

HIGH SPEED I/O PRODUCTS



AMPHENOL COMMERCIAL PRODUCTS

Amphenol

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AMPHENOL COMMERCIAL PRODUCTS

THE COMPANY

Amphenol is a global provider of interconnect solutions to the designers and manufacturers of worldwide networking systems. With our design creativity and cost effectiveness, Amphenol leads the way in interconnect development for internet equipment, infrastructure, enterprise networks and appliances. Whether industry standard or specific designs are required, Amphenol provides customers with products capable of performing at the leading edge of today's high speed technology. Our expertise in understanding and supporting our customers' various design needs has earned Amphenol a reputation of excellence and quality among the world's leading users of high speed components.

HIGH SPEED CONNECTORS

Amphenol offers a full range of high-speed connectors with data rates ranging from 1 Gbps to 120 Gbps and beyond, meeting our customers' various high speed connector requirements. Products include SFP, ExpressPort™ SFP+, Infinity, VHDCI, XFP, ExpressPort™ XFP+, Mini-SAS, Mini-SAS HD, CXP, QSFP, ExpressPort™ QSFP+ and ExpressPort™ QSFP+ E-Series.

BENEFITS

- Increased platform density for scaling improved performance in a defined physical space
- Servers that can scale I/O and processing power independently
- Racks of servers that can be managed as one autonomous unit
- Servers that can share I/O resources
- True "plug-and-play" I/O connectivity
- Extensive range of SFP+ / IPF connector and cage solutions to support Fiber Channel, Infiniband, Ethernet and Gigabit technology
- Next generation Expressport™ connectors provide premium level performance for SFP+, XFP+ and QSFP+ interfaces.

This technology allows data speeds to reach 14-16 Gbps.

Amphenol[®]
Canada

Telephone: (416) 291-4401 Fax: (416) 292-0647 E-Mail: sales@amphenolcanada.com

All specifications are subject to change without notice.

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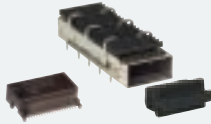
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ExpressPort™ XFP+ / XFP Series



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ExpressPort™ SFP+ 1xN Cage & Connector



Amphenol's ExpressPort™ SFP+ 1xN Connector, when combined with the ExpressPort™ SFP+ Cages, provides data transfers speeds of up to 14 Gbps. The design of the ExpressPort™ SFP+ Connector minimizes impedance discontinuities and reflections at high data rates, and provides a 10 to 20 dB improvement in Near-End Crosstalk.

Amphenol's unique ExpressPort™ SFP+ cage construction features EMI shielding available in the form of metal spring fingers, or elastomeric gaskets. These cages also eliminate ventilation holes near the front of the cage to prevent potential catch points for the mating module EMI springs. Additional features include light pipes, which can be purchased with cages or separately, heat sinks, and other custom features.

Specification Highlights

The interconnect system is comprised of a cage assembly which is used with 20-position SFP+ connectors complying with SFF-8083. Cages comply with industry standard SFF-8433.

General Characteristics

- RoHS compliant
- Industry standard footprint
- Industry standard EIA-364

Mechanical Characteristics

- Accepts multiple transceivers per INF-8074i and SFF-8431
- Compliant press-fit pins or solder tails (1x1 cages)
- Durability: 250 mating cycles minimum

Electrical Characteristics

- Hot swappable
- Operating voltage: 3.3 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/-10 Ω
- DWV: 300 V AC
- Insulation resistance: 1000 MΩ min
- Contact resistance: 70 mΩ max

Options

- EMI shielding
 - Metal spring fingers
 - Conductive elastomeric gasket
- Round light pipe
- Heat sink
- Dust cover

Materials

- Cage
 - Base material: copper alloy
 - Plating: nickel or tin
 - Light pipe: optical grade polycarbonate
 - Heat sink: aluminum alloy
 - Heat sink clip: stainless steel
 - Dust cover: thermoplastic
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; gold or matte tin on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -55 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

Configurations (Rows x Ports per row)

- 1x1 • 1x2 • 1x4 • 1x6

Packaging

- Tape and reel packaging: connector or 1x1 cage
- Tray packaging: cage of all sizes
- Bulk packaging: dust cover



Ordering Information

Contact Amphenol for additional options

ExpressPort™ SFP+ Connector

UE76 - A 20 - X X X X X

UE76 SERIES DESIGNATION (RoHS)

A STYLE
A - R/A Single Surface Mount Connector

20 NUMBER OF POSITIONS
20 - 20 Positions

X CONTACT PLATING
 2 - 30µ" Gold Plating on Mating Area
 Gold Flash on Termination
 3 - 30µ" Gold Plating on Mating Area
 Matte Tin Plating on Termination
 5 - 15µ" Gold Plating on Mating Area
 Gold Flash on Termination
 6 - 15µ" Gold Plating on Mating Area
 Matte Tin Plating on Termination

PACKAGING
 J - Tape and Reel Packaging 480/Reel
 T - Tape and Reel Packaging 500/Reel

LUBRICANT OPTION
 0 - Non Lubricated
 1 - Lubricant Added

OPTION 2
 0 - Standard
 1 - Resonance Cancellation Features

OPTION 1
 0 - Standard (Black)

Ordering Information

Contact Amphenol for additional options

ExpressPort™ SFP+ Cage

U77 - X X X X X - X X X X X

U77 SERIES DESIGNATION (RoHS)

X STYLE
 A - One Row
 C - One Row Cage + Light Pipe Combo (on Top)
 E - One Row Cage + Heat Sink Combo
 F - One Row Cage 1 degree Angle

X NUMBER OF PORT IN ROW
 1 - Single in Row
 2 - Inline 1x2
 4 - Inline 1x4
 6 - Inline 1x6

X CHASSIS GROUNDING OPTIONS
 3 - Metal Spring Fingers (No Bottom Latch Cover)
 4 - Elastomeric Gasket
 6 - Metal Spring Fingers (1 Piece Design Bottom Latch Cover)

X HEAT SINK/LIGHT PIPE OPTION
 1 - No Heat Sink/Light Pipe Option
 2 - Heat Sink Option
 3 - Light Pipe Option (for 1xN Cage Only)

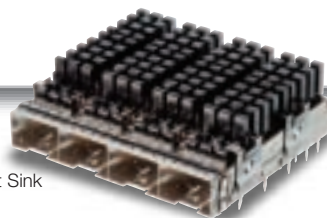
PACKAGING
 1 - Tray Packaging (ACC Re-Packed)
 T - Tape and Reel Packaging (For 1x1 only)

OPTION 1
 0 - Standard
 7 - Cage with Extra Bottom Spring Fingers,
 No Bottom Mid G-pins
 8 - Cage with Half Moon Mid G-pins
 9 - Cage with Extra Bottom Spring Fingers
 and Half Moon Mid G-pins

OPTIONAL DUST COVER
 0 - Without Dust Cover
 D - With Dust Cover (Ship Loose)

PLATING
 1 - Bright Tin (for Wave Solder)
 2 - Nickel
 3 - Matte Tin (for Reflow 245 degree)

PCB MOUNTING OPTIONS
 Various options available
 Consult sales or website for details



1X4 SFP+ Cage with Heat Sink
U77-E462M-2081

Telephone: (416) 291-4401 Fax: (416) 292-0647 E-Mail: sales@amphenolcanada.com

All specifications are subject to change without notice.

ExpressPort™ SFP+ 2xN Cage & Connector



Amphenol's ExpressPort™ SFP+ 2xN Combos provide data transfer speeds of up to 14 Gbps per port. ExpressPort™ SFP+ 2xN Combos consist of an integrated stacked connector system and a cage with compliant press-fit pins.

