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 ANSI-ratified 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.

Features and Benefits

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

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™ (Series 106268) Cable Assemblies

Design 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
**Additional Information**

**Detailed view of installation and maintenance without tools**

Ease of installation and maintenance

**Applications**

- Aerospace
  - Commercial
  - Defense
- Military / Disaster
  - Command center communications
- Non-Automotive Transportation
  - Rail
  - Mining equipment
  - Shipping
- Oil and Gas Exploration
  - Sensing equipment

**Ordering Information**

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Order No.</th>
<th>Component Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>106601</td>
<td>106601-1050</td>
<td>Backplane Receptacle</td>
</tr>
<tr>
<td></td>
<td>106601-1150</td>
<td>Daughtercard Connector</td>
</tr>
</tbody>
</table>

www.molex.com/link/vita661.html