



Amphenol's CXP connector comes in a one-piece press-fit assembly system with twelve channels of up to 20 Gbps, resulting in 240 Gbps of total bandwidth – the fastest and most dense I/O on the market today. This allows our CXP to go beyond the 100 Gigabit Ethernet IEEE 802.3ba and the Infiniband CXP12x QDR standards. It also enables pluggable copper or optical cables to increase the flexibility of system-level hardware for end users. The CXP interconnect system is ideal for network switches, routers, servers, and storage devices.



U91-A121-100A-10



U91-A121-100A-10  
(bottom view)



U91-A1A1-100A-10

## 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 min

### Electrical Characteristics

- Hot Swappable
- Operating Voltage: 30 V
- Operating Current: 0.5 A
- Differential Impedance: 100  $\Omega$  +/- 10  $\Omega$
- DWV: 300 V AC
- Insulation Resistance: 1000 M $\Omega$  min

### Packaging

- Tray Packaging: Cage and Connector Assembly
- Bulk Packaging: Dust Cover

## Materials

- Cage
  - o Base Material: Zinc Alloy
  - o Plating: Nickel
  - o Heat Sink: Aluminum Alloy
  - o Heat Sink Clip: Stainless Steel
  - o Cage Cover: Stainless Steel
  - o Mounting Screw: AISI 1010 Steel
  - o Dust Cover: Thermoplastic
- Connector
  - o Contact Base Material: Copper Alloy
  - o Contact Plating: Gold on Mating Area, Matte Tin on Termination
  - o 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

## Configurations

- 1x1
- Custom Solutions Available

## Options

- Dust Cover
- Heat Sink
- EMI Shielding
  - o Conductive Elastomeric Gasket
  - o Metal Spring Fingers
- Keying
  - o Key #1 (Left) InfiniBand™
  - o Key #2 (Right) Ethernet



Dust Cover

# Ordering Information

## CXP Combo (Cage / Connector)

U91 - X 1 X X - 1 X X X - 3 X

**U91** SERIES DESIGNATION (RoHS)

X

### STYLE

- A - One Row 0°, Standard Footprint
- D - One Row 0°, Enhanced Footprint
- E - One Row 0°, Long Connector, Belly-to-Belly Application
- F - One Row 0°, Short Connector, Belly-to-Belly Application

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### NUMBER OF PORTS IN ROW

- 1 - 1x1

X

### HEAT SINK OPTION

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

X

### KEYING

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

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### CAGE PLATING

- 1 - Nickel

### MOUNTING SCREWS

- 0 - No Screws
- 1 - With Mounting Screws (Standard Length of M2 x 0.4, 6 mm long)

### CONTACT PLATING

- 3 - Mating Area Plating 0.76 µm Gold Over 1.27 µm to 3.81 µm of Nickel; Press Fit Tail Area Plating 0.381 µm to 1.52 µm of Matte Tin Over 1.27 µm to 3.81µm of Nickel

### PACKAGING

- 1 - Tray Packaging
- A - Tray Packaging: Heat Sink and Clip Shipped Assembled

### LIGHT PIPE OPTION

- 0 - Without Light Pipe
- X - Various Options Available  
Consult Sales or Website for Details

### DUST COVER OPTION

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