

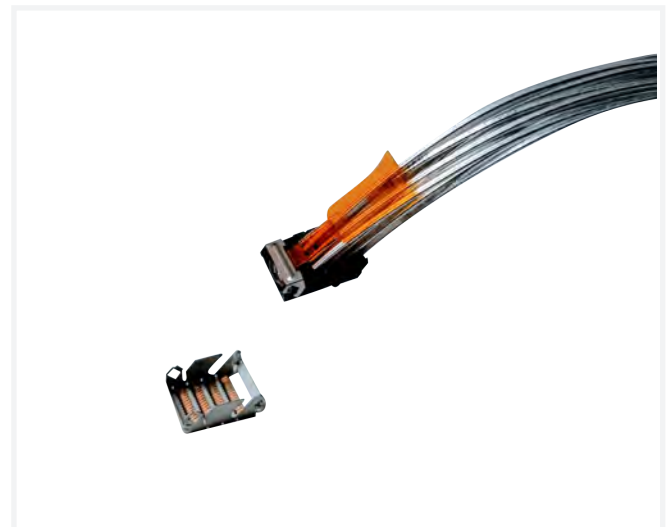
DensiLink® OverPass™ Assemblies

112G DOUBLE ENDED HIGH PERFORMANCE CABLING INTERCONNECT

DensiLink® OverPass™ products remove high speed signaling from the PCB and create a double ended, high performance cabling interconnect. These cables support 56G and 112G signaling in hardware system designs as well as technology for future 224G signaling systems.

These create an eight channel lower signal loss interconnection from the chip site to the external port. Deploying these cables can also result in less PCB design complexity and reduced PCB costs. DensiLink® enables arrayed connector layouts for near chip / on package IO solutions – allows for cascaded cable routing and highest differential pair count interconnection near or around the chip site in the market.

- Lower loss interconnect from chip site to external port
- Full support of 56G & 112G signaling speeds and anticipated 224G
- Reduced overall system cost
- Delivers superior signal integrity performance
- Short signal length from cable to board pad



TARGET MARKETS



FEATURES

- Direct point-to-point connection; hi-density two piece IO connector & cable system
- SMT or SMT / through hole leg board connector mounting
- Full support of 56G & 112G signaling speeds and anticipated 224G
- Straightforward application & termination; pick-n-place board connector & guided cable mating
- 100% full performance testing and characterization
- Full vertical integration of product components
- 16 differential pair configuration; 32 pair in development
- Pairs with QSFP DD or QSFP OverPass™ interfaces to deliver high performance, high speed external Ethernet IO port products
- Eliminates the need for re-timers and expensive low loss PCB laminates

BENEFITS

- Significant reduction in signal loss transmission; addresses system thermal and mechanical needs
- Robust connector mounting & reliability
- Full signal integrity performance compatibility
- Ease of assembly into hardware systems
- Assures full product functionality
- Connectors and cable supplied, processed, terminated and tested by Amphenol
- Choice of multiple IO solutions to address differential pair count and performance
- Fully engineered and vertically integrated 8 channel assembly solutions for 56G, 112G and future 224G signaling systems
- Lowers system costs

TECHNICAL INFORMATION

MATERIAL

- Contacts: High performance copper alloy
- Board Connector Frame: Stainless steel
- Pull Tab: Polypropylene
- 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

- DensiLink® Product Specification: HS-07-0017

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



Servers
Data Centers
Supercomputers
Datacom
Optical Transport

PART NUMBERS

Description	Part Numbers
Double ended 16DP DensiLink® cable assembly, one end up and one end down	V59-Y1021
Double ended 16DP DensiLink® cable assembly, both ends down	V59-YD001
16DP board connector, SMT mount	V59-DAZ01
16DP board connector, SMT and thru hole leg mount	V59-DAZ11
16 DP DensiLink® Loopback	V59-DAZ18