

# MILITARY & DEFENSE

PMC CARRIER BOARD FAMILY



## PMC CARRIER BOARD FAMILY

### **PMC Carrier Cards**

IXI's family of PMC carrier cards adapt PCI Mezzanine Cards (PMC) to a variety of bus architectures including VME, VME64, VME64x, PCI, and PCI Express (PCIe). PMCs combine the electrical characteristics of the PCI bus with the mechanical dimensions of the Common Mezzanine Card (CMC) format, resulting in a small daughter card that can be mounted in industry standard slots to add system features, increase computing power, or increase I/O channel density. IXI's family of PMC carriers provide a range of I/O capabilities and space-saving form factors to help you build robust, modular systems using PMCs. Choose from our family of PMC carriers to take advantage of the flexibility, economy, and performance of PMC technology.

### **VME/PMC Carrier Card**

The VME/PMC Carrier is a 6U VME card that supports up to 2 PMC modules. Its industry standard Tundra Universe II VME/PCI bridge chip assures compliance with VME and PCI bus standards. The card comes standard with easy to read front panel configuration displays, front panel reset switch, and two single wide PMC slots. IXI's VME/PMC Carrier allows you to build more powerful and less expensive systems by increasing board density while saving VME slot space for future system enhancements.

### **VME64/64x PMC Carrier Card**

PMC modules may have user I/O pins that are vendor or application dependent. In an effort to maintain flexibility, ANSI/VITA standardized different I/O routing schemes, most of which are mutually exclusive. It was from the need to support the different routing schemes that the 64 and 64x were developed. With both the standard and these two variations of the VME/PMC Carrier, IXI can support all standard user I/O routing schemes.

### **VME/PMC64/64x Conduction-Cooled PMC Carrier Card**

The VME/PMC 64x Conduction-Cooled Carrier is a 6U VME card that supports up to two (2) PMC modules. Its industry standard Tundra Universe II VME/PCI bridge chip assures compliance with VME and PCI Bus standards. The card comes standard with LED configuration, a front panel reset switch, and two single-wide PMC slots. The VME/PMC 64x Conduction-Cooled Carrier allows you to build more powerful and less expensive systems by increasing board density while saving VME slot space for future system enhancements.

### **PCI/PMC Carrier Card**

The PCI/PMC Carrier card is a standard short length PCI card that supports a single PMC module. It requires no set up and supports both 3.3V and 5V PCI signaling. Develop your software in a conventional desktop PC, then move your application and PMC module to a different hardware architecture for deployment.

### **PCI Express/PMC Carrier Card**

The PCIe/PMC Carrier card is a standard height, half length PCI Express card that supports a single PMC module. It installs in a standard 1x, 4x, 8x, or 16x PCI Express slot and is compatible with PMC modules operating at 33 Mhz or 66 Mhz. Maintain backward-compatibility with existing applications while moving into the next generation of high speed bus architecture with the PCIe/PMC carrier.

## GENERAL PRODUCT FEATURES

### PMC Carrier Cards

- 33MHz PCI bus interface
- Programmable DMA controller
- VME A32/A24/A16 master and slave addressing
- Single 6U height Eurocard
- Full VMEbus system controller functionality
- Easy-to-read LED configuration displays
- 5V PCI signaling support
- Flexible user I/O routing
- VME/PMC  
P4V2-64ac P4V2-46dz

### VME64/64x PMC Carrier Card

- 33MHz PCI bus interface
- Programmable DMA controller
- VME A32/A24/A16 master and slave addressing
- Single 6U height Eurocard
- Full VMEBus system controller functionality
- Easy-to-read LED configuration displays
- 5V PCI signaling support
- Flexible user I/O routing
- 64: P4V2-46dz (ANSI/VITA 35-2000 Section 2.4)  
P4V2-32+32ac (ANSI/VITA 35-2000 Section 2.5)
- 64x: P4V0-64 (ANSI/VITA Section 2.2)  
P4V2-64ac (ANSI/VITA 35-2000 Section 2.3)

