

micro-LinkOVER™ OverPass Assemblies

HIGH SPEED CABLES SUPPORTING 56G AND 112G SIGNALING

micro-LinkOVER™ OverPass™ products remove high speed signaling from the PCB and create a double ended, high performance cabling interconnect by overpassing the PCB. These cables support 56G and 112G signaling in hardware system designs as well as a technology for future 224G signaling systems. Deploying these cables can result in lower over signal loss, less PCB design complexity and reduced PCB costs. The low profile of the connector allows for mounting of the connector end under the chip's heat sink.

These cable assemblies lower system costs by eliminating the need for re-timers and expensive low loss PCB laminates. They also enable arrayed connector layouts for near chip / on package IO solutions allowing cascaded cable routing and high differential pair count interconnection near or around the chip site.

- Removes the high speed signaling from the PCB
- Creates an eight channel lower loss interconnection from the chip site to the external port
- Enables 56G and 112G hardware system design
- Reduced overall system cost
- Enables arrayed connector layouts for near chip / on package IO solutions
- Delivers superior signal integrity performance

FEATURES

- Direct point-to-point connection; single connector compression connection to PCB
- SMT or screw hold down mounting options
- Direct wire attachment to connector contact & robust shield termination coupled with high performance differential pair cabling
- Full support of 56G & 112G signaling speeds and anticipated 224G
- Straightforward application & termination; alignment pins assure proper connector location
- 100% full performance testing and characterization
- Full vertical integration of product components
- 16 & 24 differential pair configurations



TARGET MARKETS



BENEFITS

- Significant reduction in signal loss transmission; addresses system thermal and mechanical needs
- Robust connector mounting & reliability
- Delivers superior signal integrity performance; short signal length from cable to board pad
- Full signal integrity performance compatibility
- Ease of assembly into hardware systems
- Assures full product functionality
- Connectors and cable supplied, processed, terminated & tested by Amphenol
- Choice of multiple IO solutions to address differential pair count and performance

TECHNICAL INFORMATION

MATERIAL

- Contacts: High performance copper alloy
- Connector Cover: Zinc
- SMT Actuation Spring: Stainless steel
- Housings: High performance thermoplastics – UV94V-0
- Cable: Silver & tin plated copper wire, aluminized mylar shields, fluorinated polymer insulation

ELECTRICAL PERFORMANCE

- 93Ω characteristic impedance
- Supports ethernet protocol signaling speeds & performance – 10G, 28G, 56G and 112G
- EIA -364 series

MECHANICAL PERFORMANCE

- Durability: 25 cycles

ENVIRONMENTAL

- EIA-364-1000
- Operating Temperature Range: -40°C to +85 °C

APPROVALS AND CERTIFICATIONS

- UL 94V-0

SPECIFICATION

- micro-LinkOVER™ product specification

PACKAGING

- Product Specific: Usually package in antistatic bags or plastic clamshells
- Protective covers on cable ends for worry free system assembly
- Cable is bulked via either a series of cable wraps or snakeskin jacket

TARGET MARKETS/APPLICATIONS



Switches
Routers
Wireless Infrastructure
Telecom
Optical Transport



Servers
Data Centers
Supercomputers
Datacom

PART NUMBERS

Description	Part Numbers
Double ended 16DP micro-LinkOVER™ cable assembly, Screw mount	V59-Y1Z02
Double ended 16DP micro-LinkOVER™ cable assembly, SMT mount	V59-Y1Z03
16DP micro-LinkOVER™ PCB anchor and carrier	V59-DDZ05
16DP micro-LinkOVER™ application tool	V59-DDZ06