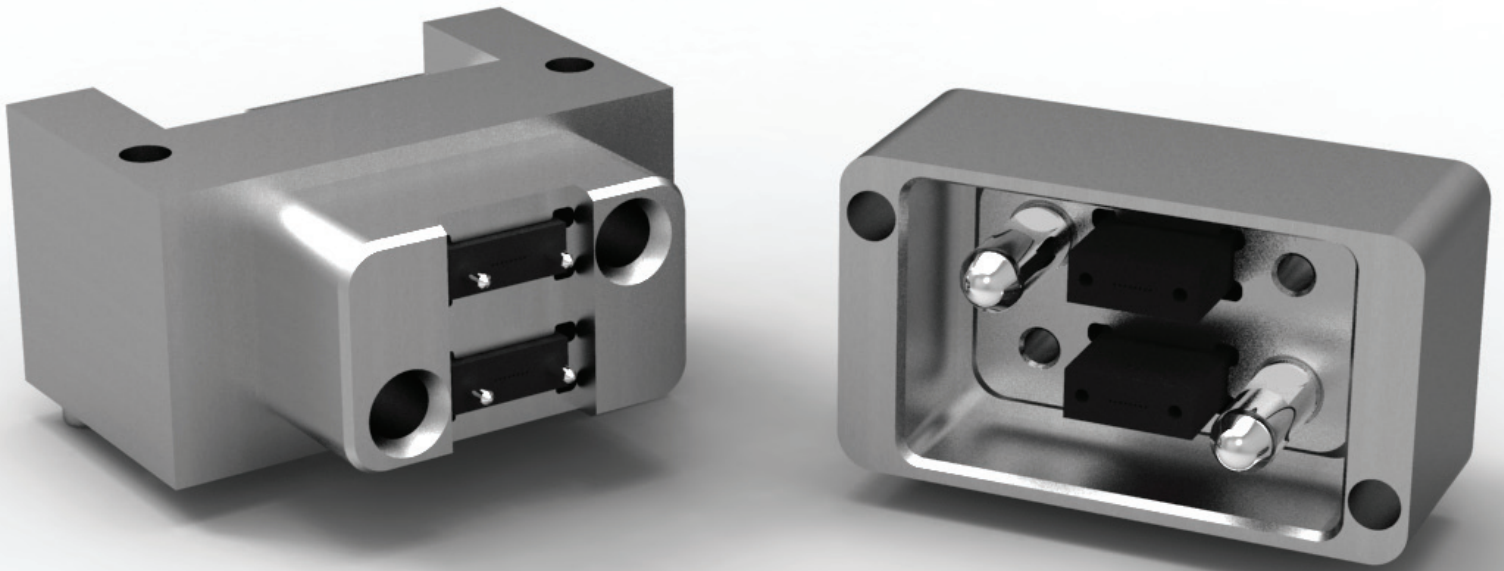




Introducing
**Ruggedized Optical Backplane
Interconnect**
Supports VITA 66.1 Standard



Ruggedized
Optical Backplane
Interconnect



Supports VITA 66.1 Standard

Connectors designed to maximize optical performance and accommodates up to two MT ferrules

Locating post features helps ensure proper position on the backplane and module boards

Common protective cover is made of anti-static material

Plug (daughtercard) connector housing contains a slot feature to facilitate cleaning the MT interfaces

Receptacle (backplane) connector includes two robust guide pins for blind-mating

Receptacle connector insert floats relative to the shell, providing ±0.25mm planar floating alignment capability

Connector mounting screws contain pre-applied Nylok patch to withstand vibration

DESCRIPTION

TE Connectivity’s (TE) Ruggedized Optical Backplane interconnect system provides a high-density, blind-mate optical interconnect in a backplane/daughtercard configuration. The fiber optic (ribbon) cable interconnect is fed through the backplane to removable system modules using MT ferrules.

TE offers the optical system in both a receptacle (backplane) and mating plug (daughtercard) connectors which interconnect up to two MT ferrules, each accomodating up to 24 fiber paths. Other options are available using industry standard ARINC 801 fiber terminus and TE’s Expanded Beam, PRO BEAM interface in a four-fiber configuration.

APPLICATIONS

Typical applications are in the aerospace and defense industries for use in adverse environments, in high-bandwidth computing applications requiring optical infrastructure, such as:

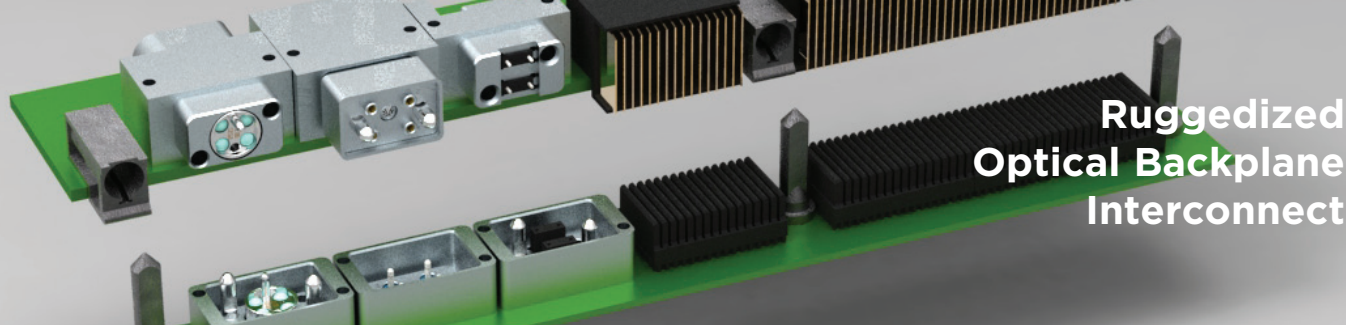
- Embedded Computing
- Avionics and Vetronics
- Secure Communications
- Processing
- Radar
- Imaging and Targeting

MECHANICAL

Mating Force (per 12-fiber MT ferrule):	Min: 7.8N [1.75 lb] Max: 11.8N [2.65lb]
Durability:	100 cycles, tested per EIA-455-21
Shock:	50G, sawtooth, 11 msec pulse duration, tested per TIA/EIA-455-14, condition E
Random Vibration:	11.95 G (rms), 50-2000 Hz, 2 hrs per plane - tested per TIA/EIA-455-11, test condition V1-D

ENVIRONMENTAL

Storage temperature:	-55°C to +85°C
Operating temperature:	-20°C to +85°C
Thermal aging:	168 hrs at +85°C
Humidity, steady-state:	95% RH at 60°C
Temperature cycling:	21 cycles between -20°C and +85°C



Ruggedized Optical Backplane Interconnect

APPLICATION TOOLING

The connector mounting screws and the captive screws securing the retainer plate to the connector are installed and removed using a commercially available 5/64" allen key.

STANDARDS & SPECIFICATIONS

Application Specification:	114-32050
Product Specification:	108-2467
Qualification Test Report:	501-134012
Supports ANSI/VITA 66.1 Optical Interconnect on VPX - MT	
Variant and ANSI/VITA 66.0 Optical Interconnect on VPX - Base Standard	

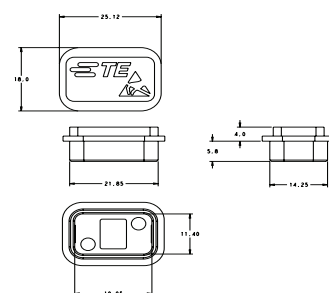
MATERIAL

Connector shell & housing:	Aluminum alloy 6061, clear-chromate conversion-coated (RoHS compliant)
Alignment posts & screws:	Stainless Steel, 300 series, passivated (RoHS-compliant)

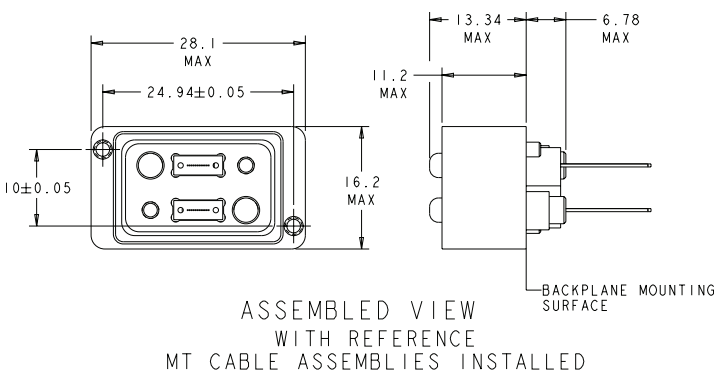
PART NUMBERING & DIMENSIONS

Interface	Part No.	
	Backplane	Daughtercard
VITA 66.1: MT	2000973-1	2000974-1
MT Ferrule Kit (12 Fiber, Multimode)	2102866-1	2102866-2

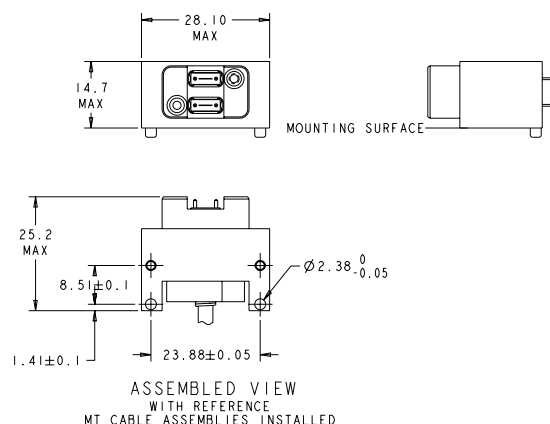
Protective Cover: PN 2102321-1



Backplane Module - PN 2000973-1



Daughtercard Module - PN 2000974-1



FOR MORE INFORMATION

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