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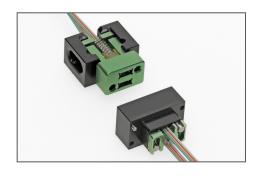
# Achieve installation and maintenance simplicity for rugged embedded VPX MIL/AERO backplane applications with the VITA 66.1 Ruggedized Optical MT Backplane Interconnect System

The VITA 66.1 Ruggedized Optical MT Backplane Interconnect System is designed to meet the ANSIratified VITA 66.1 specification for VPX architecture. VPX (previously known as VITA 46 — an ANSI standard), provides component- and system-design recommendations to ensure compliance in military defense and other applications.

VITA 66 defines the optical requirements for VPX architecture. Molex's VITA 66.1 Ruggedized Optical MT Backplane Interconnect System, available with two industry standard MT termini styles, is designed for blind-mate backplane applications that require optically robust interfaces with simple accessibility (no need for hand tools) to streamline MT assembly installation or regular maintenance. The anodized aluminum-based housings provide a rugged solution for use in the designated VPX card space as determined by the standard, or can be used as a stand-alone solution outside of the VPX architecture.

## VITA 66.1 Ruggedized Optical MT Backplane Interconnect System

**106601** Daughtercard Connector, Backplane Receptacle



VITA 66.1 Ruggedized Optical MT Backplane Interconnect System

#### **Features and Benefits**

Fully compliant with the ANSI-ratified VITA 66.1 specification	Ensures complete design and function compatibility with specification
Patent-pending MT ferrule-carrier design enables field servicing without hand tools	Provides access for installation and maintenance with no service tools required. Reduces installation and maintenance time plus associated costs
Robust housing with heavy-duty anodized aluminum construction and VITA 66.1 compliant footprint	Ideal for rugged military and non-automotive commercial applications. Withstands extreme temperature ranges
Supports up to two (2) floating MT ferrules (termini)	Aids in proper mating in blind-mate applications
MT termini available in 8, 12 or 24 fibers in standard multimode and singlemode or VersaBeam™ (expanded beam MT)	Provides design flexibility with multimode and singlemode compatibility
Planned intermatibility with competitors' products	Anticipated second source option

#### **Specifications**

#### **Reference Information**

Packaging: Bag Mates With:

Daughtercard Connector Mates With: Backplane Receptacle

(106601-1050)

Backplane Receptacle Mates With: Daughtercard Connector

(106601-1150)

Use With:

MT (Series 106283) and VersaBeam<sup>™</sup> (Series 106268) Cable Assemblies

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

#### Mechanical

Insertion Force to PCB:

10Nm per MT (20Nm total)

Mating Force:

10Nm per MT (20 Nm total)

Unmating Force:

< 10Nm per MT (<20 Nm total) Durability (min.): 500 mating cycles

#### Physical

Housing: Aluminum Contact: Precision plastic Plating: Clear Anodized

PCB Thickness (max.): 4.75mm

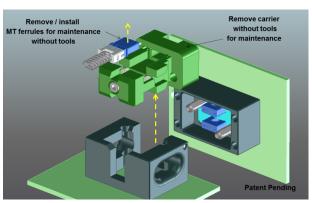
Operating Temperature: MT Ferrule: -55 to +105°C

VersaBeam Ferrule: -10 to +60°C

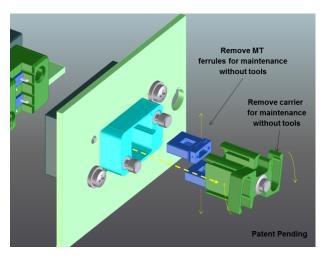
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#### **Additional Information**

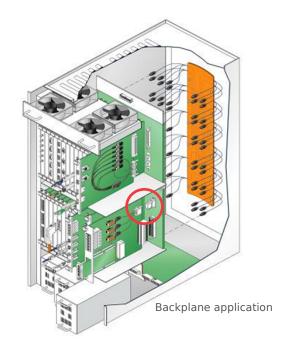
Detailed view of installation and maintenance without tools



Ease of installation and maintenance



VITA 66.1 Ruggedized Optical MT Backplane Interconnect System



### **Applications**

Aerospace

- Commercial
- Defense

Military / Disaster

- Command center communications

Non-Automotive Transportation

- Rail
- Mining equipment
- Shipping

Oil and Gas Exploration

- Sensing equipment



Military / Disaster Command Center



Locomotive

## **Ordering Information**

Series No.	Order No.	Component Type
106601	106601-1050	Backplane Receptacle
100001	106601-1150	Daughtercard Connector

www.molex.com/link/vita661.html