Amphenol's unique ExpressPort™ SFP+ cage construction features EMI shielding available in the form of metal spring fingers or elastomeric gaskets. These cages also eliminate ventilation holes near the front of the cage to prevent potential catch points for the mating module EMI springs.

Specification Highlights

The interconnect system is comprised of a 2-row stacked, 20-position, 0.8 mm pitch SFP+ connector and cage assembly as one unit with all press-fit construction.

General Characteristics

- RoHS compliant
- Press-fit cage and connector combo for minimum 1.57 +/-10% mm (0.0625") PCB thickness
- Industry standard EIA-364

Mechanical Characteristics

- Accepts multiple transceivers per INF-8074i
- Card entry slot accepts 1.0 mm thick integrated circuit cards
- Durability: 250 mating cycles minimum

Electrical Characteristics

- Hot swappable
- Operating voltage: 3.3 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/- 10 Ω
- DWV: 300 V AC
- Insulation resistance: 1000 MΩ min
- Contact resistance: 70 mΩ max

Packaging

- Tray packaging: cage and connector assembly
- Bulk packaging: dust cover

Configurations (Rows x Ports per row)

- 2x1 • 2x2 • 2x4 • 2x6 • 2x8

Materials

- Cage
 - Base material: copper alloy
 - Plating: nickel or tin
 - Light pipe: optical grade polycarbonate
 - Dust cover: thermoplastic
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; tin-lead on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -55 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

Options

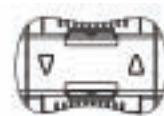
- Dust cover
- Light pipe
 - 4 light pipes per 2x1
 - 2 inner light pipes per 2x1
 - 2 outer light pipes per 2x1
- EMI shielding
 - Metal spring fingers
 - Conductive elastomeric gasket



U86-KX627-10XX1
4 LIGHT PIPES PER 2X1



U86-KX627-20XX1
2 INNER LIGHT PIPES
PER 2X1



U86-KX627-30XX1
2 OUTER LIGHT PIPES
PER 2X1

Ordering Information

Contact Amphenol for additional options

ExpressPort™ SFP+ 2xN Combo (Cage & Connector)

U86 - XXXXX - X0XX1

U86 SERIES DESIGNATION

- X STYLE**
- B - 2xN, No Light Pipes
 - D - 2xN, Light Pipes - small Light Pipe openings
 - K - 2xN, Light Pipes

- X NUMBER OF PORT IN ROW**
- 1 - 2x1
 - 2 - 2x2
 - 4 - 2x4
 - 6 - 2x6
 - 8 - 2x8

- X CHASSIS GROUNDING**
- 4 - Elastomeric Gasket
 - 5 - Elastomeric Gasket, Bottom-Mylar Tape
 - 6 - Metal Spring Fingers

- X CONNECTOR MOUNTING TYPE**
- 2 - Standard Press Fit Pins
 - 5 - Small Press Fit Pins for High Speed Termination

- X CAGE MOUNTING TYPE**
- 7 - Standard 2xN Cage
 - C - Improved EMI Cage
 - E - Special EMI Cage

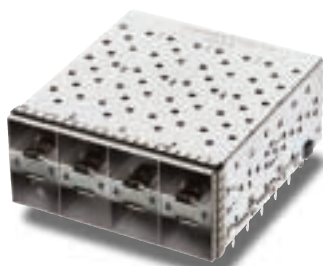
- PACKAGING**
- 1 - Tray Packaging (Stacked)

- PLATING OPTIONS FOR CAGE**
- 2 - Nickel
 - 3 - Matte Tin

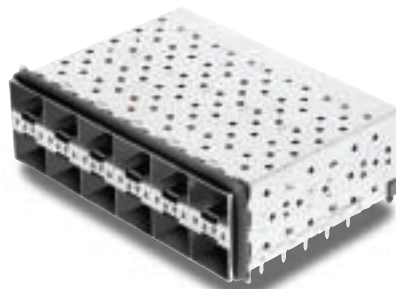
- PLATING OPTIONS FOR CONNECTOR**
- 1 - 30µ" Gold Plating on Mating Area
150-300µ" Tin/lead on Termination
 - 4 - 15µ" Gold Plating on Mating Area
150-300µ" Tin/lead on Termination

- 0 - Standard

- LIGHT PIPE OPTION**
- 0 - No Light Pipe
 - 1 - 4 LP per 2x1
 - 2 - 2 Inner LP per 2x1
 - 3 - 2 Outer LP per 2x1



2x4 SFP+ Combo with Light Pipes
and Spring Fingers
U86-K4627-30121



2x6 SFP+ Combo with Light Pipes
and Elastomeric Gasket
U86-K6427-10121



2x8 SFP+ Combo with Light Pipes
and Elastomeric Gasket
U86-K8427-20121

SFP



U77-A1118-2001



U77-A4114-2001

Amphenol's SFP interconnect system consists of a 20-position connector enclosed in a metal cage mounted to a host PCB.

Amphenol single port and stacked SFP connectors are rated up to 6 Gbps. They are available in standard RoHS compliant or non-RoHS compliant versions. The cages have a one-piece construction with enhanced transceiver mating tabs available in press-fit version and solder tail version. Longer or shorter pins are available as custom options.

Single Row versions (1xN) consist of SMT connectors used with a separate single row cage (press-fit or solder tail). Stacked versions (2xN) consist of a 2 row cage with integrated 2 row connectors. The entire assembly is press-fit compliant pin.

Specification Highlights

The interconnect system is comprised of a cage assembly which is used with 20-position SFP connectors complying with MSA Agreement INF-8074i.

General Characteristics

- RoHS compliant
- Industry standard footprint
- Industry standard EIA-364

Mechanical Characteristics

- Accepts multiple transceivers per INF-8074i
- Compliant press-fit pins or solder tails (1x1 cages)
- Durability: 250 mating cycles minimum

Electrical Characteristics

- Hot swappable
- Operating voltage: 3.3 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/- 10 Ω
- DWV: 300 V AC
- Insulation resistance: 1000 M Ω min
- Contact resistance: 70 m Ω max
- Spring fingers for superior EMI grounding

Packaging

- Tape and reel packaging: connector or 1x1 cage
- Tray packaging: cage of all sizes
- Bulk packaging: dust cover

Materials

- Cage
 - Base material: copper alloy
 - Plating: nickel or tin
 - Light pipe: optical grade polycarbonate
 - Heat sink: aluminum alloy
 - Heat sink clip: stainless steel
 - Dust cover: thermoplastic
 - EMI ground tabs: stainless steel
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; gold or matte tin on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -55 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

Configurations (Rows x Ports per row)

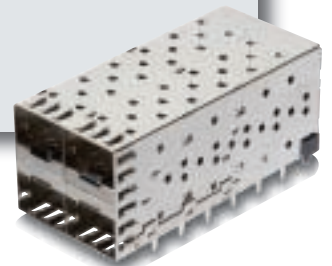
- | | | | |
|-------|-------|-------|-------|
| • 1x1 | • 1x2 | • 1x4 | • 1x6 |
| • 2x1 | • 2x2 | • 2x4 | • 2x6 |

Options

- Light pipes
- Heat sink (standard fin for final cage combo)
- Enhanced EMI performance cage
- Dust cover



1x4 SFP cage with heat sinks
U77-E4124-2041



2x2 SFP Combo
U78-B2127-00121

SFP 1xN Cages & Connectors



UE75-A20-2000T

HIGH SPEED
I/O PRODUCTS

Ordering Information

Contact Amphenol for additional options

SFP Connector

(Used with 1xN cages)

