



Open VPX Intel Quad-Core based 6U VPX
SBC with on-board 24-port 10 Gb ENET
Switch

PRESS RELEASE

PHOTO AVAILABLE

Contact: Mike Horan

Phone: (949) 855-3235

Fax: (949) 770-3481

E-mail: sales@dynatem.com

www.dynatem.com

Features:

- Open VPX compatible profile MOD6-PAY-4F2T-12.2.2.4.
- Intel®Quad Core L5408 Processor @ 2.13 Hz
- Support VITA 46.21 for full mesh 10 Gb XAUI interconnect up to 5 boards on backplane per VITA 46.7 (Ethernet on VPX Fabric Connector)
- Seven 10 Gb XAUI total ports to the backplane for full mesh support
- On board Fulcrum 24 port 10 Gb Ethernet XAUI switch (also available without switch)
- On-board PCI express SVGA Controller
- Front panel SFP+ 10 Gb copper or optical for chassis to chassis interconnect

- Supports two fully capable PMC/XMC Sites with PCI-X speeds of up to 133MHz and PCIe x8. Additionally, each XMC site provides a 10G XAUI lane to the on-board 24-port switch enabling an XMC card to be part of the 10G fabric.
- Available in conduction cooled versions for rugged applications
- On board 4 GB DDR2 and 16 GB bootable Flash disk
- OS support for Linux, VxWorks, Windows, Solaris, LynxOS, QNX

Mission Viejo, California, October 26, 2010---- Dynatem is now shipping the VPQ. It is a high performance 6U Single Board Computer (SBC) based on the 6U VPX (VITA 46) form factor. It is Open VPX compatible per profile MOD6-PAY-4F2T-12.2.2.4. This profile indicates a 6U Payload Module having 4 fat pipes (10 GBase-BX4) and two thin pipes (1000Base-T).

Offered in both convection cooled and ruggedized conduction cooled variants, the VPQ will meet the needs of numerous commercial and military applications.

At the heart of the VPQ is one quad-core Intel L5408 Xeon Processor, an Intel 5100 Memory Controller Hub (MCH), and an Intel ICH9R I/O Controller Hub (ICH), forming the central processing backbone of the design. Up to 4 GBytes of DDR2 SDRAM are supported with the MCH running at up to 1066 MHz double data rate speeds.

The VPQ provides unparalleled data processing capabilities. It supports two fully capable PMC/XMC Sites with extensive User I/O. An on-board Fulcrum FM3224 24-Port 10 Gigabit Ethernet Switch provides full-mesh backplane data-layer interconnectivity. This allows up to eight VPQ SBC's to be integrated into a single chassis without the use of an additional switch board. A PLX PEX8624 PCI Express Switch provides connectivity to the XMC Sites and an Intel 82599EB Dual 10 Gigabit Ethernet controller, which connects to the 10 Gigabit Ethernet Switch. The Intel 82599EB supports the IEEE 1588 Precision Time Protocol standard allowing all node boards to be synchronized in the sub-microsecond range. An 82571EB Dual 1Gigabit Ethernet controller provides 1000Base-T or 1000Base-KX connectivity to the backplane via the VPX P4 connector.

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

On-board non-volatile storage includes a 16 GByte Solid State Flash Drive, 16 Mbit SPI flash memory, and a 16 Mbit Firmware Hub. Four SATA, two USB, VGA, and an RS232 or RS485 Console port complement the VPQ I/O through the backplane or rear transition module.

Pricing starts at \$11,120 in quantity.

Dynatem manufactures and integrates systems based on 6U and 3U VMEbus and CompactPCI, CompactPCI Express, and VPX modules. Custom stand-alone embedded designs are also provided. Dynatem is located at 23263 Madero, Suite C, Mission Viejo, CA 92691. For additional information, call (949) 855-3235, fax (949) 770-3481, e-mail [*sales@dynatem.com*](mailto:sales@dynatem.com) or visit our website at [*www.dynatem.com*](http://www.dynatem.com).

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