



SFP+ 10 Gbps Interconnect System

- 74441** 20-Circuit Host Connector
- 74754** Single and Ganged Cages
- 74752** Passive Cable Assembly
- 76044, 76045, 76046, 76047, 76048, 76090, 76091, 76092, 76093, 76094** Stacked Connectors

SFP+ (Small Form-factor Pluggable Plus) 10 Gbps Interconnect System from Molex supports next generation speeds of standard SFP applications

The SFP+ connectors, cages and patch cables are the latest additions to Molex's extensive SFP product line. SFP+ takes SFP to the next level. SFP+ interconnects are designed to support applications for 8 Gbps Fibre Channel and 10 Gbps Gigabit Ethernet, as opposed to SFP, which is designed to support 2.125 Gbps Fibre Channel and 2.5 Gbps Gigabit Ethernet applications. SFP+ interconnects use the same space-per-port as standard SFP interconnects, therefore providing 11.1 Gbps capability in a space that is 30% smaller than XFP. The SFP+ interconnect system supports the SFP+ specifications covering 6 different standards, which define data rates ranging from 8.5 to 11.1 Gbps.

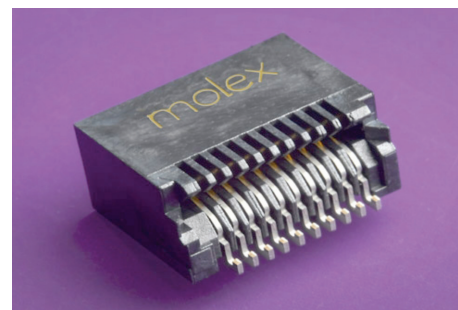
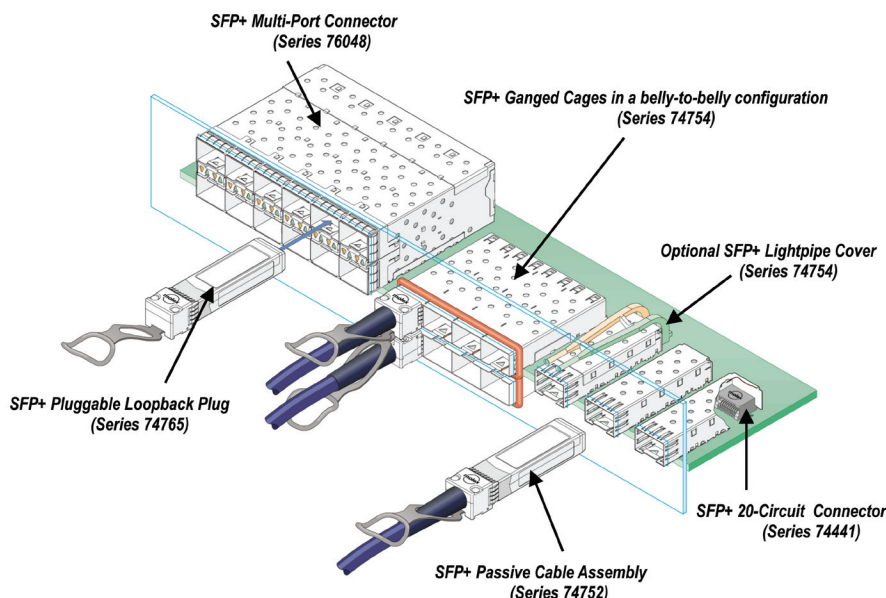
The SFP+ system is commonly referred to as 10 Gbps system although the specification is rated up to 11.1 Gbps.

SFP+ (SFF-8431 specification) was developed under a Multi-Source Agreement (MSA) by a group of diverse companies to ensure industry-wide compatibility. The SFP+ specification will address requirements for greater power, reduced cost and smaller footprints than existing 10 Gbps MSA's (XENPAK, XPAK, X2 and XFP).

For more information on Molex's SFP+ offering, visit: www.molex.com/product/sfp-plus.html.