UE75 - A 20 - X X 0 X X

UE75 SERIES DESIGNATION (RoHS)

A STYLE

A - R/A Single Surface Mount Connector

20 NUMBER OF POSITIONS

20 - 20 Positions

X CONTACT PLATING

- 2 - 30µ" Gold plating on Mating Area
Gold Flash on Termination
- 3 - 30µ" Gold plating on Mating Area
Matte Tin Plating on Termination
- 5 - 15µ" Gold plating on Mating Area
Gold Flash on Termination
- 6 - 15µ" Gold plating on Mating Area
Matte Tin Plating on Termination

PACKAGING

- J - Tape and Reel Packaging 480/Reel
- T - Tape and Reel Packaging 500/Reel

LUBRICANT OPTION

- 0 - Non Lubricated
- 1 - Lubricant Added

OPTION 1

- 0 - Standard (Black)

Ordering Information

Contact Amphenol for additional options

SFP Cage

(1xN)

U77 - X X X X X - X X X X X

U77 SERIES DESIGNATION

X STYLE

- A - One Row
- C - One Row Cage + Light Pipe Combo (on Top)
- E - One Row Cage + Heat Sink Combo
- F - One Row Cage 1 degree Angle

X NUMBER OF PORT IN ROW

- 1 - Single in Row
- 2 - Inline 1x2
- 4 - Inline 1x4
- 6 - Inline 1x6

X CHASSIS GROUNDING OPTIONS

- 1 - Metal Grounding Tabs
- 2 - Inner and Outer Flexible Spring Fingers

X HEAT SINK/LIGHT PIPE OPTION

- 1 - No Heat Sink/Light Pipe Option
- 2 - Heat Sink Option
- 3 - Light Pipe Option (for 1xN Cage Only)

PACKAGING

- 1 - Tray Packaging (ACC Re-Packed)
- T - Tape and Reel Packaging (For 1x1 only)

OPTION 1

- 0 - Standard
- 1 - Cage With Light Pipe on Top
- 8 - Cage with Half Moon Mid G-pins

OPTIONAL DUST COVER

- 0 - Without Dust Cover
- D - With Dust Cover (Ship Loose)

PLATING

- 1 - Bright Tin (For Wave Solder)
- 2 - Nickel
- 3 - Matte Tin (For Reflow 245 degree)

PCB MOUNTING OPTIONS

Various options available
Consult sales or website for details

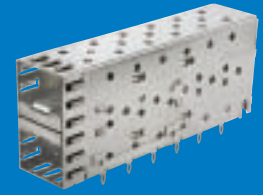


1x6 SFP cage with light pipes
U77-C6114-2011

Telephone: (416) 291-4401 Fax: (416) 292-0647 E-Mail: sales@amphenolcanada.com

All specifications are subject to change without notice.

SFP 2xN Cage & Connector Combos



U78-B1126-00121

Ordering Information

Contact Amphenol for additional options

SFP 2xN Combo (Cage & Connector)

UXX - XX12X - XXXX1

UXX SERIES DESIGNATION

- U78** - Standard SFP Cage & Connector
- U86** - Standard SFP Cage & Connector with Light Pipes

X STYLE

- B** - Stacked Connector and Cage Combo (U78 Series)
- K** - 2xN Combo with Light Pipes (U86 Series)
- L** - Stacked Low Profile 2xN Combo (U78 Series)

X NUMBER OF PORT IN ROW

- 1** - 2x1
- 2** - 2x2
- 4** - 2x4
- 6** - 2x6

1 1 - Standard

2 2 - Standard

X 6 - Standard

- X** - Various options available, customer specific
Consult sales or website for details

X HEAT SINK/LIGHT PIPE OPTION

- 0** - No Heat Sink, no Light Pipes
- X** - Other options available

PACKAGING

- 1** - Tray Packaging (Stacked)

PLATING OPTIONS FOR CAGE

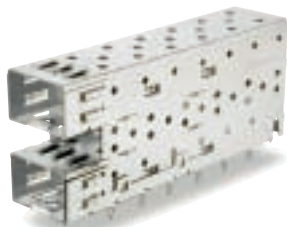
- 1** - Bright Tin (for Wave Soldering)
- 2** - Nickel
- 3** - Matte Tin (for SMT Soldering)

PLATING OPTIONS FOR CONNECTOR

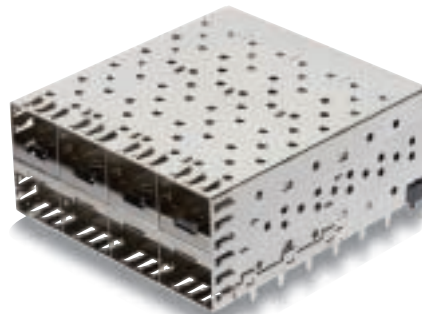
- 1** - 30µ" Gold plating on Mating Area
150-300µ" Tin/lead on Termination (For U78)
- 2** - 30µ" Gold Plating on Mating Area
Gold Flash on Termination (For UE78)
- 3** - 30µ" Gold Plating on Mating Area
150-300µ" Matte Tin on Termination (For UE78)
- 4** - 15µ" Gold Plating on Mating Area
150-300µ" Tin/lead on Termination (For U78)
- 5** - 15µ" Gold Plating on Mating Area
Gold Flash on Termination (For UE78)
- 6** - 15µ" Gold Plating on Mating Area
150-300µ" Matte Tin on Termination (For UE78)

OPTIONAL DUST COVER

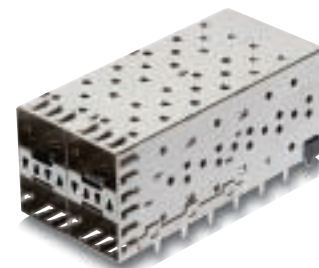
- 0** - Without Dust Cover
- D** - With Dust Cover (Ship Loose)



2x1 SFP Combo
(Customized Version)
U78-B112C-00121



2x4 SFP Combo
U78-B4127-00121



2x2 SFP Combo
U86-K2127-10121

VHDCI Receptacle

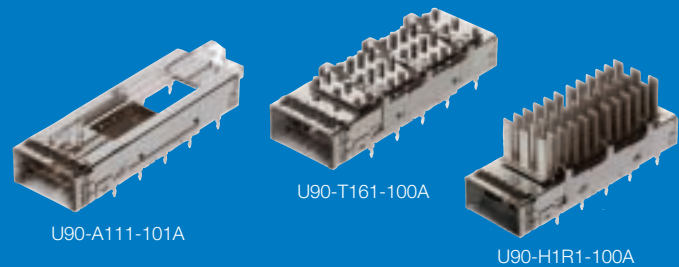
Very High Density Cable interconnect (VHDCI) provides interconnections where space limitations exist and high performance is a key requirement. Designed to be compact, these fully shielded connectors support ESD/EMI protection and are capable of transferring data up to 80 Gbps while meeting EI700A0AF specifications. Receptacles are available in both right-angle and straddle-mount versions with or without shielded EMI tabs.

