



- **6U CompactPCI® CPU Board**
- **Intel® Atom™, Quad Core**
- **ECC Memory**
- **USB 3.0**
- **Low Power and Fanless**
- **PICMG® 2.0 Compliant**
- **Customizable**

Features

6U CompactPCI - The A6pci8077 is a single-slot 6U CompactPCI board, powered by Intel Atom processors and fully PICMG 2.0 compliant

Atom Powered - Comes with Intel Atom E3800 CPU: up to four core configurations and 1.91GHz clock speed

Reliable - Offers memory configurations up to 4GB with Error Correcting Code (ECC)

Low Power and Fanless - Enables fanless designs with a CPU TDP up to 10W

Customizable - Personalization and full customization options are available, ranging from custom SW image pre-installation to deep HW/SW configurations

Description

The A6pci8077 is a single-slot 6U CompactPCI designed to meet the requirements of industrial and rugged fanless applications. Fully compliant with the PICMG 2.0 CompactPCI standard, the A6pci8077 is based on the Intel Atom E3800 processor family, with 1 to 4 cores, and up to 4GB ECC RAM on a SO-DIMM socket.

Other features include high speed interfaces on the front panel: two Gigabit Ethernet, one USB 3.0 and two USB 2.0, two RS-232 serial ports on DB9 connectors, and one VGA. In addition to these interfaces, the A6pci8077 supports one CFast slot for on-board storage, and an internal SATA 2.0 connector.

Supported operating systems include VxWorks, and Windows 10 IoT Enterprise.

Professional Services are available for the A6pci8077, starting from BIOS personalization and including full system development and production. Deep board customization, such as feature changes, are also available.

Specifications

PROCESSOR	CPU	Atom E3800 CPU Family Options - up to 4 Cores
	Chipset	Integrated Intel PCH Chipset
BIOS	Type	AMI UEFI
	Size	128Mbit SPI Flash
MEMORY	RAM	1x DDR3L-1333 ECC SODIMM up to 4GB
STORAGE	SATA	1x SATA 2.0 Internal Connector
	CFast	1x CFast Type 2 Slot
I/O INTERFACES	Ethernet	2x 10/100/1000Mbps (Intel I210-IT Controller) - RJ45
	USB	1x USB 3.0 (Type A), 2x USB 2.0 (Type A)
	Serial	2x RS-232 - DB9
	Video	Integrated 3D Graphic Controller: 1x VGA - D-Sub 15pins
	cPCI	1x TI XIO2001Z (PCIe to PCI Bridge) + 1x Lattice LCMXO2-640HC-4TG100C (CPLD): PCI 32-bit/33MHz PCI Bus, IRQ Management (IRQ Selection of INT #A, #B, #C, #D)
OTHER	RTC	Built-in RTC with on-board lithium battery (BR2032)
	Sensors	Hardware Monitor: Temperature Inputs, Voltage Monitor Inputs
	LEDs	1x Power Status (Green), 1x HDD Status (Red)
	Buttons	1x Reset (Front Panel)
POWER	Input	5VDC (cPCI Backplane)
	Consumption	Up to 10W (CPU TDP)
ENVIRONMENT	Operating Temp	0 to +60°C
	Storage Temp	- 40 to +85°C
	Humidity	10 to 90% (Non-condensing)
CERTIFICATIONS	Environmental	RoHS2
	Compliance	PICMG 2.0 CompactPCI Rev 3.0
MECHANICAL	Dimensions	233x160mm (LxH), Single-slot 4HP (20.32mm Width), 1.6mm PCB Thickness
SOFTWARE	OS	Support for VxWorks, Windows 10 IoT Enterprise

Block Diagram

