

MPCIe x16 Host Card with fibre connection

Overview

The MPCIE16-H3 card is a PCIe Gen 3 host card dedicated to the high-throughput PCIe connectivity. It is designed to operate with a MPCIE16-T3 target card. The PCIe host card supports the PCIe x4, x8 or x16 link.

It is designed to operate with the MPCIE16-T3 Target card. The MPCIE16-H3 allows connecting the PCIe switch of MCH to an external CPU working as Root



Features

- Data transfer up to 128 Gb/s (Gen 3)
- Supports PCIe x16 Gen 2/Gen 3
- No additional drivers or software
- Dedicated for optical fiber and cooper link

Typical Applications

- Data Acquisition and Control Systems
- Telecommunication
- Image Acquisition and Processing Systems
- High Performance Computing

Requirements

The MPCIE16-H3 card can be directly connected to the MTCA.4 compliant system equipped with MPCIE-T3 card with a compliant MCH. The MCH should support the PCIe x16 Gen 2 or Gen 3 uplink port in the Zone 3 connector.

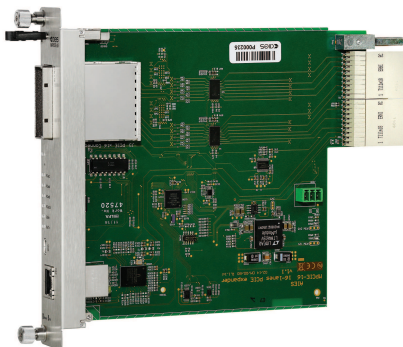
Hardware Features	
Form Factor	<ul style="list-style-type: none"> • PCI Express x16 • Low profile card (dimensions 167.65 x 111.15 mm) • Standard height
Power Consumption	<ul style="list-style-type: none"> • 1.0 A Payload Power (+12 V) • 50 mA Management Power (+3V)
Connectors	<ul style="list-style-type: none"> • PCIe x16 External Cable Connector
Status indicators	<ul style="list-style-type: none"> • Link Status (x1/x4/x8/x16)
Redrivers	<ul style="list-style-type: none"> • 8.0 Gbps, 16-Lane PCI Express Gen 3 Re-river • Equalization and Emphasis Tuning
PCIe Cable	<ul style="list-style-type: none"> • Four PCIe x16 fiber/cooper cable
Industry Specifications	<ul style="list-style-type: none"> • PCIe External Cabling Specification, Rev. 2.0 • PCI Express Base Specification, Rev. 3.0
Operating Temperature	<ul style="list-style-type: none"> • 0°C to +70°C
Storage Temperature	<ul style="list-style-type: none"> • -40°C to +85°C
Operating Humidity	<ul style="list-style-type: none"> • 10% to 90% relative humidity non-condensing
Storage Humidity	<ul style="list-style-type: none"> • 5% to 95% relative humidity non-condensing

Order information	RoHS Compliant
Part Number	Description
MPCIE16-H3-O	PCIe x16 gen. 3 Host Card with optical fibre
MPCIE16-H3-C	PCIe x16 gen. 3 Host Card with cooper cable

PCle Expander Card for MTCA.4 Systems

Overview

The MPCIE16-T3 is a double-width, mid-size RTM PCIe target cable adapter dedicated to MTCA.4 systems using the NAT-MCH-PHYS80 MicroTCA Carrier Hub. The MPCIE16-T3 allows for connecting the PCIe switch of the MCH to an external CPU working as a Root Complex using the PCIe cable (fiber or cooper). The MPCIE16-T3 supports the PCIe x16, Gen 3.



Features

- Data transfer up to 128 b/s (Gen 3)
- Supports the PCIe 4, x8 x16 Gen 2 / Gen 3
- No additional drivers or software
- Dedicated for the optical fiber and cooper link

Typical Applications

- Data Acquisition and Control Systems
- Telecommunication
- Image Acquisition and Processing Systems
- High Performance Computing

Requirements

The RTM card can be directly connected to the MTCA.4 compliant with the MCH via the Zone 3 Connector. The MCH should support PCIe x16 Gen 2 or Gen 3 uplink port in the Zone 3 connector. The MPCIE16-T3 requires the MPCIE16-H3 PCIe Host card.

Hardware Features

Form Factor	<ul style="list-style-type: none"> • Rear Transition Module • PICMG MTCA.4 • Double-Width (board dimensions: 180.6 x 148.5 m) • Full-Size faceplate (MS available as option)
Power Consumption	<ul style="list-style-type: none"> • 1.0 A Payload Power (+12 V) • 50 mA Management Power (+3V)
Connectors	<ul style="list-style-type: none"> • PCIe x16 External Cable Connector • 1 Gb Ethernet • ERmet High-speed ADF 30-pair connector
Status indicators	<ul style="list-style-type: none"> • Link Status (x1/x4/x8/x16) • Cable Presence • Link Failure
PCB thickness	<ul style="list-style-type: none"> • 1.6 mm
PCIe Cable	<ul style="list-style-type: none"> • Four PCIe x4 fibre or cooper cable
Module Managment Controller	<ul style="list-style-type: none"> • IPMI version 1.5 with MTCA.4 extensions • Blue, Red, And Green LEDs according to MTCA.4
Industry Specifications	<ul style="list-style-type: none"> • PCIe External Cabling Specification, Rev. 2.0 • PCI Express Base Specification, Rev. 3.0 • PICMG MTCA.4
Operating Temperature	<ul style="list-style-type: none"> • 0°C to +70°C
Storage Temperature	<ul style="list-style-type: none"> • -40°C to +85°C
Operating Humidity	<ul style="list-style-type: none"> • 10% to 90% relative humidity non-condensing
Storage Humidity	<ul style="list-style-type: none"> • 5% to 95% relative humidity non-condensing

Order Information	RoHS Compliant
Part Number	Description
MPCIE16-T3-FS	PCIE Expander Card with Full-Size faceplate
MPCIE16-T3-MS	PCIE Expander Card with Mid-Size faceplate