

## 0.80mm (.031") Pitch iPass+ 84-Circuit 120 Gbps Products

### 76105 Integrated Connector and Cage Assembly



**Molex's 84-circuit, iPass+ integrated connector and cage supports 8, 10 and 12 channels of InfiniBand\* and 10 Gigabit Ethernet data for up to 120 Gbps of pluggable data in one assembly**

The iPass Interconnect System offers connectors that enable flexible-speed compatibility for applications ranging from 1.0 to 10.0 Gbps, and is an ideal interconnect solution for the growing server storage market. iPass+ is the latest addition to the existing iPass product family.

The 84-circuit iPass+ connector is a derivative of the x16 iPass PCIe External Cable Standard Input/Output (I/O) connector. This 84-circuit connector enables protocols such as InfiniBand to port up to 12 channels of 2.5, 5.0 or 10 Gbps, enabling 120 Gbps of data from box-to-box. Fibre Channel can port up to 12 channels of 8.5 or 10 Gbps of data and Ethernet can port 10 Channels of 10 Gbps, enabling data rates to 100 Gbps.

Applications range from high-performance computing and storage to networking. iPass+ products are found in

mainstream data centers and sub systems that require scalability, performance and reliability.

iPass+ active and passive cable assemblies will be available in volume, early 2008. At that point, the iPass+ Interconnect system will support both copper and optical mating solutions similar to Molex's existing pluggable SFP products. You may hear our product being referred to in the market as the new "CSFP" Interconnect. The name was derived from a two-fold word play on the letter "C"; first, the Roman number for 100, indicating a form factor targeted for 100 Gbps, and secondly "C" is the Hex character for 12, depicting the ability to provide 12 high-speed transmission channels.

For more information on iPass+ Products, visit: [www.molex.com/product/ippas.html](http://www.molex.com/product/ippas.html)

\*InfiniBand is a registered trademark of the InfiniBand Trade Association.

### APPLICATIONS

■ High Performance Computer Industry

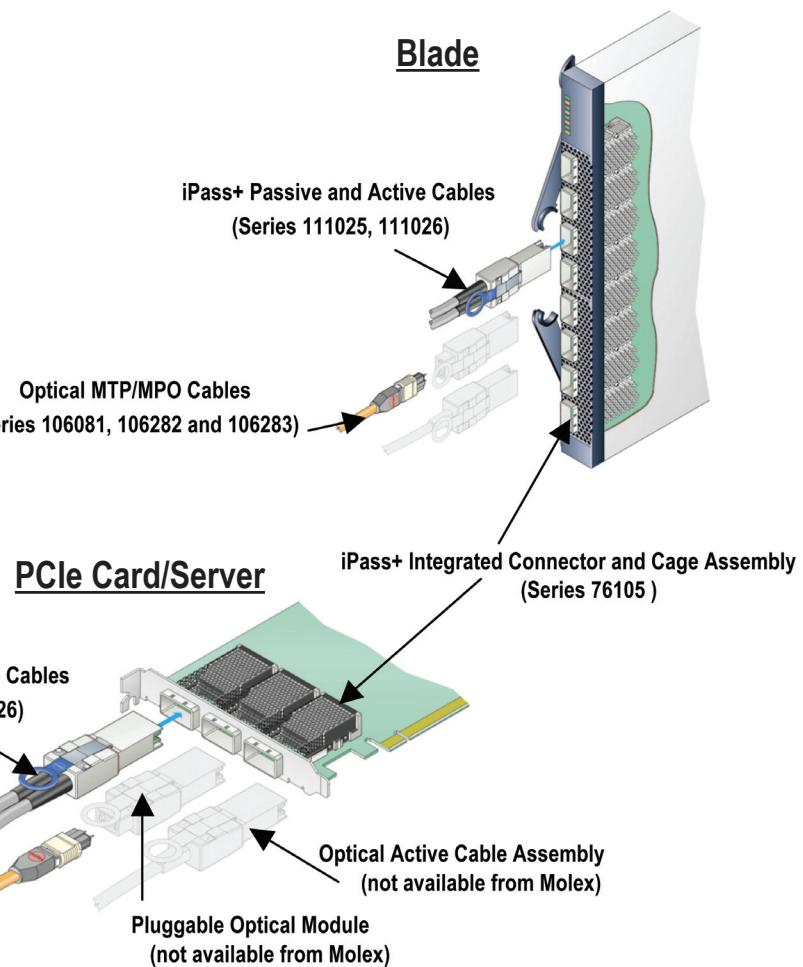
- Controller cards and servers
- Switches
- Direct Attached Storage (DAS)

■ Data Centers

- Controller cards and servers
- Switches
- Blades
- Storage Attached Networks (SAN)

■ Networking

- NIC cards and servers
- Switches
- Routers
- Network Attached Storage (NAS)





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### 76105 Integrated Connector and Cage Assembly

#### Features and Benefits

- Integrated press-fit connector assembly with cage provides one-step placement to PCB
- Four integral screw-mount hold downs applied from bottom of PCB provide optimal retention of die-cast assembly to PCB without taking up additional board real estate
- Low-profile height, 13.13mm (.517") from top of host board conforms to standard and low-profile PCIe card form factors
- Robust guide pins located on each side of the guide ensure assembly alignment to PCB
- Front elastomeric gasket provides improved electro magnetic interference (EMI) protection between guide and face plate
- Ground-pad alleys are located at the rear of the die cast assembly provide ease of routing off top layers of PCB

#### SPECIFICATIONS

##### Reference Information

###### Packaging:

Trays

UL File No.: Pending

CSA File No.: Pending

###### Mates With Cable Assemblies:

iPass+ Passive (Series 111025),  
iPass+ Active (Series 111026)

Designed In: Millimeters

##### Electrical

Voltage: 30V

Current: 0.5A

###### Contact Resistance:

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms

##### Mechanical

Contact Insertion Force: 35N (7.868 lbf) per circuit max.

Mating Force: 2.36 N (.531 lbf) per circuit

Unmating Force: 0.15N (.034 lbf) per circuit

Durability: 250 cycles

##### Physical

Housing: LCP

Contact: Copper (Cu) Alloy

###### Plating:

Contact Area — 30 $\mu$ " Gold (Au) min.

Solder Tail Area — 100 $\mu$ " Tin (Sn) min.

Under plating — 50 $\mu$ " Nickel (Ni)

PCB Thickness: 1.77mm (.070") min.

RoHS compliant: Yes

Operating Temperature: -40 to +105°C



#### ORDERING INFORMATION

##### Connector

Order No.	Channels	Circuit Size	Plating
76105-0084	Up to 12	84	30 $\mu$ " Gold (Au)

##### iPass+ Test Board

Order No.	Lane	Circuits
73931-3231	x12	84

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