Ordering Information		Contact Amphenol for additional options	
VHDCI Receptacle		HX11	XXX-XXX-X-XX*
HX11	SERIES DESIGNATION H11 - Standard Receptacle HE11 - RoHS Receptacle		
XXX	STYLE RAA - Right Angle, Single Port RDA - Straddle Mount, Single Port		
XXX	OPTIONS 100 - No Screwlocks, Standard Shell 101 - Screwlocks Bulk Packed, Standard Shell 110 - No Screwlocks (Standard), Shell without EMI Tabs 111 - Screwlocks Bulk Packed, Shell without EMI Tabs		
		STRADDLE MOUNT PACKAGING (Applies to RDA only)	XX*
		C - Plug Cover and Tube Packaging*	
		T - Tape & Reel Packaging*	
		CT - Plug Cover and Tape & Reel Packaging*	
		TAIL LENGTH OPTIONS	X
		Blank - Standard**	
		1 - 0.125" Contact Tails**	
		3 - 0.062" PCB Thickness*	
		4 - 0.093" PCB Thickness*	
Notes			
* RDA Style Only			
** RAA Style Only Available in tube packaging only			



VHDCI Right Angle Receptacle
HE11-RAA-100

ExpressPort™ QSFP+ QSFP



The ExpressPort™ QSFP+/QSFP Interconnect system is comprised of a 38-position 0.8 mm pitch SMT connector and a press-fit cage designed to comply with the Quad Small Form-factor Pluggable (QSFP) Transceiver Specifications. The connector system is capable of data rates beyond 10 Gbps per channel (4 channels) and is intended for external connections (38-position connector). High speed serial interconnect applications include clusters, servers and storage devices.

The ExpressPort™ QSFP+ E-series connector family is rated at 28 Gbps per channel (4x28), featuring a stamped and formed contact design providing improved mechanical durability. This connector features an integrated grounding structure and resonance dampening features for superior crosstalk performance. The contact design is optimized for a smooth impedance profile resulting in low losses. The ExpressPort™ QSFP+ E-series connector is designed for IBTA [EDR] applications (25.78 Gbps) and is fully compatible with industry standard SFF-8436 QSFP+ modules. The QSFP+ E-series connector is fully compatible with existing QSFP and QSFP+ cages.

Specification Highlights

The QSFP interconnect system is comprised of a press-fit cage assembly which is used with 38-position, 0.8 mm pitch connectors complying with QSFP Transceiver Specifications.

Mechanical Characteristics

- Cage is keyed according to QSFP MSA
- Durability: 250 mating cycles minimum
- Connector insertion force: 40 N max
- Connector withdrawal force: 30 N max

Electrical Characteristics

- Operating voltage: 30 V
- Insulation resistance: 1000 M Ω min
- Contact resistance: 70 m Ω max
- Differential impedance: 100 Ω +/- 10 Ω
- Operating current: 0.5 A
- DWV: 300 V AC
- Hot swappable

Signal Integrity Characteristics

- QSFP, ExpressPort™ QSFP+
- Return Loss: 10 dB
 - Near end isolation: -40 dB (frequencies up to 3 GHz)
 - Insertion loss: 0.13dB max (frequencies up to 1.25 GHz)
0.25 dB max (frequencies 1.25 - 2.50 GHz)
0.25 dB max (frequencies 2.50 - 5.00 GHz)
 - Rise time for impedance measurement: 25 ps
 - Within pair skew: 1 ps
 - NEXT: \leq 2%
- ExpressPort™ QSFP+ E-series Connector
- Return loss: -12dB max (frequencies up to 14GHz)
 - Insertion loss: 1.4dB max (frequencies up to 14GHz)
 - Common mode conversion: -24dB max (up to 14 GHz)
 - Integrated Crosstalk Noise: 3mV rms
- assumes 3 nearest-neighbor (most-detrimental) aggressor parameters and receiver parameters:
 - Near- & far-end aggressors' peak differential amplitude: 600mv
 - Near- & far-end aggressors' 20%-80% risetime: 9.6ps
 - 3dB reference receiver bandwidth: 18.75 GHz
 - Range of integration: 10MHz to 28 GHz
 - MDNEXT: 1mVrms MDNEXT: 2.8mVrms

Packaging

- Tape and reel packaging: connector or 1x1 cage
- Tray packaging: cage of all sizes
- Bulk packaging: dust cover

Materials

- Cage
 - Base material: copper alloy
 - Plating: nickel
 - Light pipe: optical grade polycarbonate
 - Heat sink: aluminum alloy
 - Heat sink clip: stainless steel
 - Dust cover: thermoplastic
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; matte tin on terminations and grounding tabs
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

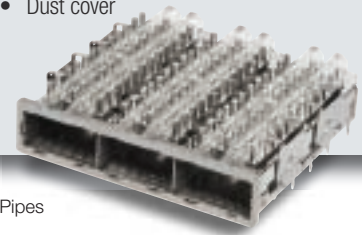
- Operating temperature: -40 °C to +85 °C
- Storage temperature: -40 °C to +85 °C

Configurations (Rows x Ports per row)

- 1x1
- 1x3
- 1x4
- 1x6

Options

- Cage design
 - Through the bezel
 - Behind the bezel
- Heat sinks
- Light pipe
 - Round 1.4 mm
 - Square 2.6x2.6 mm
- Dust cover



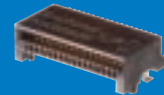
1x3 QSFP Cage
with Heat Sink and Round Light Pipes
U90-G351-101A



FS1-E38-20M0-10
28 Gbps



FS1-R38-20A2-10
16 Gbps



FS1-R38-20A2-01
12 Gbps

HIGH SPEED I/O PRODUCTS

Ordering Information

Contact Amphenol for additional options

Connectors:

- QSFP
- ExpressPort™ QSFP+
- ExpressPort™ QSFP+ E-series

FS1 - R38 - X0 XX - XX

FS1 SERIES DESIGNATION

R38 R38 - 38 Position Connector (QSFP, ExpressPort™ QSFP+)
E38 - 38 Position connector (ExpressPort™ QSFP+ E-series)

X PLATING

- 2 - 30µ" Gold Plating on Mating Area
Matte Tin Plating on Termination
- 3 - 15µ" Gold Plating on Mating Area
Matte Tin Plating on Termination

0 0 - Standard

SPECIAL

XX	Features		Bandwidth per Channel	
	Resonance Dampening	Hold down tabs	FS1-R38 QSFP+	FS1-E38 E-series
00	NO	NO	12 Gbps	Contact Amphenol
10	YES	NO	16 Gbps	28 Gbps
01	NO	YES	12 Gbps	N/A
11	YES	YES	16 Gbps	N/A

OPTIONS

- 00 - QSFP Connector
- 0A - Connector with Hold Down Tabs
- A2 - QSFP+ Connector
- M0 - E-series Connector

Ordering Information

Contact Amphenol for additional options

Cages:

- QSFP
- ExpressPort™ QSFP+

U90 - XXX1 - 1XXX

U90 SERIES DESIGNATION (RoHS)

X STYLE

- A - One Row Cage 0°
- G - One row Cage - 0° Behind Bezel
- H - One row Cage - 0° Thru the Bezel w/optional Light Pipe
- L - One row Cage - 0° No Pins on Back Wall
- R - Thru the Bezel with Low Profile, Low Force Heat Sink Clip and Low Profile Heat Sink

X NUMBER OF PORT IN ROW

- 1 - 1x1 ports
- 3 - 1x3 ports
- 4 - 1x4 ports
- 6 - 1x6 ports

X HEAT SINK OPTION

- 1 - No Heat Sink and No Clip Shipped
- 2 - Fin Style (Black Oxide) Heat Sink and Clip (H=6.5 mm)
- 3 - Fin Style (Black Oxide) Heat Sink and Clip (H=4.2 mm)
- 4 - Fin Style (Black oxide) Heat Sink and Clip (H=13.5 mm)
- 5 - Pin Style (Nickel Plated) Heat Sink and Clip (H=6.5 mm)
- 6 - Pin Style (Nickel Plated) Heat Sink and Clip (H=4.2 mm)
- 7 - Pin Style (Nickel Plated) Heat Sink and Clip (H=13.5 mm)
- D - Pin-Fin Style (Black Oxide) Heat Sink and Clip (H=6.5 mm)
- E - Pin-Fin Style (Black Oxide) Heat Sink and Clip (H=4.2 mm)
- F - Pin-Fin Style (Black Oxide) Heat Sink and Clip (H=13.5 mm)
- R - Pin-Fin Style (Nickel Plated) Heat Sink and Clip (H=13.5 mm)

