

FEATURES AND SPECIFICATIONS

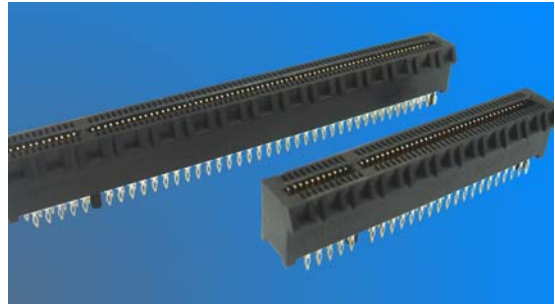
Molex's PCI Express connector offers greater signaling bandwidths for today's workstation and server applications*

PCI Express is a third generation I/O architecture. PCI-SIG* recently updated PCI Express specifications to greater signaling bandwidth. Unlike the previous version in which the PCI bus is implemented via a multi-drop parallel architecture, PCI Express now incorporates a point-to-point signaling using differential pairs operating at 2.5 Gbps. PCI Express provides adequate bandwidth to support developing I/O such as Infiniband and 10G fiber channel.

Molex's press fit version of PCI Express provides an alternative for customers who require solderless termination on PCBs which have a high layer count.

All Molex PCI Express connectors are compliant with PCI-SIG* specifications. For more information on these specifications please see www.pcisig.com

78028 Vertical Press fit



Features and Benefits

- High-temperature thermoplastic housing for lead-free processing
- Keying design ensures correct mating of card module to edge card connector
- Press fit termination allows solderless termination on high layer count PCBs
- Complies with PCI-SIG industry specifications ensure connectors support all PCI Express module cards available in the market
- Ridge design will be compatible with module cards that require a retention clip for secure retention

SPECIFICATIONS

Reference Information

Packaging: Tray

UL File No.: Pending

CSA File No.: Pending

Mates With : PCI Express® module card

Designed In: mm

Electrical

Voltage: 50 Volts AC (RMS)/DC

Current: 1.1 Amps/pin

Contact Resistance: 30 milliohms max

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms min

Mechanical

Max Terminal Retention Force: 2.94 N min/terminal

Mating Force: 1.15 N max/contact pair

Un-Mating Force: 0.15 N min/contact pair

Durability: 50 Cycles

Physical

Housing: High Temperature Nylon, Black, UL 94V-0

Contact: Copper Alloy

Plating:

Contact Area — 0.76 μ m Gold or 0.38 μ m Gold

Solder Tail Area — Tin

Underplating — Nickel

PCB Thickness: See Ordering Tables

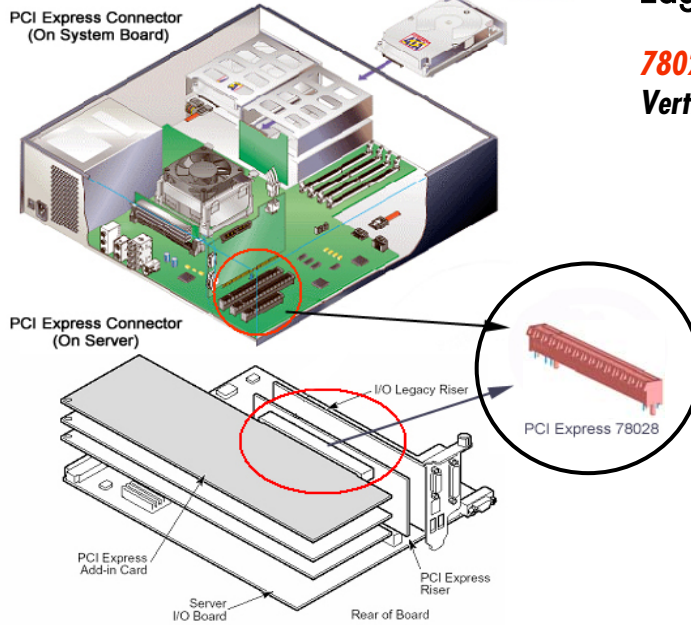
Operating Temperature: - 55 °C to +85 °C

Markets and Applications

- Servers
- Desktop
- Mobile
- Networking and Communications

molex® PCI Express EdgeCard Connector

78028
Vertical Press fit



Ordering Information

| Lead Free Order Number | Circuits | Plating Thickness | PC Tail Length | Recommended PCB Thickness |
|------------------------|----------|-------------------|----------------|---------------------------|
| 78028-0008 | 98 | 0.76µm (30µ") | 2.54mm (.100") | 2.3mm (.090") |
| 78028-0108 | | | 2.79mm (.110") | 2.6mm (.100") |
| 78028-1108 | | | 3.43mm (135") | 3.2mm (.125") |
| 78028-0018 | | 0.38µm (15µ") | 2.54mm (.100") | 2.3mm (.090") |
| 78028-0118 | | | 2.79mm (.110") | 2.6mm (.100") |
| 78028-1118 | | | 3.43mm (135") | 3.2mm (.125") |
| 78028-0016 | 164 | 0.76µm (30µ") | 2.54mm (.100") | 2.3mm (.090") |
| 78028-0116 | | | 2.79mm (.110") | 2.6mm (.100") |
| 78028-1116 | | | 3.43mm (135") | 3.2mm (.125") |
| 78028-0026 | | 0.38µm (15µ") | 2.54mm (.100") | 2.3mm (.090") |
| 78028-0126 | | | 2.79mm (.110") | 2.6mm (.100") |
| 78028-1126 | | | 3.43mm (135") | 3.2mm (.125") |

Americas Headquarters
2222 Wellington Ct.
Lisle, Illinois 60532 USA
1-800-78MOLEX
amerinfo@molex.com

Far East North Headquarters
Yamato, Kanagawa, Japan
81-462-65-2324
feninfo@molex.com

Far East South Headquarters
Jurong, Singapore
65-6-268-6868
fesinfo@molex.com

European Headquarters
Munich, Germany
49-89-413092-0
eurinfo@molex.com

Corporate Headquarters
2222 Wellington Ct.
Lisle, Illinois 60532 USA
630-969-4550