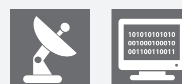
OSFP OverPass™ Assemblies

DIRECT HIGH SPEED CONNECTION FROM CHIP SITE TO IO PORT

OSFP OverPass™ products remove high speed signaling from the PCB and create an eight channel direct lower loss interconnection between the ASIC site and the external OSFP IO port by overpassing the PCB. This helps to enable 56G and 112G hardware system designs and a technology for future 224G systems. Using these solutions results in lower over signal loss, less PCB design complexity and reduces PCB costs. Fully compatible with OSFP industry standards and with both high speed and sideband signal requirements.

These cable assemblies lower system costs by eliminating the need for re-timers and expensive low loss PCB laminates. They can be paired with multiple near chip IO solutions including Amphenol's micro-LinkOVER™ and DensiLink® with press-fit sidebands or cabled sidebands to a separate Minitek® cable connector.

TARGET MARKETS



- Lower loss interconnect from chip site to external port
- Enables 56G and 112G hardware system design
- Superior signal integrity performance
- Fully engineered and tested cabling solution with straightforward application and assembly into systems

FEATURES	BENEFITS
Direct chip to IO port connection; accommodates straightand cross over wiring; custom IO mapping; heat sinks and light pipes	Significant reduction in signal loss transmission; addresses system thermal and mechanical needs
Direct wire attachment to connector contact & robust shield termination coupled with high performance differential pair cabling	Delivers superior signal integrity performance
Full OSFP industry standard compatibility	Assures proper mating of cables, AOC's and optical modules
Full support of 56G & 112G signaling speeds and anticipated 224G	Full signal integrity performance compatibility
Integrated system solution including assembly aids	Ease of assembly into hardware systems
100% full performance testing and characterization	Assures full product functionality
Full vertical integration of product components	Connectors and cable supplied, processed, terminated & tested by Amphenol
Multiple near chip / on package IO connector options	Choice of multiple IO solutions to address signal integrity performance and mechanical requirements

TECHNICAL INFORMATION

MATERIAL

- Contacts: High performance copper alloy
- Cages: Stainless steel
- Housing: 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® OverPass™ product specification: HS-07-0017
- micro-LinkOVER™ product specification

PACKAGING

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

TARGET MARKETS/APPLICATIONS

Switches
Routers
Wireless Infrastructure
Telecom

Servers
Data Centers
Supercomputers
Datacom
Optical Transport

PART NUMBERS

Description	Part Numbers
1x1 OSFP OverPass™ connector & std height cage to single 16DP DensiLink® cable connector, PF sidebands	V59-YC026
1x1 OSFP OverPass™ connector & std height cage to single 16DP micro-LinkOVER™ cable connector, SMT mount, PF sidebands	V59-YC027
1x1 OSFP OverPass™ connector & std height cage to single 16DP micro-LinkOVER™ cable connector, Screw mount, PF sidebands	V59-YC028
1x1 OSFP OverPass™ connector & std height cage to single 16DP DensiLink® cable connector, cabled sidebands to Minitek®	V59-YC018
1x1OSFP OverPass™ connector & std height cage to single 16DP micro-LinkOVER™ cable connector, SMT mount, cabled sidebands to Minitek®	V59-YC019
1x1 OSFP OverPass™ connector & std height cage to single 16DP micro-LinkOVER™ cable connector, Screw mount, cabled sidebands to Minitek®	V59-YC020

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Disclaimer
Please note that the above information is subject to change without notice.