



## XMC to PCIe Carrier

The accessory supporting PCIe installations for flight grade VITA 42 XMC modules



### Key Benefits

- ✓ Enables the use of flight grade single-width XMC modules compatible with PCIe 3.0 x4 slot in a laboratory environment
- ✓ Integrated Ethernet Front I/O interface support via RJ-45 connectors
- ✓ Compatible with SOSA™ aligned XMC host cards (profile X12d+X38s+X8d per ANSI/VITA 46.9-2018)
- ✓ Compliance to FCC and CE regulations

XMC to PCIe carrier allows the use of single-width XMC modules with VITA 61 (XMC 2.0) style connectors in four-lane PCI Express Gen 3 motherboard edge card slots. It supports Ethernet connectivity via three RJ-45 connectors accessed through the PCIe card front bracket, or alternatively through the rear VME connector. Additional JTAG, IPMI I2C and VITA discretes interfaces are available for user debugging and control.

### Product Description

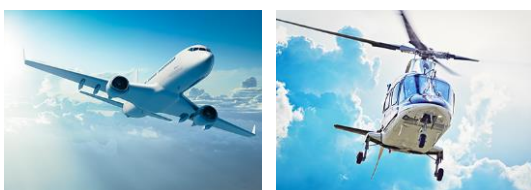
XMC to PCIe carrier is a passive device designed to host XMC form factor mezzanine card <sup>TTTech</sup>End System A664 Lab (XMC) v2.0 and other compatible designs for laboratory applications and early integration phase in aviation projects inside an air-cooled chassis.

XMC to PCIe carrier is compatible with PCIe 3.0 x4 slots. PCI express lanes on the J15 XMC connector receptacle are routed to the male PCI express edge finger connector. Ethernet interface on the J16 XMC connector receptacle is routed to 3 front I/O channels Ethernet interface (RJ-45 connectors).

The rear 96 pin VME connector provides alternative access to the Ethernet physical interface and GPIO signals from J16.

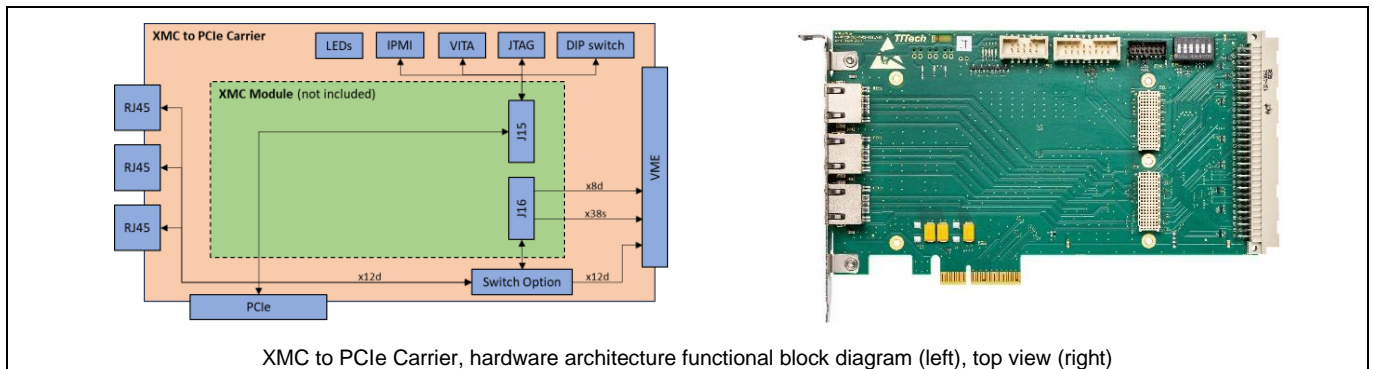
XMC to PCIe carrier accepts +3.3V power supply on the PCIe connector for destination to the XMC module through J15 connector.

The XMC To PCIe Carrier features eight active LEDs to visually indicate key VITA 42 signals and voltage status. Alternatively, DIP switches can toggle the state of their associated LED.



### Application Fields

- Technology evaluation
- Product testing
- Architecture development



<b>Carrier Capabilities</b>	<ul style="list-style-type: none"> <li>- Pluggable PCIe 3.0 x4 carrier for XMC modules</li> <li>- Hosting capabilities: VITA 42.0-2021 mezzanine single slot card</li> <li>- Compatible with SOSA™ aligned XMC host cards with profile P1w9-X12d+P2w3-X38s+X8d per ANSI/VITA 46.9-2018</li> <li>- Activity LEDs for the following signals:                         <ul style="list-style-type: none"> <li>o +3V3</li> <li>o +3V3 AUX</li> <li>o +12V</li> <li>o PERST# / MRSTI#</li> <li>o MRSTO#</li> <li>o MPRESENT#</li> <li>o MBIST#</li> <li>o MVMRO</li> </ul> </li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>- Ethernet: RJ-45 x3 connectors for data traffic</li> <li>- PCIe: x4 (64 pins) standard PCIe edge connector</li> <li>- VITA 61 XMC connector receptacles J15 &amp; J16</li> <li>- VITA discretes: 16-pin 2x8 header for debugging and control</li> <li>- JTAG: standard 14-pin 2x7 header compatible with Xilinx Platform Cable USB II</li> <li>- IPMI I<sup>2</sup>C: standard 10-pin 2x5 header</li> <li>- VME: 96 pin connector for GPIO signal access, optional Ethernet data traffic</li> </ul>
<b>Supported Standards</b>	<ul style="list-style-type: none"> <li>- PCI Express® Base Specification Rev 3.0</li> <li>- PCI Express® Card Electromechanical specification Rev 3.0</li> <li>- ANSI/VITA 42.0-2021</li> <li>- ANSI/VITA 61.0-2014</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>- 201 x 123 x 22 (in mm)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>- 130g</li> </ul>
<b>Power Supply (on PCIe connector)</b>	<ul style="list-style-type: none"> <li>- +3.3V with destination on J15</li> <li>- Up to 25 W power supply through the PCIe edge connector</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>- 0.2W (passive carrier)</li> </ul>
<b>Environmental Operating Range</b>	<ul style="list-style-type: none"> <li>- Operating Temperature: 0°C to 55°C</li> <li>- Storage Temperature: -40°C to 85°C</li> <li>- Relative Humidity: 25-90%</li> </ul>
<b>Manufacturing &amp; Environmental Regulations</b>	<ul style="list-style-type: none"> <li>- CE &amp; FCC compliance</li> </ul>
<b>Documentation</b>	<ul style="list-style-type: none"> <li>- User Manual</li> </ul>
<b>Order Number</b>	<ul style="list-style-type: none"> <li>- 14575</li> </ul>
<b>Compatible products</b>	<ul style="list-style-type: none"> <li>- 13434 TTE-End System A664 Lab (XMC) v2.0</li> <li>- 14497 TTE-End System A664 Pro (XMC) v2.0 – Flight Product Representative non-coated</li> <li>- 14240 TTE-End System A664 Pro (XMC) v2.0 – Flight Product Representative coated</li> </ul>

