FlexPlane Optical Circuitry and Routed Ribbon Cable Solutions

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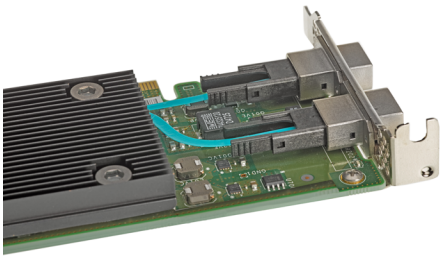
FlexPlane Optical Flex Circuits provide versatile, high-density routing on a flexible substrate, and Routed Ribbon Solutions offer cable management and mitigate airflow challenges for low-profile Network interface cards (NICs), switch fabric modules, complex shuffling and backplane applications

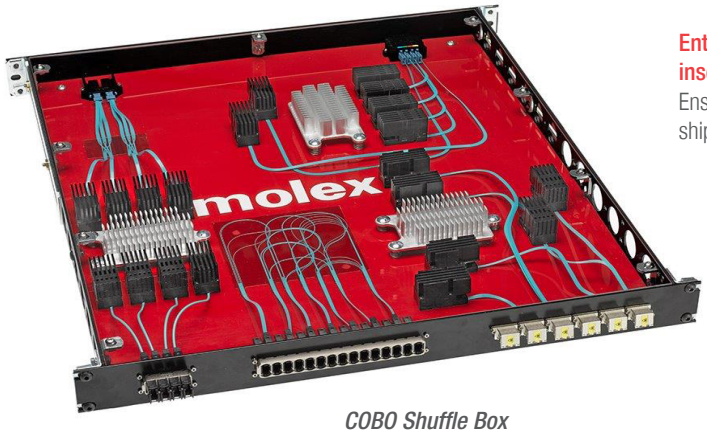


Network Interface Card (NIC)

Features and Advantages

FlexPlane Optical Circuit Solution Options

Compatible with mass and discrete-fiber terminations
Ensures customized solutions



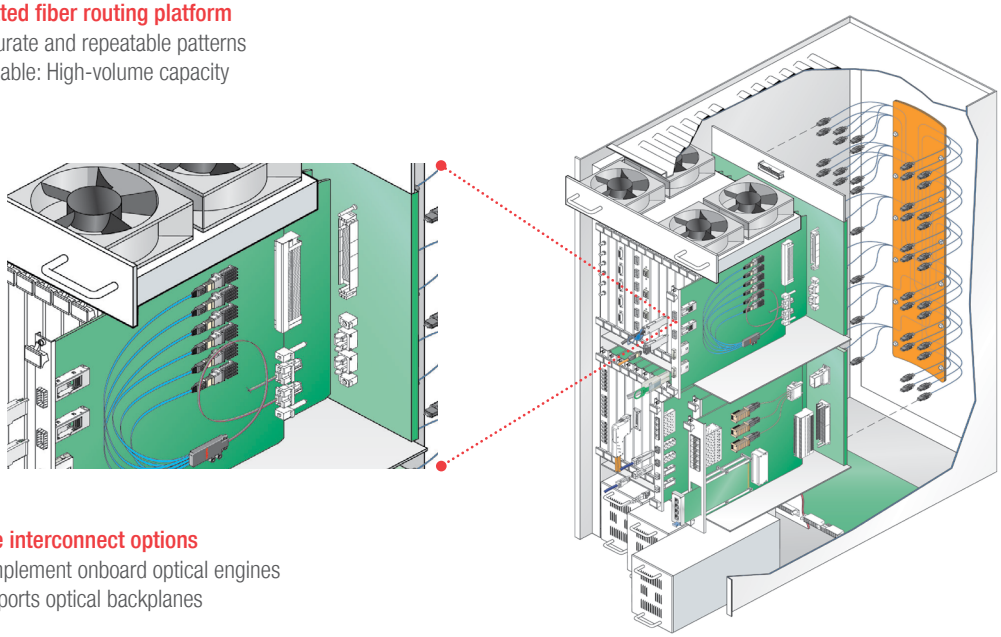
COBO Shuffle Box

Entire circuit 100% tested for insertion loss and continuity
Ensures correct pin-out prior to shipment

