

# 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  $\Omega$  +/- 10  $\Omega$
- DWV: 300 V AC
- Insulation resistance: 1000 M $\Omega$  min
- Contact resistance: 70 m $\Omega$  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

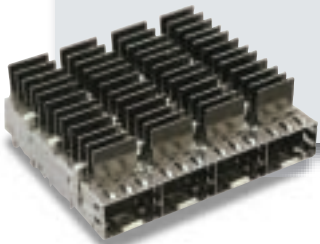
- Operating temperature: -55 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

### Configurations (Rows x Ports per row)

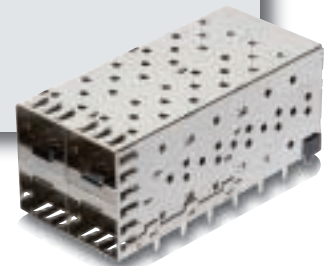
- |       |       |       |       |
|-------|-------|-------|-------|
| • 1x1 | • 1x2 | • 1x4 | • 1x6 |
| • 2x1 | • 2x2 | • 2x4 | • 2x6 |

### Options

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

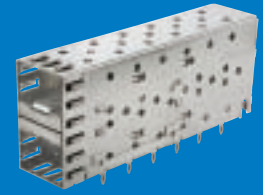


1x4 SFP cage with heat sinks  
U77-E4124-2041



2x2 SFP Combo  
U78-B2127-00121

# SFP 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

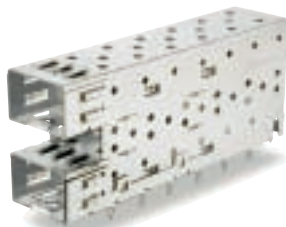
- 1** - Bright Tin (for Wave Soldering)
- 2** - Nickel
- 3** - Matte Tin (for SMT Soldering)

#### PLATING OPTIONS FOR CONNECTOR

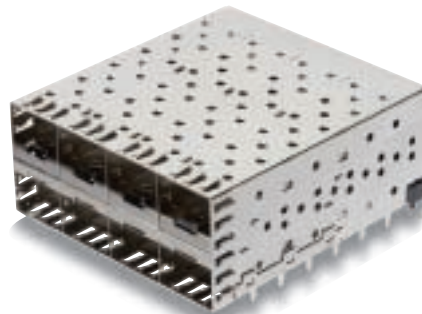
- 1** - 30µ" Gold plating on Mating Area  
150-300µ" Tin/lead on Termination (For U78)
- 2** - 30µ" Gold Plating on Mating Area  
Gold Flash on Termination (For UE78)
- 3** - 30µ" Gold Plating on Mating Area  
150-300µ" Matte Tin on Termination (For UE78)
- 4** - 15µ" Gold Plating on Mating Area  
150-300µ"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

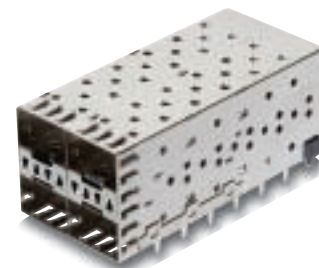
- 0** - Without Dust Cover
- D** - With Dust Cover (Ship Loose)



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



2x4 SFP Combo  
U78-B4127-00121



2x2 SFP Combo  
U86-K2127-10121