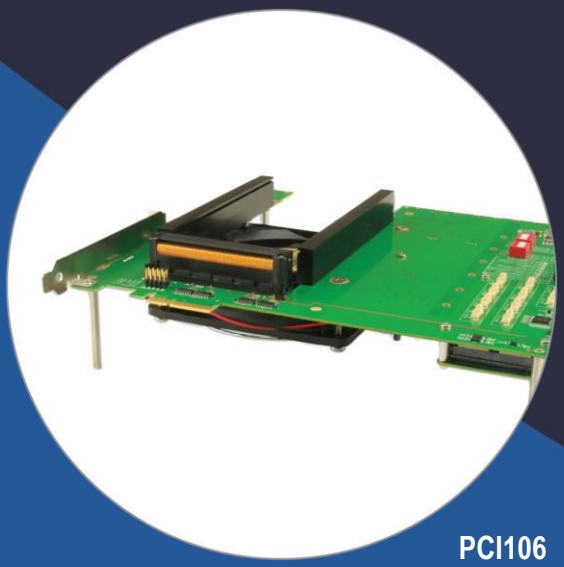
PCI106

Carrier for AMC Modules



PCI106

Key Features

- Supports one AMC.1, AMC.2, AMC.3 and/or AMC.4
- Allows to put in double width AMC modules
- PCIe x4 lanes to the PC style edge connectors
- Optional VT040 IPMI Management Controller
- AMC.2 GbE to RJ-45
- AMC.3 to SATA headers
- On board 100Mhz HCSL Clock for FCLKA
- MLVDS drivers for TCLKA, TCLKB, TCLKC and TCLKD via SMB connectors as input or output
- IPMI 2.0 compliant
- Connectors to access the I2C bus
- Can run standalone without the host PC
- RoHS compliant

Benefits

- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

PCI EXPRESS

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PCI106

The PCI106 allows testing of AMC.1, AMC.2, AMC.3 and/or AMC.4 modules in a PC environment (or standalone) during development and manufacturing; reducing the costs associated with maintaining different platforms.

The PCI106 is a PCIe edge style carrier with x4 lanes routed to from the AMC to the PCIe edge style. The AMC.1 module can connect directly to the host PC PCIe bus. The AMC.2 module GbE ports are routed to RJ-45s. The AMC.3 differential pairs are routed to two SATA connectors. The PCI106 is available with a socket for an optional VT040 Shelf Manager which can test the AMC IPMI management functionality. The Dual I2C bus connectors allow connecting any I2C bus to any other I2C bus as well as being able to debug and monitor the I2C bus traffic.

Provides two current sense resistors to measure the payload power as well as the management power of the AMC.

The PCI106 can be powered on the bench without the host PC.

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).

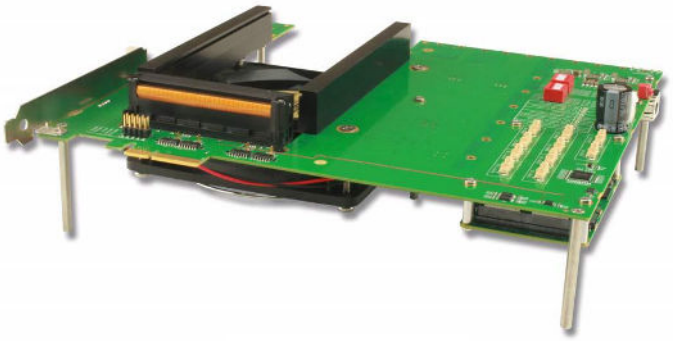

Figure 1: PCI106

Figure 2: PCI106 Bottom View

Reference Design

VadaTech provides a reference design implementation for our FPGAs, complete with VHDL source code and configuration binaries. The reference design focuses on the I/O ring of the FPGA to demonstrate low-level operation of the interconnections between the FPGA and other circuits on the board and/or backplane. It is intended to prove out the hardware for engineering/factory diagnostics and customer acceptance of the hardware, and can be used as a starting point for developing an end application.

