

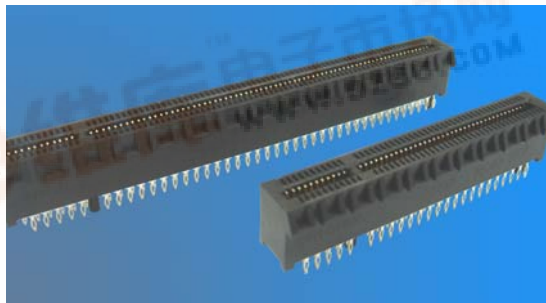
**Molex's PCI Express\* connector offers greater signaling bandwidths for today's workstation and server applications**

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

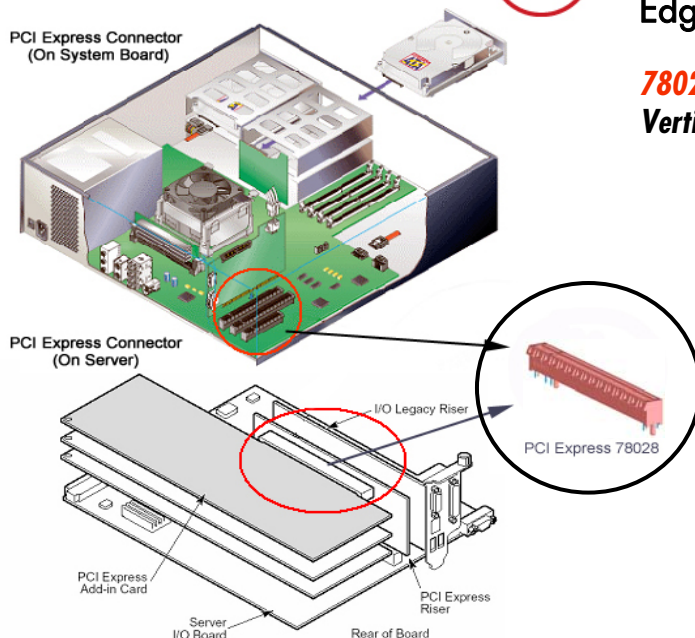
Housing: High Temperature Nylon, Black, UL 94V-0  
Contact: Copper Alloy  
Plating:  
Contact Area — 0.76 µm Gold or 0.38 µm Gold  
Solder Tail Area — Tin  
Underplating — Nickel  
PCB Thickness: See Ordering Tables  
Operating Temperature: - 55 °C to +85 °C



# PCI Express EdgeCard Connector

**78028**  
**Vertical Press fit**

- Servers
- Desktop
- Mobile
- Networking and Communications



## 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