1-lane (1X) connector can support many of the conventional PCI functions found in client systems, while a 16-lane (16X) connector provides the bandwidth needed for supporting graphics processing, InfiniBand† and 10G Fibre Channel.

Features and Benefits

- Complies with the PCI-SIG specification for seamless desktop PCI Express implementation
- Supports 2.5 Gbps data transfer for faster signaling
- Scaleable design maximizes card interoperability, allowing customers to plug add-in cards of smaller or equal bandwidth into the edgecard connector
- Enable hotswap add-in cards for plug-and-play applications
- Simple through hole layout for easy PCB processing

SPECIFICATIONS

Reference Information
Product Specification: PS-87715-200
Packaging: Tray
Use with: PCI Express add-in cards
Designed in: Millimeters

Electrical
Voltage: 50V AC (RMS)/DC
Current: 1.1A per pin
Contact Resistance: Initial - 30 milliohms max.
     Change over life - 10 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 1000 Megohms min.

Mechanical
Card Insertion Force: 1.15N max. per contact pair
Card Withdrawal Force: 0.15N min. per contact pair
Contact Retention to Housing: 5N min.
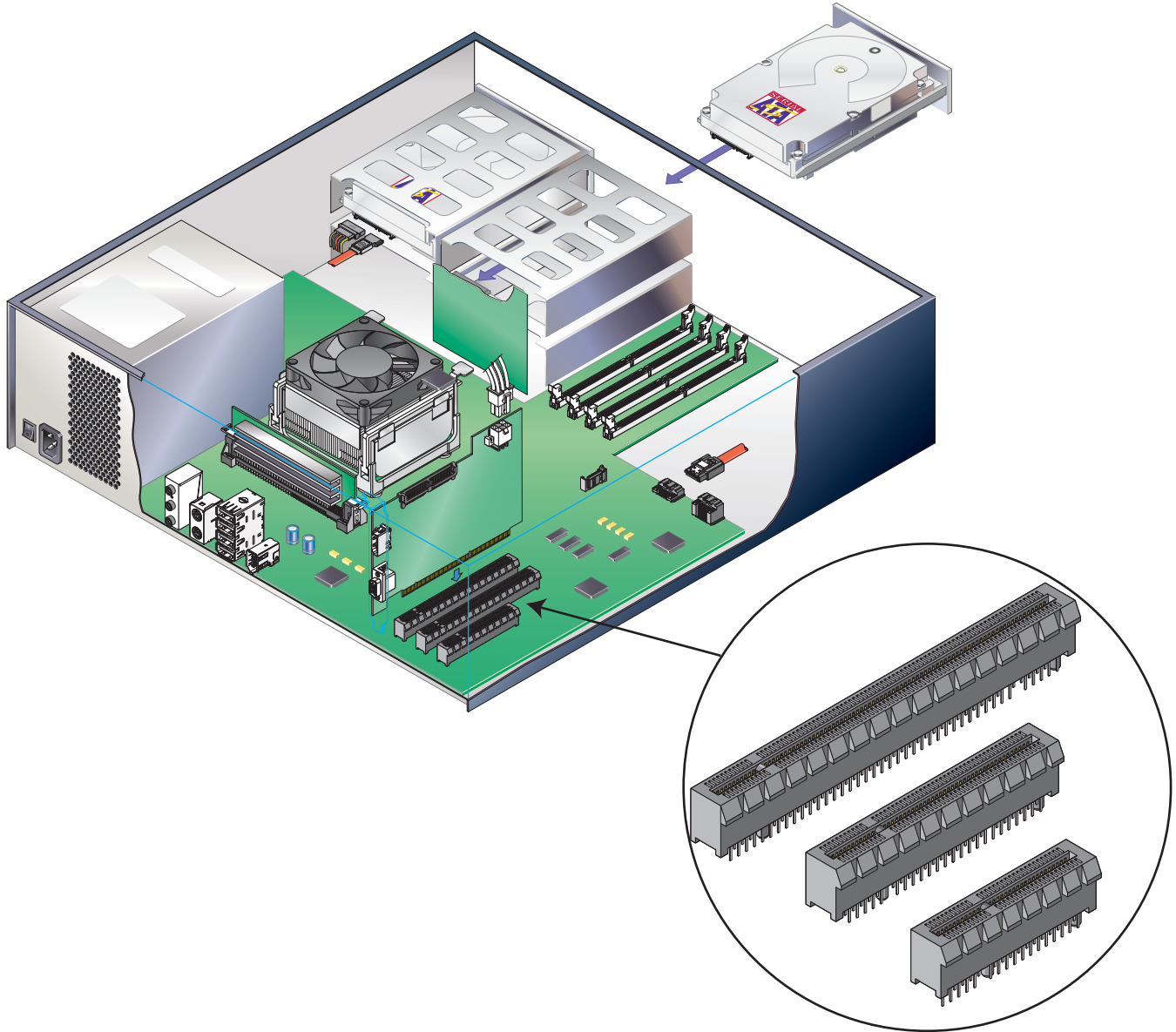Durability: 50 cycles

Physical
Housing: Nylon, UL 94V-O, various colors
Contact: Phosphor Bronze
Plating: Contact Area - Gold Flash, 15μ" or 30μ" Gold
     PC Tail Area - Tin Lead
Resistance to Solder Heats: Connector on applicable PCB can float on molten solder at +260°C for ten seconds
Operating Temperature: +15 to +85° C

ORDERING INFORMATION

Order No.	Description	PC Tail	Plating
87715-3002	1-lane PCI Express Edgecard		
87715-3102	4-lane PCI Express Edgecard	2.54mm (.100")	15μ" Gold
87715-3202	8-lane PCI Express Edgecard		
87715-3302	16-lane PCI Express Edgecard		

* PCI Express is a trademark of PCI-SIG

†InfiniBand is a trademark of the InfinBand (TM) Trade Association

APPLICATIONS

- Desktop and tower PCs
- Workstations
- Servers

*PCI Express is a trademark of PCI-SIG

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