Block Diagram

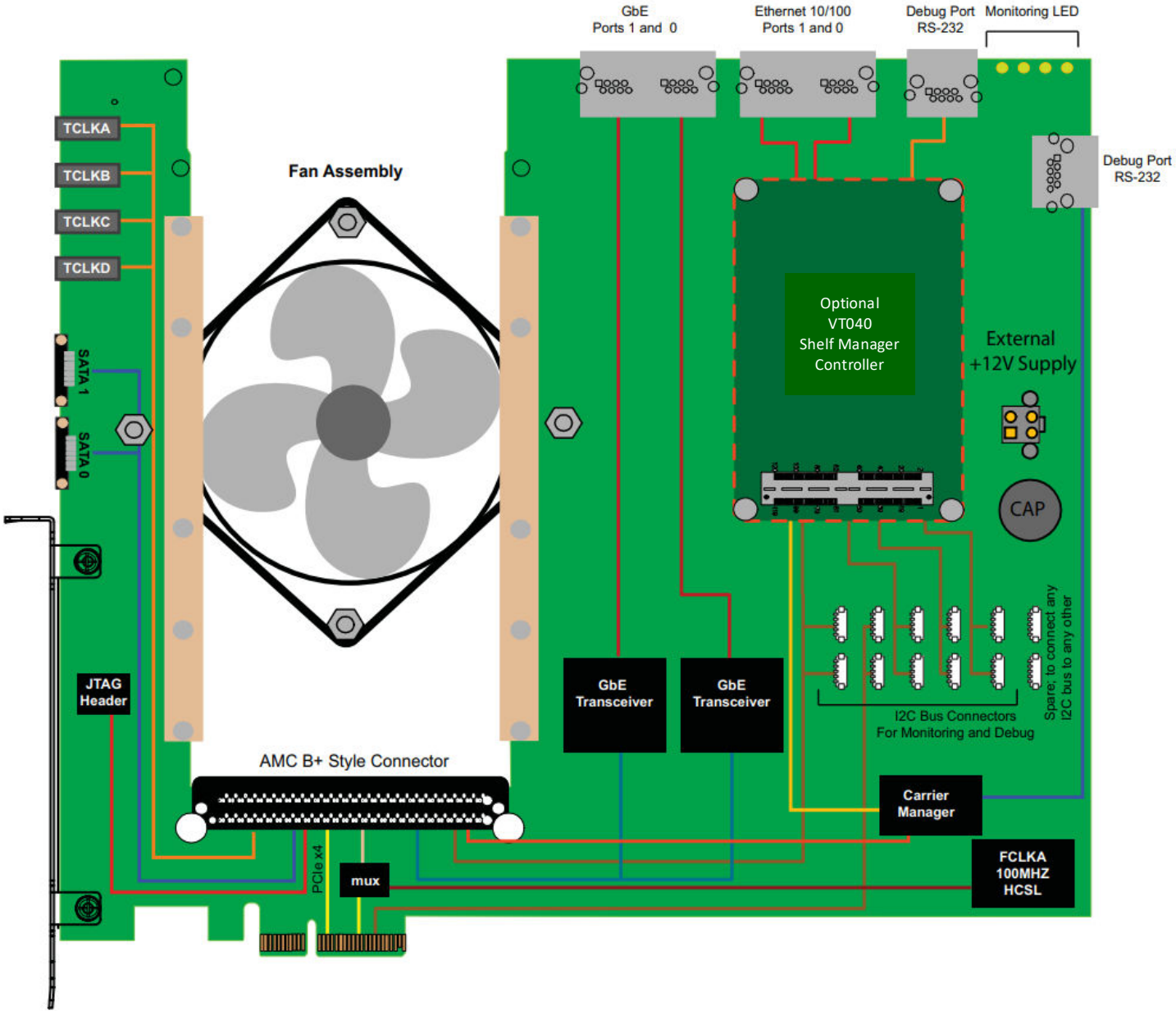

Figure 3: PCI106 Functional Block Diagram

Specifications

Architecture		
Physical	**Dimensions**	Full size PCIe bus format
		Width: 8.865 in. (225 mm)
		Depth: 9.5 in. (241 mm)
Type	**PCIe Network**	PCI Carrier for AMC
Standards		
PCIe	**Lanes**	X4
Configuration		
Power	**PCI106**	4 W with the VT040 installed
Environmental	**Temperature**	See Ordering Options
		Storage Temperature: -40° to +90° C
	Vibration	Operating 9.8 m/s^2 (1G), 5 to 500 Hz
	Shock	30Gs on each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	AMC B+
		AMC.1
		AMC.2
		AMC.3
	Clocks	FCLKA, TCLKA, TCLKB, TCLKC and TCLKD
Software Support	**Operating System**	N/A
Other		
MTBF	MIL Spec 217-F >205,000 Hrs. (without the Fan)	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Warranty	Two (2) years, see VadaTech Terms and Conditions	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

PCI106 – A00-000-0HJ

A = Optical modules*		
0 = None 1 = VT040		
		H = Temperature Range
		0 = Commercial (–5° to +50°C) 1 = Industrial (–20° to +65°C)
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic 3 = Parylene

Notes: *Qty four is shipped with the module, if a mix of modules are needed, please contact VadaTech Sales Team member

**Minimum order quantity applies for these FPGA SKU's and/or memory option

For operational reasons VadaTech reserves the right to supply a higher speed FPGA device than specified on any particular order/delivery at no additional cost, unless the customer has entered into a Revision Lock agreement with respect to this product.

Related Products

VT072

- Single slot AMC backplane
- Provides +12V and Management Power to the AMC Module
- Port 0 and 1 are routed to the GbE PHY

VT073

- Double tongue AMC backplane
- Tongue 2 provides additional power for high performance modules
- Provides +12V and Management Power to the AMC Module

VT074

- Single slot chassis for an AMC module
- Option for AMC single-width or double-width
- Option for AMC panel size Extended, Full, or Mid-size

Contact

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