

# New Product

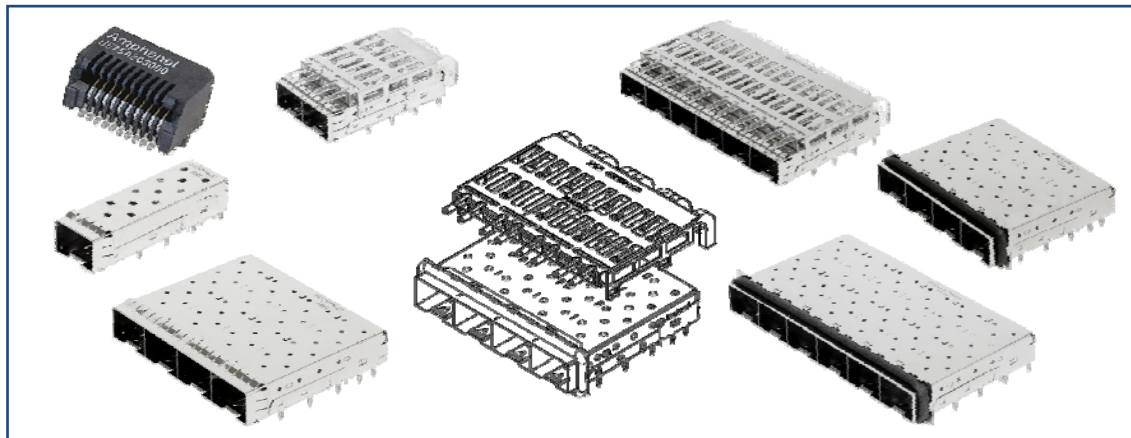
## ExpressPort™ SFP+ 1xN Cages

Amphenol

*Now you're connected!*

### About Amphenol Commercial Products

Amphenol's commercial connector products are used in a variety of end user applications including networking, telecom, server & computer, storage & HDD, consumer electronics and entertainment, professional audio & Industrial & Military/Aerospace.



### Description

Amphenol's ExpressPort™ SFP+ 1xN Cages expand Amphenol's SFP series product offering to provide data transfer speeds of up to 10 Gbps when combined with the new ExpressPort™ SFP+ connector. Together, these products form a modular high speed I/O interconnect system providing a higher speed, inexpensive External I/O product, primarily for the networking, telecom and storage systems markets.

ExpressPort™ SFP+ 1xN cages and connectors meet the SFF-8432 standard for single port cages, and SFF-8433 standard for 1xN (1x2, 1x4 and 1x6) port versions, and feature compliant press-fit pins (single port cages are also available with pcb mount solder tails)

Amphenol's unique ExpressPort™ SFP+ cage construction features EMI shielding either in the form of metal spring fingers that interface with the panel cut-out, or an elastomeric gasket that is compressed between the cage flange and the rear surface of the mounting panel.

The EMI spring finger tabs are spot-welded to the cage in a continuous strip to provide improved EMI sealing, with "kinkless" tabs to reduce the potential for damage to the tabs during assembly to a chassis panel.

The Elastomeric sealing gasket is captured by features on the flange, preventing gasket creep, and maintaining alignment for reliable EMI sealing.

These cages also feature the removal of ventilation holes near the front of the cage to eliminate potential catch points for the mating module EMI springs.

Additional features include available lightpipes (2 lightpipes per port), which can be purchased with cages or separately, heat sinks, and other custom features.

The ExpressPort™ SFP+ external I/O connector is a 20 position SMT receptacle, utilizing industry proven card edge style contacts with refined geometries, providing gigabit data transmission signal capabilities to 10 Gbps, with a more linear impedance profile. This new design minimizes impedance discontinuities and reflections at high data rates, and provides a 10 to 20 dB Improvement in Near-End Crosstalk, allowing the use of longer copper cables, improved pcb routing, resulting in an overall lower interconnect loss budget.

### Applications

The demand for higher data rates, improved electrical performance and suppression of EMI generated by higher frequencies are driving the development and availability of SFP+ products with more features and configurations for use in both Telecom and Datacom applications using 10 Gb Ethernet and 8Gb Fibre Channel.

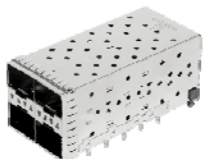
- Switches, Routers, Media converters, Storage applications

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## Related Products

Amphenol manufactures an entire product line of SFP and SFP+ products. Contact your local Amphenol representative for details.



Please contact your local sales engineer or Amphenol office for more information about ExpressPort™ SFP+ Connectors and ExpressPort™ SFP+2xN Combos products.

## Electrical Properties

ExpressPort™ SFP+ connectors feature superior high speed electrical performance:

- 10+ Gbps serial data transmission
- Current: 0.5 A max per contact at 3.3V
- Differential Impedance: 100 Ohm
- DWV: 300 VAC
- Insulation Resistance: 1000 MOhm min
- Contact Resistance: 80 mOhms max

## Mechanical Properties

ExpressPort™ SFP+ connectors and cages combine to provide a compact, modular, robust I/O:

- Single port, 2, 4 and 6 port ganged configurations
- Compliant press-fit pins or solder tails (for single port cages)
- RoHS Compliant
- Nickel or tin plated copper alloy cage
- Copper alloy EMI cage spring fingers, or conductive elastomeric EMI cage gasket
- Connector housing of UL94V-0 LCP, compliant with RoHS solder reflow process
- 250 mating cycles durability
- Operating Temp range -55C to +85C; Storage Temp range -55C to +105C

## Available Documents

### Drawing Numbers:

|                |                                                                    |
|----------------|--------------------------------------------------------------------|
| UX76-A20-X00XX | ExpressPort™ SFP+ 1x1 Connector                                    |
| UE76-A20-X01XT | ExpressPort™ SFP+ 1x1 Connector with Resonance Damping Clips       |
| U77-A1618-2X0X | 1x1 ExpressPort™ SFP+ Cage, EMI Spring Fingers (8 Press Fit Pins)  |
| U77-A1619-200X | 1x1 ExpressPort™ SFP+ Cage, EMI Spring Fingers (11 Press Fit Pins) |
| U77-C1419-X001 | 1x1 ExpressPort™ SFP+ Cage, Elast EMI Gasket and Light Pipe        |
| U77-C1619-X001 | 1x1 ExpressPort™ SFP+ Cage, EMI Spring Fingers and Light Pipe      |
| U77-AX41M-X081 | 1xN ExpressPort™ SFP+ Cage, Elastomeric EMI Gasket                 |
| U77-AX61M-X081 | 1xN ExpressPort™ SFP+ Cage, EMI Spring Fingers                     |
| U77-CX41M-X081 | 1xN ExpressPort™ SFP+ Cage, Elast. EMI Gasket and Light Pipes      |
| U77-CX61M-X081 | 1xN ExpressPort™ SFP+ Cage, EMI Spring Finger and Light Pipes      |

Many other configurations available – contact factory or Authorized Amphenol representative.

### Product Specification:

S6017C ExpressPort™ SFP+ 1x1 Cage  
S6021C ExpressPort™ SFP+ 1xN Cages

### Test Report:

QTR930041

## Amphenol

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