PACKAGING

- 1 - Tray Packaging
- T - Tape and Reel Packaging
- A - Tray Packaging with Heat Sink and Clip or Light Pipe Shipped Assembled

LIGHT PIPES OPTION

- 0 - Standard
- 1 - With Light Pipes (Round 1.4 mm Outlet)
No EMI gasket
- 3 - With Light Pipes (Square 2.6 x 2.6 mm Outlet)
No EMI Gasket

OPTIONAL DUST COVER

- 0 - Without Dust Cover
- D - With Dust Cover (Ship Loose)

PLATING

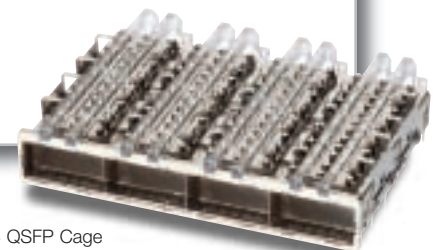
- 1 - Nickel

APPLICATION

- 1 - Press Fit Pins - 2.5 mm Long



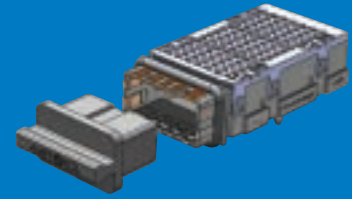
1x1 QSFP Cage
with Heat Sink and Dust Cover
U90-A131-1D01



1x4 QSFP Cage
with Heat Sink and Square Light Pipes
U90-G461-103A

Telephone: (416) 291-4401 Fax: (416) 292-0647 E-Mail: sales@amphenolcanada.com

All specifications are subject to change without notice.



U91-A151-1D01-10

The CXP cage and connector system is one of Amphenol's newest additions to the High Speed I/O Family. Amphenol's CXP connector comes in a one-piece press-fit assembly system with twelve channels of 10 Gbps data rates, resulting in 120 Gbps of total bandwidth – the fastest and most dense I/O on the market today. It also enables pluggable copper or optical cables to increase the flexibility of system-level hardware for end users. CXP is ideal for network switches, routers, servers, and storage devices.

Specification Highlights

The CXP interconnect system is comprised of an 84-position, 2-row press-fit connector and a cage assembly as one unit complying with SFF-8642.

General Characteristics

- RoHS compliant
- Industry standard footprint
- Industry standard EIA-364

Mechanical Characteristics

- Insertion force for an MSA compliant transceiver: 150 N max
- Unmating force: 50 N max
- Durability: 250 mating cycles minimum

Electrical Characteristics

- Hot swappable
- Operating voltage: 30 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/- 10 Ω
- DWV: 300 V AC
- Insulation resistance: 1000 M Ω min

Packaging

- Tray packaging: cage and connector assembly
- Bulk packaging: dust cover

Temperature Rating

- Operating temperature: -40 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

Materials

- Cage
 - Base material: zinc alloy
 - Plating: nickel
 - Heat sink: aluminum alloy
 - Heat sink clip: stainless steel
 - Cage cover: stainless steel
 - Mounting screw: AISI 1010 steel
 - Dust cover: thermoplastic
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; tin-lead on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Configurations

- 1x1
- Custom solutions available

Options

- Heat sink
- Dust cover
- EMI shielding
 - Conductive elastomeric gasket
 - Metal spring fingers
- Keying
 - Key #1 (Left) InfiniBand™
 - Key #2 (Right) Ethernet



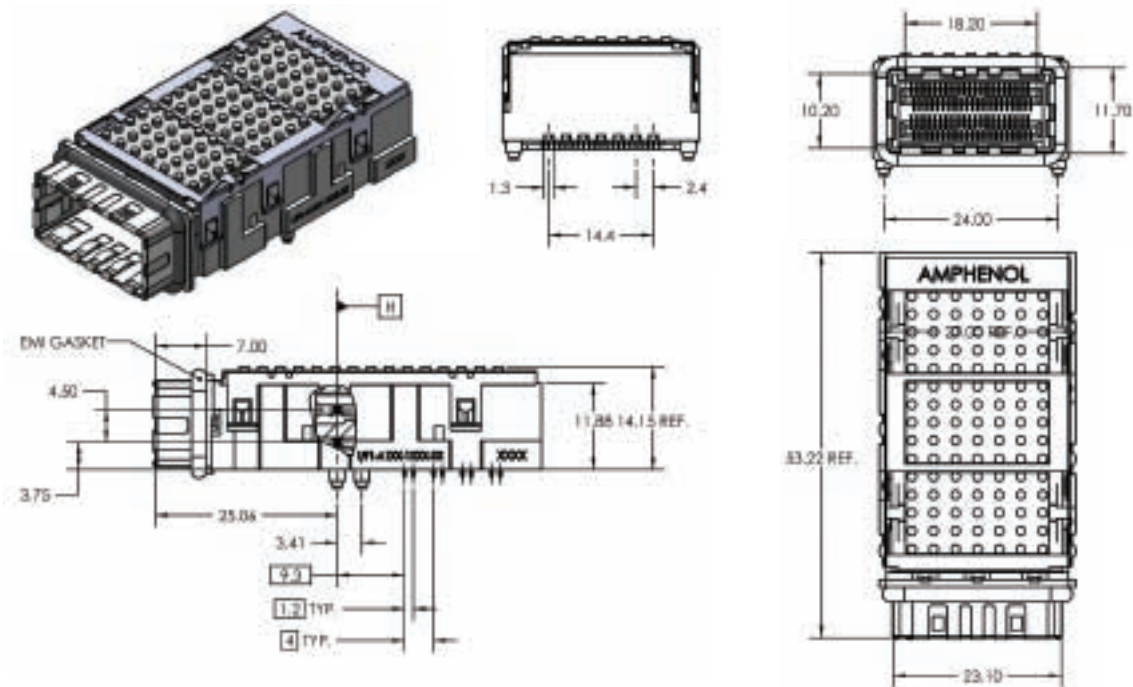
(bottom view)



(top view)

CXP Cage and Connector Assembly
U91-A121-100A-10

CXP Cage and Connector Assembly U91-A1XX-1XXX-XX



Ordering Information

Contact Amphenol for additional options

CXP Cage/Connector Combo

U91 - A1XX - 1XXX - 1X

U91 SERIES DESIGNATION

A STYLE

A - One Row Cage 0°

1 NUMBER OF PORT IN ROW

1 - 1x1 Port

X HEAT SINK OPTION

- 1 - No Heat Sink and No Clip Shipped
- 2 - Square Pin (Black Oxide) HS & Clip
- 5 - Round Pin (Black Oxide) HS & Clip
- A - Square Pin (Nickel Plated) HS & Clip
- D - Round Pin (Nickel Plated) HS & Clip
- G - Square Pin (Chromate Passivation) HS & Clip
- K - Round Pin (Chromate Passivation) HS & Clip

X KEYING

- 0 - No Key
- 1 - Key #1 (Left) InfiniBand™
- 2 - Key #2 (Right) Ethernet

MOUNTING SCREWS

- 0 - No Screws
- 1 - With Mounting Screws (Standard Length)

