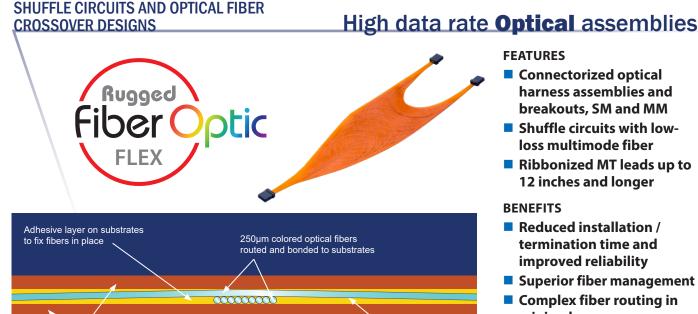
## BACKPLANE AND CARD-TO-CARD APPLICATIONS **Optical Flex Circuit Assemblies**



High fiber count, small form-factor optical flex circuits for rugged defense, aerospace, and space applications





- Connectorized optical harness assemblies and breakouts, SM and MM
- Shuffle circuits with lowloss multimode fiber
- Ribbonized MT leads up to 12 inches and longer

## **BENEFITS**

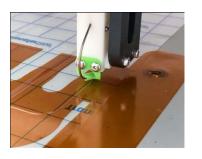
- Reduced installation / termination time and improved reliability
- Superior fiber management
- Complex fiber routing in minimal space
- Controlled routing lengths (low-skew)
- Controlled bend radius for minimized bend loss



Thermally-stable flame-resistant

flexible polymer substrate





3D layout and routing designs in Fusion 360

Build-to-print per customer specifications

Proper bend radius design at crossovers

ensures long life and no impact

on optical performance

Single- and multimode fiber bonding

- Optical fiber bonded to a flame-resistant Kapton substrate—rad-hardened and outgassed assemblies available
- High-density fiber-to-fiber spacing: 250 μm
- Optimized fiber layouts, bend radius, and routing for high fiber-count applications
- Industry-standard connector terminations including FC, SC, LC, and others plus Glenair Signature F/O terminations including MT, GC, GHD, GFR, Eye-Beam, and others

250um
Singlemode/Multimode
-40° to +100°C
0.5 inch
.018 inch
Yes
UL-V1 or Better
Yes
Kapton

## BACKPLANE AND CARD-TO-CARD APPLICATIONS **Optical Flex Circuit Assemblies**



High fiber count, small form-factor optical flex circuits for rugged defense, aerospace, and space applications

## **OPTICAL FLEX** Integrated SM and MM Optical Flex assemblies **ECOSYSTEM** Ecosystem includes MTP\*/MPO transceiver interface connectors, turnkey fiber optic breakout cables, and ruggedized MT ferrule-equipped I/O connectors—circular and rectangular. 1 Card-to-card optical flex circuits 3 On-board optical 2 Shuffle circuits flex circuits 4 Optical backplanes High-speed, high data rate board-to-board stacking Hybrid I/O connectors (Rugged MT ferrule, discrete termini, and expanded beam) Vita 66.1 and 66.4 and Glenair Signature optical backplane connectors Rectangular MT I/O and board connectors Optical flex MT breakouts Available PRIZM® to optical backplane or expanded-beam I/O connector ferrules from US Connec



Optical flex jumpers terminated to MT fiber optic ferrules, PRIZM MT expanded-beam ferrules, and standard Fiber Optic connectors, as well as Glenair signature environmental I/O fiber optic connectors, are available as catalog items.