APPLICATIONS

- Fibre Channel and Gigabit Ethernet
- Networking
- Storage
- Telecommunications
- Hubs, Switches, Routers, Servers, Network Interface Cards (NICs)



20-Circuit Connector, Series 74441



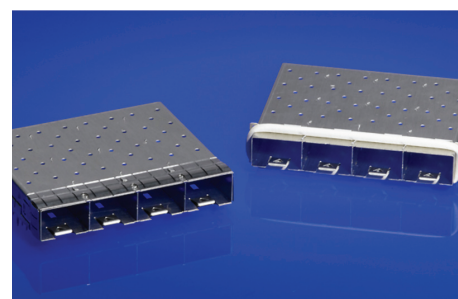
Single Cages, Series 74754



Patch Cables, Series 74752, 74753



Stacked Connector, Series 76092
(other series numbers available)



Ganged Cages, Series 74754

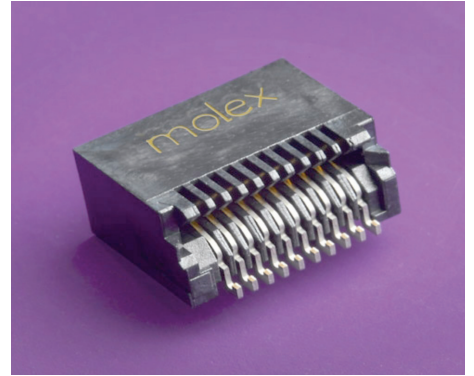
Features and Benefits

SFP+ 20 Circuit Host Connector (Series 74441)

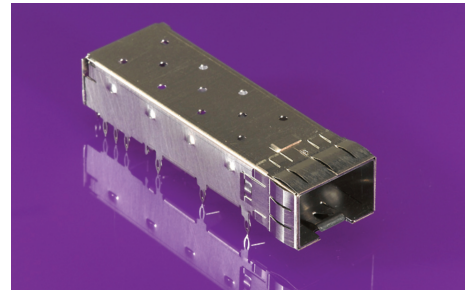
- High-speed contact design provides excellent electrical performance
- Capable of handling 10 Gbps data rates to meet SFP+ industry standard requirements
- SMT design packaged in tape and reel to ensure easy pick-and-place to the PCB
- Available in 0.38 or 0.76µm (15 or 30µ") Gold (Au) plating, accommodating cost and performance preferences
- Lubricated contacts available which are ideal for extended life and harsh environment applications, or applications that require telecom reliability levels

SFP+ Single and Ganged Cages (Series 74754)

- Available in press-fit, solder-post and PCI (1°) versions to enable use with various board thicknesses and assembly processes
- Optional rear and side-mounted lightpipe cover assemblies allow for flexibility of PCB signal routing of LED's
- Newly designed spring-finger gasket for single cages provide optimal EMI grounding
- Ganged cages have 360° elastomeric gaskets, spring fingers and multiple ground-pin locations for advanced EMI shielding to the bezel
- Press-fit tails accommodate belly-to-belly applications for single and ganged cages to ensure best use of PCB real estate
- Ganged cages available with up to 6 ports provide multiple design options



20-Circuit Connector, Series 74441



Single Cages, Series 74754



Ganged Cages, Series 74754

ORDERING INFORMATION

Order No.	Plating Gold (Au)	Comment
74441-0001	0.38µm (15µ")	-
74441-0010	0.76µm (30µ")	-
74441-0021	0.76µm (30µ")	With Lubricated Contacts
74441-5001	0.38µm (15µ")	With Modified Housing
74441-5010	0.76µm (30µ")	With Modified Housing

Single Cages

Order No.	PCB Mounting	Pin Length
74754-0101	Press-fit	3.05mm (.120")
74754-0104	Press-fit, PCI	

Note: Single port SFP+ cages use standard SFP light pipe covers (series 74726)

Ganged Cages

Order No.	PCB Mounting	Pin Length	EMI Protection	Port Size
74754-0210	Press-fit, Belly-to-Belly	2.62mm (.103")	Elastomeric gasket	1-by-2
74754-0410				1-by-4
74754-0610				1-by-6

Note: Light pipes for ganged cages, 1-by-5 press-fit and spring-finger gasket cages will be available in March, 2008.