CONTACT PLATING

- 1 - Mating Area Plating 0.76µm Gold Over 2.54µm of Nickel; Tail Area 0.76µm Tin Lead Over 2.54µm of Nickel

PACKAGING

- 1 - Tray Packaging
- A - Tray Packaging with Heat Sink and Clip or Light Pipe Shipped Assembled

LIGHT PIPES

- 0 - Standard
- X - Consult Amphenol Sales for Additional Options

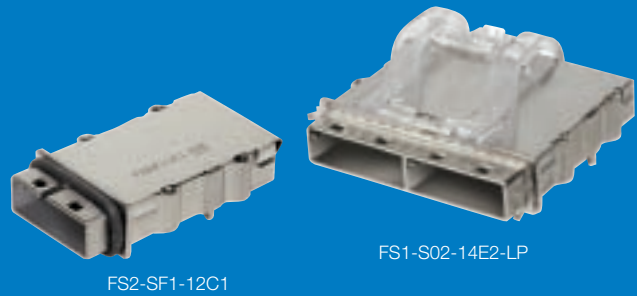
OPTIONAL DUST COVER

- 0 - Without Dust Cover
- D - With Dust Cover (Ship Loose)

CAGE PLATING

- 1 - Nickel

Mini-SAS FS Series



The Mini-SAS external I/O connector system consists of a die-cast metal cage and a Compact MultiLane SMT Connector, featuring proven "cut edge" style contacts. Providing 4 serial send/receive channels per port, this connector system is designed to satisfy the needs for gigabit serial data transmission applications with signal speeds across the connector interface of 6 Gbps per channel.

The cage is mounted separately to the body so that the stress imposed by insertion and removal of the cable plug does not affect the signal/body solder joints. The connector is available with unique solder hold-down tabs designed to provide additional mechanical robustness in demanding applications.

Specification Highlights

The Mini-SAS interconnect system is comprised of a cage assembly which is used with 26-position, 0.8 mm pitch connectors complying with SFF-8086, SFF-8087 and SFF-8088.

Mechanical Characteristics

- Co-planarity specification: 0.1 mm
- Connector insertion force: 55.5 N max
- Connector withdrawal force: 49.0 N max
- Durability: 250 mating cycles minimum
- Reverse keying for active copper cables per SAS 2.0

Electrical Characteristics

- Operating voltage: 30 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/- 10 Ω
- DWV: 300V AC
- Insulation resistance: 1000 M Ω min
- Contact resistance: 80 m Ω max
- Near end isolation: -40 dB (frequencies up to 3 GHz)
- Insertion loss: 1.0 dB maximum (frequencies up to 1.6 GHz)
- Rise time for impedance measurement: 50 ps
- Within pair skew: 5 ps

Configurations (Rows x Ports per row)

- 1x1
- 1x2
- 1x4

Packaging

- Tape and reel packaging: connector
- Tray packaging: cage
- Bulk packaging: mounting screw or dust cover

Materials

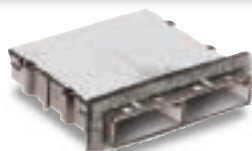
- Cage
 - Base material: zinc alloy
 - Plating: nickel
 - Mounting screw: AISI 1010 steel
 - Light pipe: optical grade polycarbonate
 - Dust cover: thermoplastic
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; matte tin on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -55 °C to +85 °C
- Storage temperature: -55 °C to +85 °C

Options

- Cage inclination from printed circuit board
 - 0° angle
 - 1° angle (PCI applications)
- Keying
- Dust cover
- Light pipe
- EMI shielding
 - Conductive elastomeric gasket
 - Soft shield foam gasket
 - Stainless steel gasket



1x2 Mini-SAS 2.0 Cage
with Foam Gasket
FS2-S02-14F1



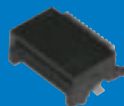
1x4 Mini-SAS 1.0 Cage with
Stainless Steel Gasket
FS1-SF4-14E1



1x2 Mini-SAS 2.0 Cage with
Elastomeric Gasket
FS2-SF2-16C1



FS1-R26-2000



FS1-R26-2001

Ordering Information

Contact Amphenol for additional options

Mini-SAS Connector

FS1 - R26 - X00X

FS1 SERIES DESIGNATION

R26 STYLE
R26 - 26 position connector

X PLATING
2 - 30µ" Gold in Mating Area/
100µ" Matte Tin on Tails over Nickel Under-plate
3 - 15µ" Gold in Mating Area/
100µ" Matte Tin on Tails over Nickel Under-plate

OPTIONS

0 - Standard Connector
1 - Connector with Hold Down Tabs

0 - Standard

0 - Standard

X

0

0

Ordering Information

Contact Amphenol for additional options

Mini-SAS Cage

FSX - SXX - 1XXX - XX

FSX TYPE
1 - Standard
2 - With SAS 2.0 Guide Keyway
A - With SAS 2.1 Guide Keyway

S S - Shell

XX SIZE
01 - 1x - 1 degree
F1 - 1x - 0 degree
P01 - 1x - 1 degree PCI Express
02 - 2x - 1 degree
F2 - 2x - 0 degree
04 - 4x - 1 degree
F4 - 4x - 0 degree

1 PLATING
1 - Nickel (ROHS)

SPECIAL

Blank - No Light Pipe
LP - With Two Barrel Light Pipes - One Light Pipe per Port

OPTIONS

C1 - Conductive Elastomer Gasket - 8 mm Long Mounting Screw, No Lock Washer
C2 - Conductive Elastomer Gasket - No Mounting Screw
E1 - Stainless Steel Gasket - 8 mm Long Mounting Screw, No Lock Washer
E2 - Stainless Steel Gasket - No Mounting Screws
E3 - Stainless Steel Gasket - 10 mm Long Mounting Screw with Lock Washer
F1 - Foam Gasket

KEYING

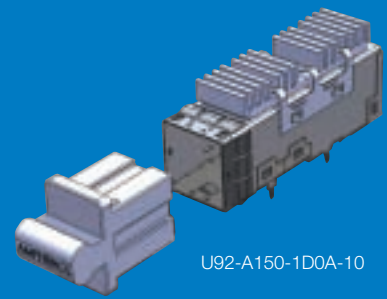
0 - No key
1 - Key #1
4 - Key #4 Universal SAS port
7 - Key #7
24 - Key #2 and #4 SAS Out
46 - Key #4 and #6 SAS In
D22 - Left Port Key #2 & #4 / Right Port Key #2 & #4
D66 - Left Port Key #4 & #6 / Right Port Key #4 & #6
D26 - Left Port Key #2 & #4 / Right Port Key #4 & #6
D62 - Left Port Key #4 & #6 / Right Port Key #2 & #4

XX

XX

X

Mini-SAS HD U92 Series



U92-A150-1D0A-10

Amphenol's Mini-SAS High Density interconnect is the next generation SAS system, with 4x and 16x cable-plugging options to provide faster data transmission and more bandwidth for end users. The Mini-SAS HD connector system has a two-row, right-angle connector with 12 Gbps per channel. Each connector handles 4 lanes of data for up to 48 Gbps of total bandwidth. Ganged options are also available up to a 1x4 configuration for up to 192 Gbps of total bandwidth. This connector will mate with active copper and optical cable assemblies and active pluggable modules for extended-length applications in data centers. Main applications for Mini-SAS HD include HBA Servers, storage devices, switches and rack-mounted computers.

