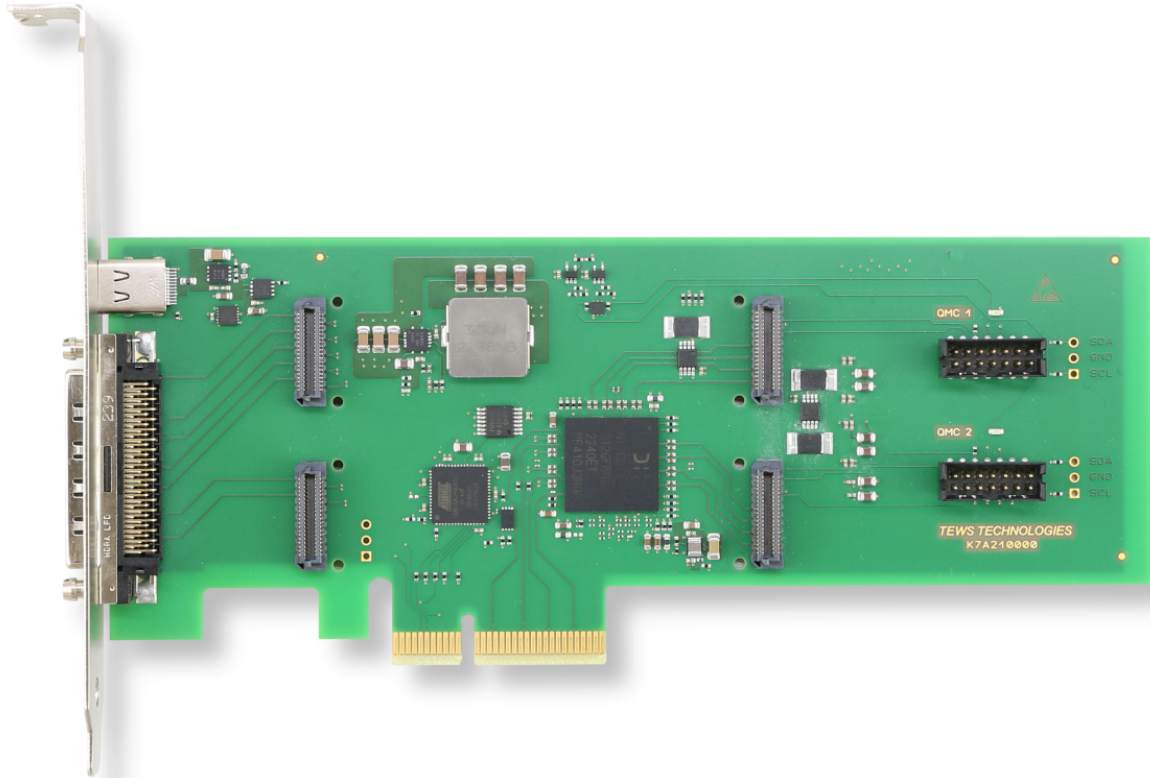# TPCE210 PCI Express x4, Gen 2, Dual QMC Carrier

TPCE210-10R

Application Information

The TPCE210 is a low-profile, half-length PCI Express Revision 2.0 compatible carrier board for two single QMC modules or one double QMC module.

It can be used to build modular, flexible and cost effective I/O solutions for all kinds of applications like process control, medical systems, telecommunication and traffic control.

The TPCE210 is a versatile solution to upgrade any system with a PCI-Express Add-in Card slot to the new QMC standard (VITA 93.0).

The PCI Express x4 Link from the host board is routed to the two QMC sites via a PCI Express switch, allowing the operation of two different single QMCs.
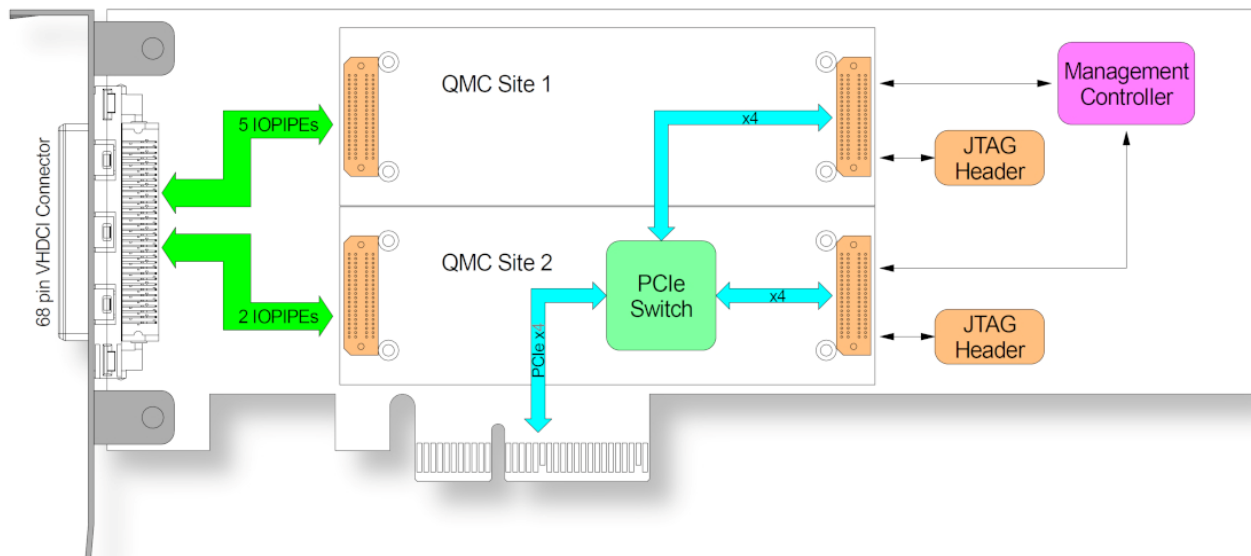
An on-board Management Controller (IPMC) allows access to the QMC's FRU EEPROM and sensors. Ideal for surveillance of the QMC's health status.

QMC I/O is accessible through a VHDCI-68 front-panel connector, supporting access to the full five IOPIPEs of QMC1 and in addition two IOPIPEs of QMC2.

A unique JTAG header is available for each QMC module for debugging purposes. Four JTAG signals (TRST# not included) are routed directly to the QMC site.

Technical Information

- ❏ Form Factor: PCI Express x4 Revision 2.0
  - ❏ Board size: low-profile, half-length (167.65 x 68.9 mm)
  - ❏ PCIe Speed: max. 5GT/s (dependent on the mounted QMC modules)
- ❏ Two single QMC sites:
  - ❏ PCIe Interface x4, Rev. 2.0
  - ❏ Front-panel I/O access via VHDCI-68
  - ❏ Unique header with JTAG Signals routed to each QMC connector

- ❏ Management Controller
  - ❏ QMC FRU EEPROM and sensor access
  - ❏ Surveillance of QMC health status
- ❏ Operating temperature -40 °C to +85 °C
- ❏ MTBF (MIL-HDBK217F/FN2 GB 20 °C)
  - ❏ TPCE210-10R: 959000h

Block Diagram

Order Information

RoHS Compliant

TPCE210-10R   2 Site QMC Carrier, PCIe x4, Gen2, low-profile, VHDCI-68 I/O

For the availability of non-RoHS compliant (leaded solder) products please contact TEWS.

Related Products

TA307   Cable Kit for Modules with VHD68 / SCSI-V Connector