

PEX441

6U VPX rugged XMC carrier

Features

- Two VITA42 compliant XMC sites
- Optimized thermal management
- 6U VITA46 / VITA48 REDI form factor
- Convection cooled and conduction cooled build options
- Flexible I/O configuration options
- Related XMC products
 - XMCV5 Virtex5
 - FX100T
 - SX95T
 - LX155T
 - A/D and D/A XMCs
 - Graphics XMCs
 - 10GE off load engines
- Related 6U VPX products
 - SBC620 Core2 Duo SBC
 - SBC610 8640D SBC
 - DSP230 Quad 8640D
 - PEX440 PCIe switch/carrier

Single slot carrier supports one or two high-power XMC cards

PEX441 is designed to offer maximum flexibility to system architects who need to deploy advanced multi-function systems that use high performance XMC cards by providing the best thermal management for multiple mezzanine cards dissipating up to 30 watts each.

Designers can migrate their XMC lab systems to a rugged, deployable 6U VPX form factor in order to exploit the full complement of high speed digital I/O available through a standard VPX backplane.

PEX441 extends the functional envelope of a 6U VPX system by leveraging an array of COTS GE, or customer-proprietary XMC modules into a distributed, fabric-based

architecture thereby removing the need to host high-power mezzanines on high-power CPU cards.

Thermal load can be spread across multiple system slots for both air and conduction-cooled applications, supporting high compute density along with modularity down to an XMC functional unit to cater for a variety of mission landscapes over the entire platform life cycle.

For systems that require PMC and XMC support, we offer PEX440 which includes an on-board PCIe switch architecture with connection to the primary fabric plane.



PEX441 and XMCs

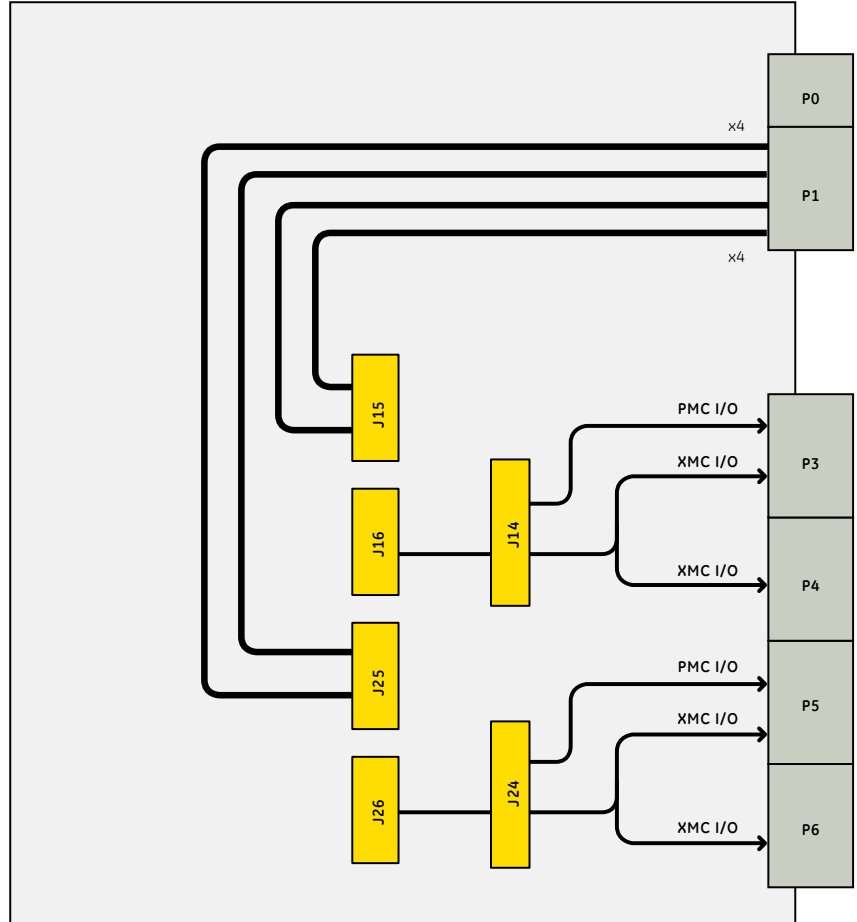


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Specifications

- Two XMC expansion sites
- Rear I/O per VITA46.9
- High-speed matched pairs to P1 from both Pn5 connectors.
- User I/O build options:
 - a) 64 diff. pairs from Jn4 and 12 diff. pairs from Jn6. or
 - b) 10 diff. pairs from Jn4 and 20 diff. pairs with 32 single-ended from Jn6
- On-board elapsed time indicator
- Optional VPX REDI covers to support two level maintenance requirements
- Board Management Microcontroller for remote health monitoring
- Power requirements
 - a) +5V
 - b) 12V only if required by a mounted XMC module

Block Diagram



Ordering Information

Convection cooled: PEX441-x223 (x=1, 2 or 3)

Conduction cooled: PEX441-x221 (x=4 or 5)

About GE Intelligent Platforms

GE Intelligent Platforms, a General Electric Company (NYSE: GE), is an experienced high-performance technology company and a global provider of hardware, software, services, and expertise in automation and embedded computing. We offer a unique foundation of agile, advanced and ultra-reliable technology that provides customers a sustainable advantage in the industries they serve, including energy, water, consumer packaged goods, government and defense, and telecommunications. GE Intelligent Platforms is a worldwide company headquartered in Charlottesville, VA and is part of GE Home and Business Solutions. For more information, visit www.ge-ip.com.

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