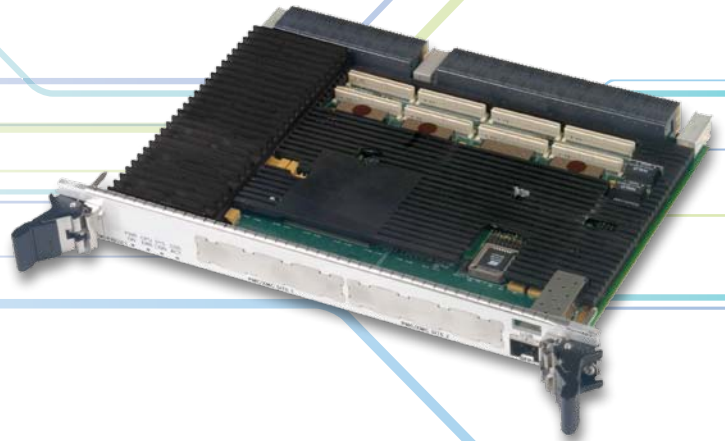


CPU-111-10

- OpenVPX Compatible
- Quad Core Intel Xeon
- Integrated 12-port 10Gb Ethernet Switch
- MIL-STD-810F version
- Convection and Conduction cooled
- Open VPX Profile: MOD6-PAY-4F2T-12.2.2.4



FEATURES

Open VPX compatible – The CPU-111-10 is OpenVPX compatible, with a MOD6-PAY-4F2T-12.2.2.4 profile. It is a Payload Module with 4 fat pipes (10 GBase-BX4) and two thin pipes (1000Base-T).

High Performance – With an Intel Quad-core Xeon CPU and up to 4GB of DDR2 RAM, the CPU-111-10 delivers very efficient computational capacity.

10Gb Ethernet Switch – The CPU-111-10 has an integrated 12-port 10Gb Ethernet switch providing full-mesh that allows integrated up to 8 CPU-111-10 boards in a single chassis

MIL-STD Versions – The CPU-111-10 is available in configurations MIL-STD-F compliant, and supports wedge locks for high shock and vibration immunity.

Convection and Conduction Cooled – The CPU-111-10 is available in convection and conduction cooled versions. Conformal coating is available for both versions.

- Defense
- Homeland Security
- Aerospace
- Industrial
- Transportation

The CPU-111-10 is a high performance Single Board Computer (SBC) based on the 6U VPX (VITA 46) form factor and compatible with the OpenVPX standard. Offered in both convection cooled and ruggedized conduction cooled variants, the CPU-111-10 meets the needs of numerous applications, in markets such as Defense, Industry and Transportation.

At the heart of the CPU-111-10 is one quad-core Intel L5408 Xeon Processor, with up to 4 GBytes of DDR2 SDRAM

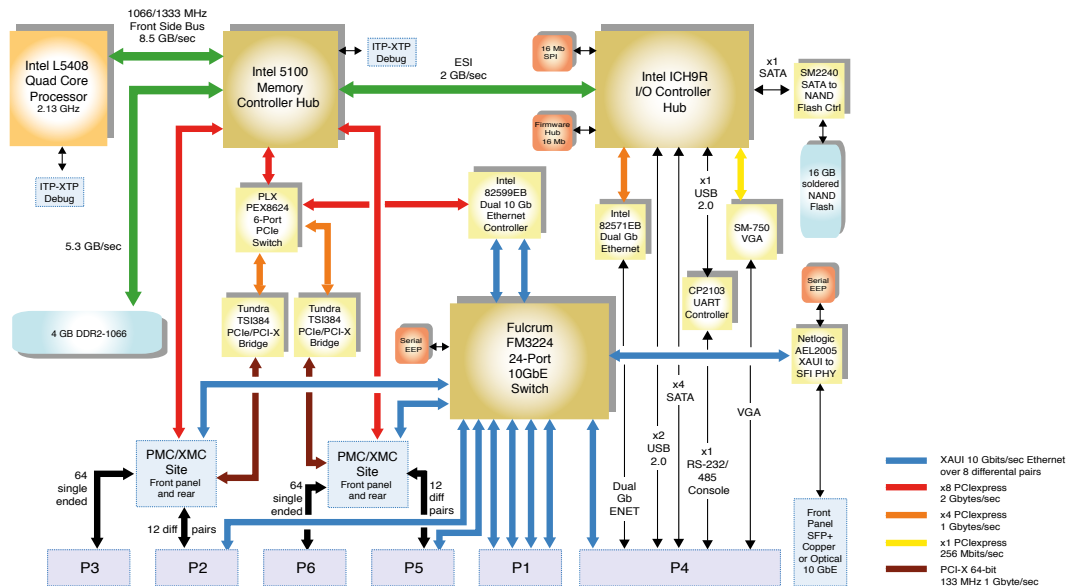
The CPU-111-10 provides unparalleled data processing capabilities. It supports two fully capable PMC/XMC sites with extensive User I/O. An on-board 10 Gigabit Ethernet Switch provides full-mesh backplane datalayer interconnectivity, allowing up to eight CPU-111-10 SBC's to be integrated into a single chassis without the use of an additional switch board.

The dual 10 Gigabit Ethernet controller, connected to the internal 10 Gigabit Ethernet Switch supports the IEEE 1588 Precision Time Protocol standard allowing all node boards to be synchronized in the sub-microsecond range; additionally, a dual 1Gigabit Ethernet controller provides 1000Base-T or 1000BASE-KX connectivity to the backplane via the VPX P4 connector.

For convection cooled applications, the CPU-111-10 provides a front panel SFP+ port supporting CX4 copper and Fiber applications for chassis-to-chassis and rack-to-rack communications.

System Architecture

CPU	Quad-core 2.13GHz L5408 Intel Xeon
RAM	4GB DDR2 SDRAM at 533/667 MHz (1066 MHz DDR)
STATIC MEMORY	16Mbit SPI Flash • 16Mbit Firmware Hub 16GB soldered NAND FLASH
ETHERNET SWITCH	10 Gigabit Ethernet switch (Fulcrum FM3224) • Layer 2 switching Full-mesh connectivity between up to 8 VPQ/VRQ boards
P1 INTERFACES	4x 10Gb Ethernet
P2 INTERFACES	x12 differential pairs (User I/O) • 1x 10GB Ethernet
P3 INTERFACES	x64 single ended (User I/O)
P4 INTERFACES	1x 10Gb Ethernet • 2x Gb Ethernet • 2x USB 2.0 • 4x SATA • 1x RS-232/485 • 1x VGA
P5 INTERFACES	x12 differential pairs (User I/O) • 1x 10GB Ethernet
P6 INTERFACES	x64 single ended (User I/O)
XMC/PMC	2x XMC/PMC front panel and rear. Busses: 64bit/133MHz PCI-X, x8 PCIe
FRONT PANEL INTERFACES	10Gb Ethernet; SFP+ Copper or Optical
DIMENSIONS	6U VITA46 VPX
POWER	141W Typical (198W Max)
OPERATING TEMPERATURE	0°C to +77°C - Extended temperature option available
COOLING	Conductive and convection cooling options
COMPLIANCE	MIL-STD-810F - Wedge lock option



Note: The information in this document is subject to change without notice and should not be construed as a commitment by EUROTECH. While reasonable precautions have been taken, EUROTECH assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.

ETH_VPQ/VPX_DS_08/2011