Specification Highlights

The Mini-SAS HD interconnect system is comprised of a 36-position, 2-row, press-fit connector and stamped and formed cage assembly as one unit complying with SFF-8644.

General Characteristics

- RoHS compliant
- Industry standard footprint
- Industry standard EIA-364

Mechanical Characteristics

- Durability: 250 mating cycles minimum

Electrical Characteristics

- Hot swappable
- Operating voltage: 30 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/- 10 Ω
- DWV: 300 V AC
- Insulation resistance: 1000 M Ω min
- EMI spring fingers for superior EMI performance

Packaging

- Tray packaging: cage and connector assembly
- Bulk packaging: dust cover or mounting screw

Configurations (Rows x Ports per row)

- 1x1
- 1x2
- 1x4

Materials

- Cage
 - Base material: copper alloy
 - Plating: nickel
 - Heat sink: aluminum alloy
 - Heat sink clip: stainless steel
 - Dust cover: thermoplastic
 - Mounting screw: AISI 1010 steel
 - EMI spring finger: copper alloy with nickel plating
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; tin-lead on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -40 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

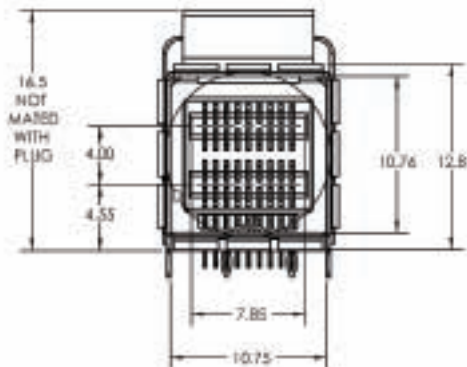
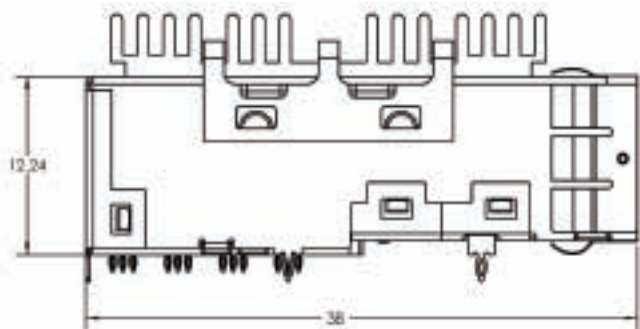
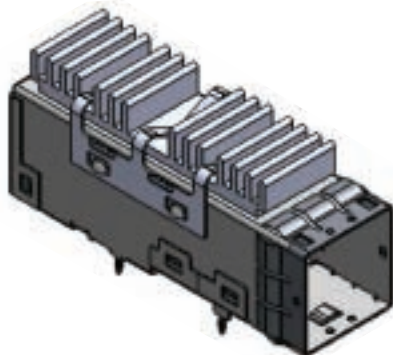
Options

- Heat sink
- Dust cover



1x4 Mini-SAS HD Combo
U92-A410-1001-20

Mini-SAS HD Cage and Connector Combo Assembly
U92-A121-1001-10



Ordering Information

Contact Amphenol for additional options

**Mini-SAS HD Cage/
Connector Combo**

U92 - A X X 0 - 1 X 0 X - 1 X

U92 SERIES DESIGNATION

A STYLE
A - One Row Cage 0°

X NUMBER OF PORT IN ROW
1 - 1x1 Ports
2 - 1x2 Ports
4 - 1x4 Ports

X HEAT SINK OPTION
1 - No Heat Sink and No Clip Shipped
2 - Fin Style (Black Oxide) Heat Sink and Clip
5 - Pin Style (Nickel Plated) Heat Sink and Clip
A - Fin Style (Nickel Plated) Heat Sink and Clip
D - Pin-Fin Style (Black Oxide) Heat Sink and Clip
G - Pin Style (Black Oxide) Heat Sink and Clip
K - Pin Style (Chromate Passivation) Heat Sink and Clip
N - Pin-Fin Style (Nickel Plated) Heat Sink and Clip
S - Fin Style (Nickel Plated) Heat Sink and Clip

0 0 - Standard

MOUNTING SCREWS
0 - No Screws
1 - With Mounting Screws (Standard Length)

CONTACT PLATING
1 - Mating Area Plating 30µ" (0.76µm) Gold over Nickel; Tail area Tin Lead over Nickel

PACKAGING
1 - Tray Packaging
T - Tape and Reel Packaging
A - Tray Packaging Heat Sink and Clip or Light Pipe Shipped Assembled

0 0 - Standard

OPTIONAL DUST COVER
0 - Without Dust Cover
D - With Dust Cover (Ship Loose)

CAGE PLATING
1 - Nickel

Infinity Receptacle



Amphenol's INFINITY (4x/12x) series of connectors facilitate data speeds up to 60 Gbps total bandwidth, as required by InfiniBand™, Fibre Channel and Serial Attached SCSI Trade Associations, with superior EMI performance. INFINITY connectors are high-density, hot pluggable and meet SFF 8470 specifications.

A variety of receptacles are available that will fit multiple connectors into a 1U form factor and PCI bracket. All receptacles are available with standard or RoHS compliant materials. They are capable of data rates beyond 5.0 Gbps per channel. 4x and 12x versions of receptacles are available with lanyard latch or screw lock styles.

Specification Highlights

The Infinity interconnect system is comprised of a 0.8 mm pitch SMT receptacle complying with SFF-8470.

Mechanical Characteristics

- Co-planarity specification: 0.1 mm
- Connector insertion force: 55.5 N max (4x version)
- Connector withdrawal force: 6.1 N typical (4x version)
- Durability: 250 mating cycles minimum

Electrical Characteristics

- Differential impedance: 100 Ω +/- 10 Ω
- DWV: 300 V AC
- Insulation resistance: 10 GΩ min
- Contact resistance: 80 mΩ max
- Rise time for impedance measurement: 70 ps
- Within pair skew: 5 ps

Options

- Number of channels
 - 4x
 - 12x
- Mating style
 - Screw lock style
 - Lanyard latch style
- Mounting style
 - Screw mount
 - Solder post
 - Extended arms

Materials

- Shell
 - Base material: zinc alloy
 - Plating: nickel
 - Rear cover: stainless steel
 - Jack screw: steel with nickel plating
 - Gasket: stainless steel
 - Locking plate: stainless steel
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; tin or tin-lead on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -40 °C to +85 °C
- Storage temperature: -40 °C to +85 °C

Packaging

- Tape and reel packaging
- Tray packaging



Lanyard latch with rear arms and solder posts
U65-B04-40C0-T



Lanyard latch with rear arms, screw mount
U65-E04-2010



Lanyard latch with top mounting, rear arms
U65-H04-40D0-T

Ordering Information

Contact Amphenol for additional options

Infinity Receptacle

U65 - **X** **XX** - **X** **XX** **X** **0** - **X**

U65 SERIES DESIGNATION

X

STYLE

- A** - R/A Surface Mount (Without Locating Post), (Lanyard Application Only)
- B** - Solder Posts (With Locating Post)
- C** - Long Solder Post for 4 mm PCB
- E** - M2 Screw Mount (With Locating Post)
- F** - Belly to Belly Design
- G** - High Profile Belly to Belly
- H** - M2 Screw Mount in Front and Solder Posts in Back (6-PCB Hole Applications Only)

XX

NUMBER OF CHANNELS

- 04** - 4x
- 12** - 12x

X

CONTACT PLATING

- 1** - 50µ" Gold Plating
- 2** - 30µ" Gold Plating
- 4** - 50µ" Gold Plating (RoHS)
- 5** - 30µ" Gold Plating (RoHS)
- 6** - 50µ" Gold Plating w/Lubrication
- 7** - 30µ" Gold Plating w/Lubrication

