



- **6U CompactPCI® CPU Board**
- **Intel® Core™ and Celeron®**
- **Up to 32GB DDR4 Memory**
- **Four Gigabit Ethernet**
- **M.2 Slot, Four USB 3.0**
- **Low Power and Fanless**
- **Customizable**

Features

6U CompactPCI - The A6pci8080 is a dual-slot 6U CompactPCI board, powered by Intel Core and Celeron processors and fully PICMG 2.0 compliant

Powerful - Comes with 6th Gen Intel Core CPUs: Core i7, i5, i3 and Celeron dual core configurations, up to 2.6GHz (3.4GHz burst)

Performant - Supports up to 32GB of high speed DDR4 dual-channel RAM on two SO-DIMM sockets

Rich - Delivers multiple high-speed interfaces, including four Gigabit Ethernet, four USB 3.0, two serial ports and much more

Low Power and Fanless - Enables fanless designs with a CPU TDP of only 15W

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

Description

The A6pci8080 is a dual-slot 6U CompactPCI CPU board designed to meet the requirements of industrial and rugged fanless applications.

Fully compliant with the PICMG 2.0 CompactPCI standard, the A6pci8080 is based on the 6th Generation Intel Core and Celeron processor family, supporting up to 32GB DDR4 RAM on dual SO-DIMM socket.

Other features include high speed interfaces on the front panel: four Gigabit Ethernet, four USB 3.0 and two serial ports on DB9 connectors, and one DVI-I that supports both analog and digital video signals. In addition to these interfaces, the A6pci8080 supports two USB 2.0 and one SATA connector on internal headers, and a M.2 slot for additional on-board storage.

Supported operating systems include Windows 10 IoT Enterprise.

Professional Services are available for the A6pci8080, starting from BIOS personalization and including full system development and production. Deep board customization, such as feature changes, are also available.

Specifications

PROCESSOR	CPU	Celeron 3955U - 2.0GHz, 2 Cores Core i3 6100U - 2.3GHz, 2 Cores Core i5 6300U - 2.4GHz (3.4GHz), 2 Cores Core i7 6600U - 2.6GHz (3.4GHz), 2 Cores
	Chipset	Integrated Intel Skylake SoC
BIOS	Type	AMI UEFI
	Size	128Mbit SPI Flash
MEMORY	RAM	2x DDR4-2133 SODIMM up to 32GB
STORAGE	M.2	1x M.2 Slot (M-Key, 2242/2260/2280 Formats, SATA 2.0 Signal Only)
	SATA	1x SATA 3.0 Internal Connector, 1x SATA 2.0 7-pin Internal Connector (Debug)
I/O INTERFACES	Ethernet	4x 10/100/1000Mbps (Intel I211-IT Controller) - RJ45
	USB	4x USB 3.0 (Type A), 2x USB 2.0 (Internal Header)
	Serial	2x RS-232/RS-422/RS-485 (BIOS Selectable, RS-232 Default) - DB9
	Video	Intel HD Graphics 510/520 (Supporting Direct x12, OpenGL 4.4): 1x DVI-I (VGA + DVI-D Signals) on Front Panel
	cPCI	1x TI XIO2001Z (PCIe to PCI bridge) + 1x Lattice LCMXO2-640C-4TG100C (CPLD): PCI 32-bit/33MHz PCI Bus, IRQ Management
OTHER	RTC	Built-in RTC with On-board Lithium Battery (BR2032)
	Sensors	Hardware Monitor: 3x Temperature Inputs, 4x Voltage Monitor Inputs
	LEDs	1x Power Status (Green), 1x HDD Status (Red)
	Buttons	1x Reset (Front Panel)
	Fan	2x Fan Header
POWER	Input	5VDC (cPCI Backplane)
	Consumption	15W (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), Dual-slot 8HP (40.64mm Width) – 1.6mm PCB Thickness
SOFTWARE	OS	Support for Windows 10 IoT Enterprise

Block Diagram