Singlemode, multimode and hybrid versions
Provide a variety of options

Routed Ribbon Solutions

Automated fiber routing platform
- Accurate and repeatable patterns
- Scalable: High-volume capacity



Efficient solutions for high-fiber system
- Organized fiber management
- Efficient front panel patching (i.e., shuffling)

Multiple interconnect options
- Complement onboard optical engines
- Supports optical backplanes

Diverse substrate size, shape, packaging and fiber routing
- Small footprint, compact density
- Low-profile package, increased airflow

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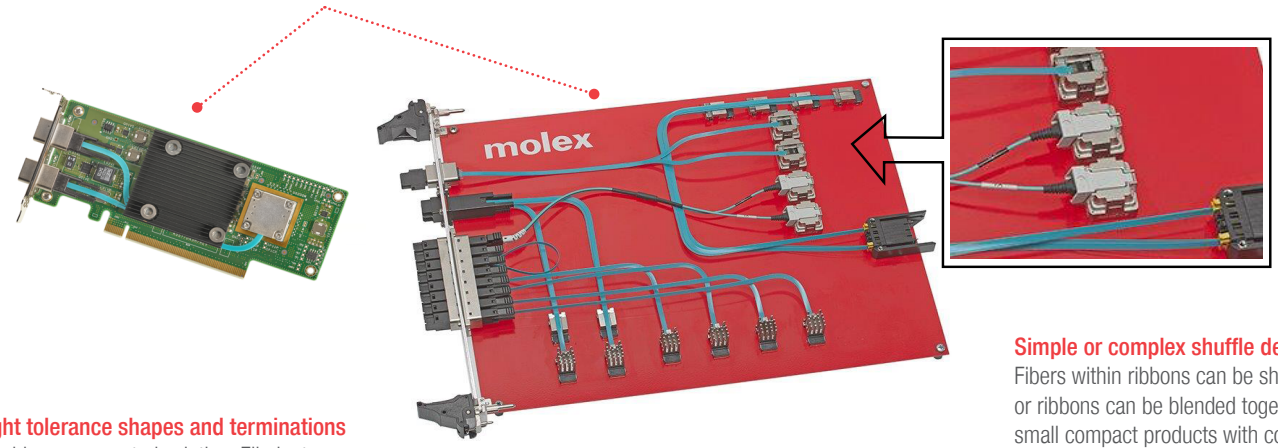
On-Board Fiber Management with Routed Ribbon

Routed ribbon reduces ribbon fiber height in stacked areas and curves
Improves fiber management and airflow on the board

Routed ribbon interconnects and modules
Eases circuit pack assembly and opens up PCB real estate. Allows ribbon shuffling and breaks from single or multiple MT ferrules



Tight tolerance shapes and terminations
Provides a pre-routed solution. Eliminates the need to add slack management areas on the card

Simple or complex shuffle designs
Fibers within ribbons can be shuffled or ribbons can be blended together for small compact products with complex interconnect patterns

Applications

Telecommunications/Networking
- Backplanes
- Optical Modules

Data Centers
- NIC Cards
- Optical Modules
- Switch Fabric

Data Centers

Specifications

REFERENCE INFORMATION
Packaging:
- FlexPlane Optical Circuitry – Packaged Flat in Box Mates With: MT-Based Connectors (MTP, HBMT, BMTP); Single-Fiber Connectors (Series LC, SC, BLC, BSC)

OPTICAL
Insertion Loss (IL): Dependent on Terminated Connector Type
Fiber Type:
- Singlemode – 9/125µm
- Multimode – 50/125µm
- Multimode – 62.5/125µm

PHYSICAL
FlexPlane Substrate: Kapton
Thickness: Typical Is Less Than 1.50mm per Layer
Mounting: Mounting Holes or Devices Are Designed to Customer Requirements

www.molex.com/fiber/flexplane.html

Order No. 987652-2611 USA/0k/GF/2020.08