X

ACCESSORIES OPTION

- 0** - Ship with C-clips or Regular Jack Screw
- 1** - One Piece Clip or Self-Locking Jack Screw
- 2** - No Locking Plate or Jack Screw (Order Separately)

PACKAGING

- Blank** - Tray Packaging
- T** - Tape and Reel Packaging
- C** - Rear Cover / Tray Packaging
- CT** - Rear Cover / Tape & Reel Packaging
- M2 Screw Mount Application*
- M** - M2 Screws included / Tray Packaging
- MT** - M2 Screws included / Tape and Reel Packaging
- CM** - Rear Cover w/ M2 Screws Included / Tray Packaging
- CMT** - Rear Cover w/ M2 Screws Included / T & R Packaging

X

KEYING OPTION OR MODIFIER

- 0** - Standard (No keying)

0

MATING STYLE

- 1** - Lanyard Latch Style
- 2** - Screw Lock Style
- 6** - Lanyard Latch Style for 6 PCB Holes (extended arms)
- 8** - Screw Lock Style for 6 PCB Holes (extended arms)
- 7** - same as 6 with Top Mounting Ear
- 9** - same as 8 with Top Mounting Ear

X

INFINITY RECEPTACLE ACCESSORIES (ORDER SEPARATELY)

- U65-404-21-P** = 4x One-piece lock plate*
- U65-404-60-P** = 4x Optical rear cover
- U65-404-61-P** = 4x Belly-To-Belly Optical rear cover
- U65-412-21-P** = 12x One-piece lock plate*
- U65-412-60-P** = 12x Optical rear cover
- U65-404-40-P** = Thumbscrews (standard)**
- U65-404-41-P** = Thumbscrews (self-locking w/ Nylok)**

Notes

- * Lanyard application only
- ** Screwlock application only
- *** Screwlock 12x application only

ExpressPort™ XFP+ XFP



U79-A141-2D01

The XFP interconnect system is capable of a 10 Gbps data rate and is intended for external I/O connections. High speed serial interconnect applications include clusters, servers and storage devices. It is a smaller space and lower cost alternative to parallel-optics VSR. XFP also requires less than one-third the power and physical space of an MSA interconnect with parallel interface.

The Expressport™ XFP+ Connector is designed to extend performance to 14 Gbps. Please consult Amphenol Factory for availability.

Specification Highlights

The XFP interconnect system is comprised of a press-fit cage assembly which is used with 30-position, 0.8 mm pitch SMT connectors complying with INF-8077i.

Mechanical Characteristics

- Insertion force: 40 N max (cage and connector)
- Withdrawal force: 30 N max (cage and connector)
- Cage retention: 180 N min (latch strength)
- Durability: 250 mating cycles minimum

Electrical Characteristics

- Operating voltage: 30 V
- Operating current: 0.5 A
- Differential impedance: 100 Ω +/- 5 Ω
- DWV: 300 V AC
- Insulation resistance: 1000 M Ω min
- Contact resistance: 70 m Ω max
- Near-end isolation: -40 dB
- Insertion loss: 1.0 dB max

Options

- Heat sink
- Dust cover
- EMI shielding
 - Conductive elastomeric gasket at back of cage
 - Mylar tape

Materials

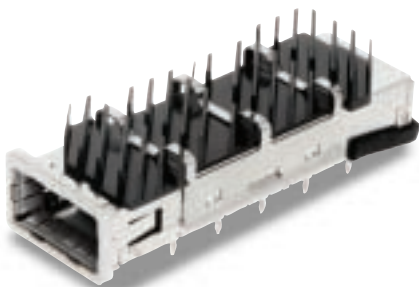
- Cage
 - Base material: copper alloy
 - Plating: nickel
 - Front flange: zinc alloy
 - Heat sink: aluminum alloy
 - Heat sink clip: stainless steel
 - Dust cover: thermoplastic
- Connector
 - Contact base material: copper alloy
 - Contact plating: gold on mating area; gold or matte tin on termination
 - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

Temperature Rating

- Operating temperature: -40 °C to +85 °C
- Storage temperature: -40 °C to +85 °C

Packaging

- Tape and reel packaging: connector or cage
- Tray packaging: cage
- Bulk packaging: dust cover



XFP Cage with 45° Fin Heat Sink
U79-A1G1-2001



XFP Connector
UE75-A30-3000T

Ordering Information

Contact Amphenol for additional options

XFP Connector

UE7X - A 30 - X X 0 X T

UE7X SERIES DESIGNATION (RoHS)
UE75 - Standard XFP Connector
UE76 - ExpressPort™ XFP+ Connector

A STYLE
A - R/A Single Surface Mount Connector

30 NUMBER OF POSITIONS
30 - 30 Positions (Single XFP)

X CONTACT PLATING
2 - 30µ" Gold plating on Mating Area
 Gold Flash on Termination
3 - 30µ" Gold plating on Mating Area
 Matte Tin Plating on Termination
5 - 15µ" Gold plating on Mating Area
 Gold Flash on Termination
6 - 15µ" Gold plating on Mating Area
 Matte Tin Plating on Termination

PACKAGING
T - Tape and Reel Packaging 500/Reel

LUBRICANT OPTION
0 - Non Lubricated
1 - Lubricant Added

0 - Standard

OPTION 1
0 - Standard (Black)
1 - Up To 2 Degree

Ordering Information

Contact Amphenol for additional options

XFP Cage

U79 - A 1 X 1 - 2 X X X

U79 SERIES DESIGNATION

A STYLE
A - One Row

1 NUMBER OF PORT IN ROW
1 - Single in Row

X HEAT SINK OPTION
0 - No Heat Sink, Only Clip is Shipped
1 - No Heat Sink No Clip Shipped
2 - Standard Height Fin Heat Sink (7.0 mm) and Clip
3 - PCI Height Fin Heat Sink (4.2 mm) and Clip
4 - Tall Fin Heat Sink (13.5 mm) and Clip

1 - Standard

PACKAGING
1 - Tray Packaging (Heat Sink & Clip Shipped Separately)
T - Tape & Reel (Heat Sink & Clip Shipped Separately)
B - Tray Packaging (Clip Shipped Assembled to Cage)

OPTION 1
0 - Standard
1 - High Conductivity Rear Lower EMI Gasket
2 - Maylar Tape Attached to the Bottom Cage Wall

OPTIONAL DUST COVER
0 - Without Dust Cover
D - With Dust Cover (Ship Loose)

PLATING
2 - Nickel

HIGH SPEED

I/O PRODUCTS

For more information about ExpressPort™ SFP+, SFP, CXP, ExpressPort™ QSFP+, ExpressPort™ QSFP+ E-Series, QSFP, Mini-SAS, Mini-SAS HD, Infinity, VHDCI, ExpressPort™ XFP+, XFP or other High Speed Products, please contact your local Amphenol Sales representative, or contact:

North America

Phone: +1-416-291-4401

Fax: +1-416-292-0647

Email: sales@amphenolcanada.com

www.amphenolacp.com

Europe

Phone: +31-30-635-8000

Fax: +31-30-637-7034

Email: customerservice@amphenol-nl.com

Asia

Phone: +852-2699-2663

Fax: +852-2691-1774

Email: enquiry@amphenol.com.hk

Amphenol World Headquarters Wallingford, CT, USA

Phone: 1-203-265-8900

Fax: 1-203-268-8516

Email: info@amphenolacp.com

Web: www.amphenol.com

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