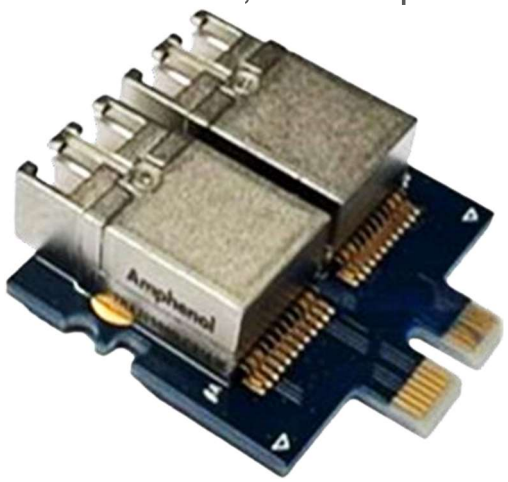
Amphenol
MILITARY HIGH SPEED

Dual Channel Small Form Factor Transceiver
The Copperhead

26-pin high speed optical module card, 2x25Gbps



INTERCHANGABLE TO ALLOW FOR DUAL SOURCE

FEATURES

- Supports 2 Amphenol 1.25Gbps – 28Gbps Ruggedized SCFF Transceivers
- -40°C to 85°C operating temperature
- About 37 x 36 mm^2
- Edge-card design with mechanical fixation features
- All individual signals routed to the edge connector
- SFF-8472 compliant two wire serial interface (I2C)
- Hard gold finish on edge-card contacts
- 2x LC Duplex – contact Amphenol for cable options
- Conformal coating for rugged applications
- Embedded CDR and BIT

BENEFITS

- Broad range of data rates for standard and non-standards protocols up to aggregate data rate of 2x25Gbps
- High-performance in harsh conditions
- Ideal for space-limited applications
- Robust easy-to-install (no soldering) pluggable design
- Highly versatile design with fully independent lines
- Easy access to transceivers for optimization and monitoring
- Extended remateability with performance variations
- Safe and easy optical connections

SUPPORTED STANDARDS

- 25Gbps Ethernet, 10Gbps, 1Gbps
- 1.25Gbps to 14Gbps (28Gbps) proprietary links
- 10GbE
- EDR Infiniband
- 8G/16G/32G Fiber Channel
- CPRI
- Other encoded interfaces

ORDERING INFORMATION

CF-170021-111	1-10Gbps Adapter card with 2x SCFF
CF-170021-112	1-25Gbps Adapter card with 2x SCFF

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ELECTRICAL PERFORMANCE

- Power Supply Voltage: 3.3V
- Bit Error Rate
  - BER < 10^{-12} at 25GbE, PRBS31
  - BER < 10^{-12} at 10GbE, PRBS31
- Lanes per device: 2 Transmits and 2 Receives
- Low Power Consumption (< 2W @ 25Gbps)
- Transmitter Type: 850nm VCSEL Laser
- Receiver Type: PIN Photodiode
- Differential Impedance RF Lines: 100 Ohm ±10%

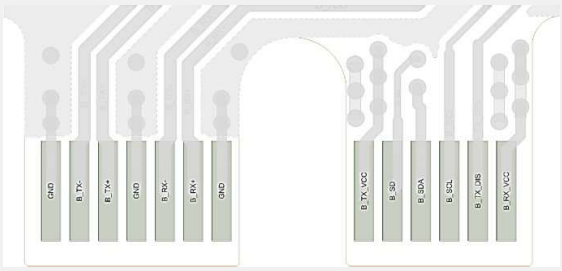
ADDITIONAL INFORMATION

- Board Thickness: 1.57mm
- Mates with Samtec HSE8-109 connector family
- Hard gold finish for the edge-connect, other areas using ENEPIG
- All SCFF signals are routed separately to the Edge Connector
- Signals applied to the Edge Connector are mirrored on both sides to allow easier custom layout routing
- The SCFF housing is connected to the signal ground on the Edge Card

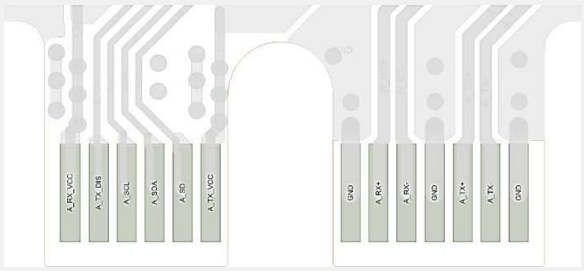
OPTICAL PERFORMANCE

- Operating Temp: -40°C to 85°C
- Storage Temp: -55°C to 100°C
- Typical Avg TX Power = 0.2dBm
- Typical RX Sensitivity = -12dBm (1E-12)
- Typical Power = 1.1W
- Power Supply = 3.3V
- Data Rate: 1Gbps to 25GbE
- Shock and Vibe: MIL-STD-883

SIGNAL TOP LAYER



SIGNAL BOTTOM LAYER



MECHANICAL PROPERTIES

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