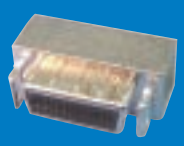
Infinity Receptacle



U65-B04-1010T

U65-B12-1020T

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

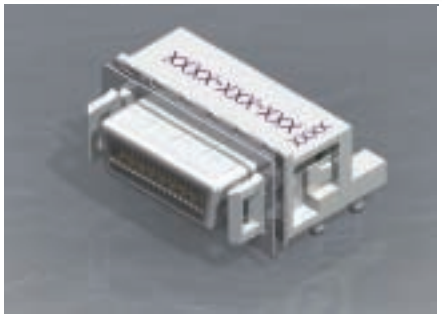
- Shell
  - Base material: zinc alloy
  - Plating: nickel
  - Rear cover: stainless steel
  - Jack screw: steel with nickel plating
  - Gasket: stainless steel
  - Locking plate: stainless steel
- Connector
  - Contact base material: copper alloy
  - Contact plating: gold on mating area; tin or tin-lead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

Temperature Rating

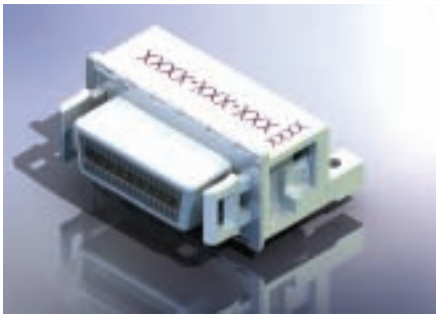
- Operating temperature: -40 °C to +85 °C
- Storage temperature: -40 °C to +85 °C

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 X 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)

X 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

0 KEYING OPTION OR MODIFIER
- **0** - Standard (No keying)

X 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

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