### VME/PMC64/64x Conduction-Cooled PMC Carrier Card

- 33MHz PCI Bus Interface
- Programmable DMA Controller
- VME A32/A24/A16 Master and Slave Addressing
- Single 6U Height Eurocard
- Full VME Bus System Controller Functionality
- Easy-to-Read LED Configuration Displays
- 5V PCI Signaling Support
- Flexible User I/O Routing
- P4V0-64 (ANSI/VITA 35-2000 section 2.2)
- P4V2-64ac (ANSI/VITA 35-2000 section 2.3)

### PCI/PMC Carrier Card

- Universal 5V or 3.3V PCI Signaling
- 3.3V Supply in Any PCI Slot
- 32 bit PCI 2.1 Compliant
- 96 pin DIN Connector for Debugging PMC Designs

### PCIe/PMC Carrier Card

- Installs in 1x, 4x, 8x, or 16x PCI Express slots
- Supports 33 or 66 Mhz PMCs

## TECHNICAL SPECIFICATIONS

### VME/PMC Carrier Card Technical Specs

VMEbus Interface	Fully ANSI/VITA 1.0 Compliant Fully
PCI Bus Interface	PCI 2.1 Compliant, 5V Signaling
Form Factor	Eurocard 6U
Weight	8 oz (Unpopulated)
Power Consumption*	0A @ +3.3VDC 1A @ +5VDC 0A @ +12VDC 0A @ -12VDC
Relative Humidity	5% to 90% (Non-Condensing)
Operating Temperature	0°C to +55°C

### VME64/64x PMC Carrier Card

VMEBus Interface	Fully ANSI/VITA 1.0 Compliant Fully
PCI Bus Interface	PCI 2.1 Compliant, 5V Signaling
Form Factor	Wide 6U Eurocard
Weight	8oz (Unpopulated)
Power Consumption*	0A @ +3.3VDC 1A @ +5VDC 0A @ +12VDC 0A @ -12VDC
Relative Humidity	5% to 95% (Non-Condensing)
Operating Temperature	0°C to +55°C

### VME/PMC64/64x Conduction-Cooled PMC Carrier Card

VME Bus Interface	Fully ANSI/VITA 1.0 Compliant
PCI Bus Interface	Fully PCI 2.1 Compliant, 5V Signaling
CC PMC Interface	Fully ANSI/VITA 20-2001 compliant Fully IEEE STD 1386.1-2001 compliant
Form Factor	Eurocard 6U IEEE STD. 1101.2 – 1992 (2001) compliant
Weight	Approximately 2.25 lbs.
Power Consumption*	0A @ +3.3VDC 1A @ +5VDC 0A @ +12VDC 0A @ -12VDC
Relative Humidity	5% to 90% (Non-Condensing)
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +125°C

### PCI/PMC Carrier Card Technical Specs

Form Factor	Short Length PCI
Weight	3.3oz (Unpopulated)
Power Consumption*	+3.3VDC - 0A, 3A max. +5VDC - 0A, 2A max. +12VDC - 0A, 0.5A max. -12VDC - 0A, 0.5A max.
Relative Humidity	5% to 90% (Non-Condensing)
Operating Temperature	0°C to +55°C

### PCIe/PMC Carrier Card Technical Specs

PCI (PMC) Bus Interface	32-bit PCI 3.0 Compli
PCIe/PCI Bridge Interface	PCI Express Bridge 1.0 Compliant
Form Factor	Standard Height, Half Length PCIe
Weight	4.0oz (Unpopulated)
Power Consumption*	+3.3VDC - 0.15A, 3A max. +5VDC - 0A, 2A max. +12VDC - 0A, 0.5A max. -12VDC - 0A, 0.5A max.
Relative Humidity	5% to 90% (Non-Condensing)
Operating Temperature	0°C to +55°C

\* Power consumption based on unpopulated, idle measurements. Actual consumption will vary depending on PMC module power requirements.