Features and Benefits

SFP+ Stacked Multi-Port Connectors:

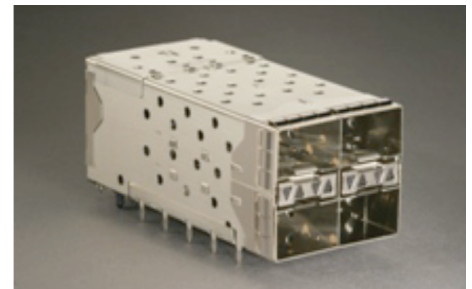
Metal Gasket (Series 76044, 76045, 76046, 76047, 76048)

Elastomeric Gasket (Series 76090, 76091, 76092, 76093, 76094)

- High-speed contact wafer design supports data transmission speeds up to 10 Gbps
- Elastomeric or metal gasket provide two options for superior EMI protection
- Capable of handling 10 Gbps data rates to meet SFP+ industry requirements
- Integrated lightpipes for use with SMT Light Emitting Diode's (LEDs) provide port status and activity feedback to the user
- Design integrates 2 (2-by-1), 4 (2-by-2), 8 (2-by-4), 10 (2-by-5) or 12 (2-by-6) SFP+ ports and lightpipes into one assembly to increase port density and reduces assembly labor
- Press-fit termination to PCB eliminates soldering, lowering the applied cost and avoiding solder-related issues
- Modules oriented "belly-to-belly" when inserted provides ease of removal of the module from the port



2-by-4 Connector with Elastomeric Gasket, Series 76092



2-by-2 Connector with Metal Gasket, Series 76045

ORDERING INFORMATION

Type	Elastomeric Gasket		Metal Gasket	
	Tin/Lead Plating Order No.	Tin Plating Order No.	Tin/Lead Plating Order No.	Tin Plating Order No.
2-by-1	76090-0001	76090-5001	76044-0001	76044-5001
2-by-2	76091-0001	76091-5001	76045-0001	76045-5001
2-by-4	76092-0001	76092-5001	76046-0001	76046-5001
2-by-5	76093-0001	76093-5001	76047-0001	76047-5001
2-by-6	76094-0001	76094-5001	76048-0001	76048-5001



Features and Benefits

SFP+ Passive Cable Assembly (Series 74752)

- Copper cable data transmission to meet customer requirements for speeds up to 10 Gbps and up to 25 meters
- Re-designed pull latch enables belly-to-belly cable use and ensures highest possible port density
- Improved backshell design conforms to Small Form Factor (SFF)-8431 specifications and provides the highest quality design features to ensure trouble-free operation
- Identical mechanical dimensions as standard SFP, enables backwards compatibility
- Available in passive and active designs to provide system design flexibility, minimize design requirements in the host, enables "optical module" performance, provides extended reach to 25 meters and ensures an inexpensive 10 Gbps interconnect
- EMI girdle provides superior EMI performance for up to 10 Gbps transmission



SFP+ Passive Cable Assembly, Series 74752

ORDERING INFORMATION

Order No.	Length	Cable Gauge (AWG)
74752-1051	0.50m (1.640')	30
74752-1101	1.00m (3.280')	30
74752-2101	1.00m (3.280')	28
74752-2301	3.00m (9.843')	28
74752-3301	3.00m (9.843')	26
74752-3501	5.00m (16.404')	26
74752-4701	7.00m (22.966')	24
74752-9007	15.00m (49.213')	24

Note: Multiple lengths and cable gauges available. Contact Molex Customer Service for ordering.

www.molex.com/product/sfp-plus.html

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