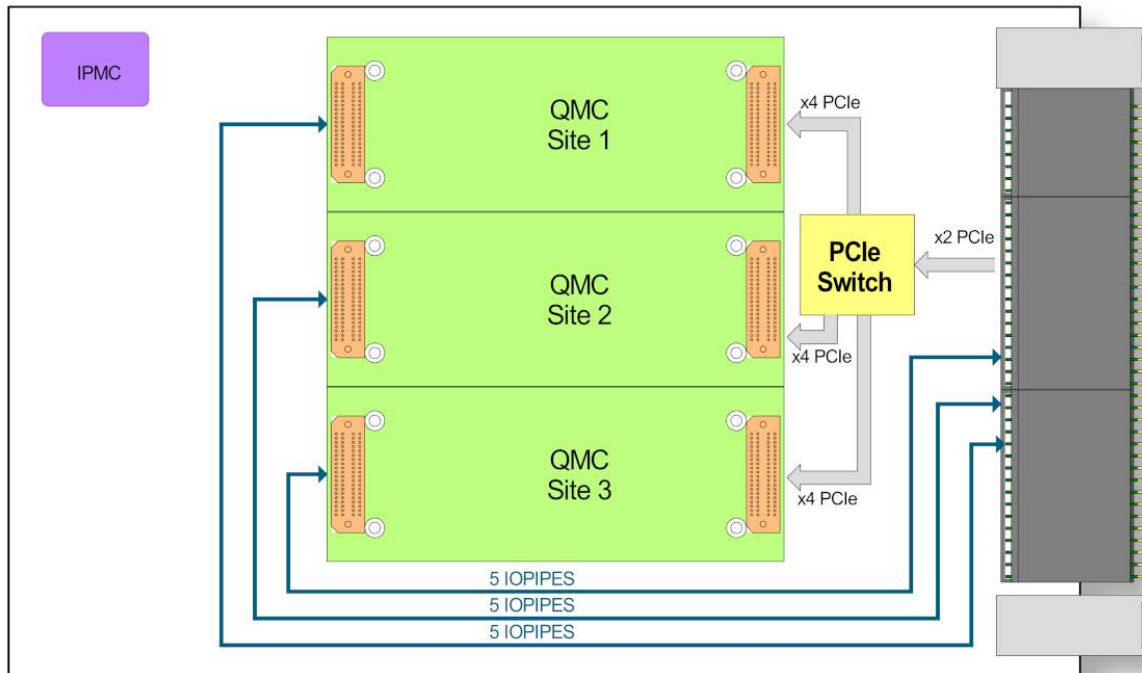


TVPX210 3U VPX Carrier with 3 QMC Sites, PCIe Gen3 x2, Rear-I/O, SOSA® aligned



TVPX210-10R

Application Information

The TVPX210 is a 3U OpenVPX® carrier board designed in alignment with the SOSA® Technical Standard, enabling system designers to rapidly integrate high-performance modular I/O into next-generation defense and aerospace platforms.

Featuring three VITA 93 QMC sites, the TVPX210 allows system architects to configure application-specific I/O subsystems using a wide range of COTS QMC modules while maintaining a common carrier architecture. This modular approach reduces development effort, simplifies future technology upgrades and supports long platform lifecycles required by modern defense programs. It can be populated with up to 3 single-width QMC modules, a double-width QMC module and a single-width QMC module, or a triple-width QMC module.

The carrier implements the SLT3-PAY-2U2U-14.2.17 payload slot profile and provides a non-blocking PCI

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Express® Gen3 switch for deterministic high-speed communication between the VPX backplane and installed QMC modules.

The full QMC I/O, which consists of all 5 IOPIPS of all three QMC modules, is accessible on the VPX backplane via the P1 and P2 connectors. The ground of all I/O pipes is connected to VPX system ground, so the TVPX210 is essentially a non-isolated carrier.

A VITA 46.11 compliant Management Controller enables health monitoring, inventory management and communication with the VPX System Manager for simplified system integration and maintenance.

The TVPX210 is offered as conduction cooled carrier with VPX REDI implementation according to ANSI/VITA 48.2.

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The Embedded I/O Company

Technical Information

- Form Factor: ANSI/VITA 48.0-2022 3U Board
 - Board size: 160 mm x 100 mm
- VPX REDI implementation according to ANSI/VITA 48.2 (conduction cooled)
- VPX Slot Profile
 - SLT3-PAY-2U2U-14.2.17
- VPX Module Profile
 - MOD3-PAY-2U2U-16.2.16-2
 - PCI Express (Base Specification 3.1) compliant Gen3 x2 host interface on Expansion Plane
- Management controller
 - Compliant to IPMI 2.0
 - Compliant to VITA46.11-2022, Tier 3
 - SOSA® v2.0 aligned
- 3 single-width QMC sites
 - PCIe Gen3 x4
 - QMC I/O via VPX P1/P2 Rear-I/O
- Operating temperature -40 °C to +85 °C

Order Information

RoHS Compliant

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For the availability of non-RoHS compliant (lead solder) products, conformal coated products or conduction cooled variants please contact TEWS.