

## FEATURES AND SPECIFICATIONS

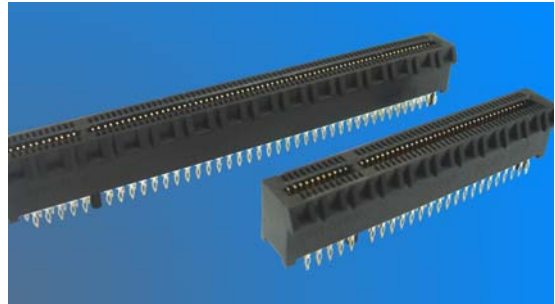
*Molex's PCI Express\* connector offers greater signaling bandwidths for today's workstation and server applications*

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](http://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  $\mu$ m Gold or 0.38  $\mu$ m Gold

Solder Tail Area — Tin

Underplating — Nickel

PCB Thickness: See Ordering Tables

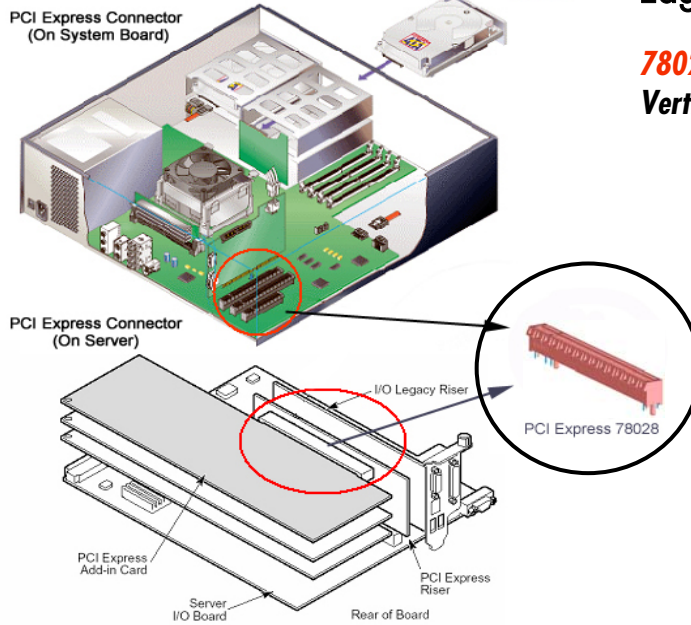
Operating Temperature: - 55 °C to +85 °C

## 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")

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