

cPCI-A3515 Series

3U CompactPCI® Serial 4th/5th Generation Intel® Core™ Processor Blade with ECC

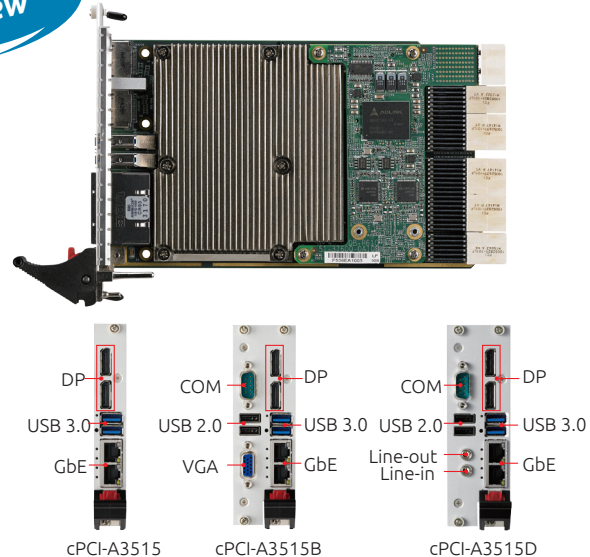
Features

- PICMG® CPCI-S.0 CompactPCI® Serial Processor Blade
- Quad-core 4th/5th Generation Intel® Core™ i7 processor
- Up to 16GB DDR3L ECC soldered memory
- Up to three independent displays
- Optional extended operating temperature -40°C to +85°C (with Intel® cTDP)
- Optional PICMG® 2.0 (CompactPCI®) support
- Smart Embedded Management Agent (SEMA) for system health monitoring

**CompactPCI®
Serial**

**EXTENDED
TEMPERATURE**

New



Specifications

Core System

CPU

Quad-core Intel® Core™ i7-5700EQ Processor 2.6GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP

Quad-core Intel® Core™ i7-4700EQ Processor 2.4GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP

Supports Intel® Hyper-Threading and Turbo Boost Technology, VT-x, VT-D, vPro Technology

Chipset

Intel® QM87 Chipset

Memory

DDR3L-1333/1600 SDRAM ECC soldered, up to 16GB

BIOS

AMI EFI BIOS, 128Mbit SPI flash memory

CompactPCI Serial

Interfaces below are routed to backplane through P1 to P5

Interface

connectors:

One PCIe x8, up to 8GT/s

Two PCIe x4, up to 8GT/s

Three PCIe x1, up to 5GT/s

Four SATA 6Gb/s

Two USB 3.0 ports

Eight USB 2.0 ports

Supports operation in system slot and in peripheral slot

PICMG Standards

PICMG CPCI-S.0 CompactPCI Serial R1.0

PICMG 2.0 CompactPCI R3.0

Connectivity

Ethernet

Two Gigabit Ethernet faceplate ports

Two Gigabit Ethernet interfaces via P6 connector to backplane (Eight Gigabit Ethernet interfaces by request)

(Please contact ADLINK for more Ethernet support)

Graphics

High-performance 3D engine integrated in Intel processor, supports up to three independent display outputs

One VGA port on faceplate (cPCI-A3515B only)

Two DisplayPorts on faceplate, support up to 2560×1440 pixels @ 60Hz, DVI, VGA and HDMI interfaces available via adapter cables

USB

Two USB 3.0 ports on faceplate

Two USB 2.0 ports on faceplate (cPCI-A3515B/D only)

Serial Port

One RS-232/422/485 port on faceplate (cPCI-A3515B/D only)

Storage

Blade

One SATA 3 Gb/s direct connector for 2.5" SATA storage drive (cPCI-A3515B/D only)

Optional onboard 32GB SSD or mSATA socketE

Operating System

OS

Microsoft Windows 10 (64-bit), Windows 7/8 (32/64-bit)

Red Hat Enterprise Linux 6.6, 7.0

Windows Embedded Standard 7, VxWorks, QNX and other OS support by request

Specifications

● Miscellaneous

LEDs

Power, WDT, Drive Activity, Overheat, General Purpose

Battery

Coin cell lithium battery onboard for RTC CMOS RAM for BIOS configuration

Watchdog Timer

System Reset and NMI, with programmable interval,
1-65535 sec or 1-65535 minutes

Hardware Monitor

Monitors CPU temperature, system temperature and DC voltages by SEMA

TPM

Atmel TPM AT97SC3204 (optional by request)

● Mechanical and Environmental

Form Factor

3U 4HP/8HP CompactPCI Serial
100mm x 160mm (L x W)

Operating Temperature

-20°C to +70°C (Core™ i7-4700EQ and i7-5700EQ 47W)
-40°C to +85°C (screened, Core™ i7-4700EQ and i7-5700EQ 47W adjusted to
37W by Intel® cTDP)

Storage Temperature

-50°C to +100°C

RH Humidity

95% non-condensing

Shock

20G peak-to-peak, 11ms duration, operating

Vibration

2Grms random vibration, 5 to 500Hz in 3 axes, operating

Weight

386g (cPCI-A3515 with heatsink)
575g (cPCI-A3515B with heatsink)
578g (cPCI-A3515D with heatsink)

Certifications

CE/ FCC

I/O Table

		GbE	USB	COM	Display	SATA 2.5"	mSATA	Onboard SSD	Audio
cPCI-A3515 (4HP)	Faceplate	2 (RJ-45)	2 (3.0)		2 (DP)				
	Onboard						optional ⁽¹⁾	1	
cPCI-A3515B (8HP)	Faceplate	2 (RJ-45)	2 (3.0) 2 (2.0)	1 (DB9)	2 (DP) 1 (VGA)				
	Onboard					1	1	optional ⁽²⁾	
cPCI-A3515D (8HP)	Faceplate	2 (RJ-45)	2 (3.0) 2 (2.0)	1 (DB9)	2 (DP)				1 (Line-in) 1 (Line-out)
	Onboard					1	1	optional ⁽²⁾	

(1) Available by replacing onboard SSD with mSATA socket.

(2) Available by replacing mSATA socket with onboard SSD.

Ordering Information

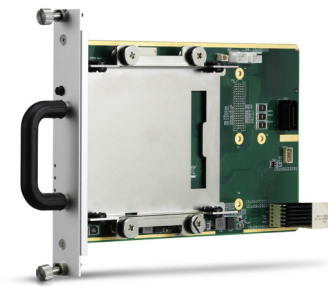
Processor Blades

- **cPCI-A3515/5700E/M16/S32**
1-slot (4HP) 3U CompactPCI Serial blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0 and onboard 32GB SSD
- **cPCI-A3515/4700E/M8/S32**
1-slot (4HP) 3U CompactPCI Serial blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0 and onboard 32GB SSD
- **cPCI-A3515B/5700E/M16**
2-slot (8HP) 3U CompactPCI and CompactPCI Serial blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, VGA, mSATA socket, SATA connector, and CompactPCI J1 and J2 connectors
- **cPCI-A3515B/4700E/M8**
2-slot (8HP) 3U CompactPCI and CompactPCI Serial blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, VGA, mSATA socket, SATA connector, and CompactPCI J1 and J2 connectors
- **cPCI-A3515D/5700E/M16**
2-slot (8HP) 3U CompactPCI Serial blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, Line-in, Line-out, mSATA socket and SATA connector
- **cPCI-A3515D/4700E/M8**
2-slot (8HP) 3U CompactPCI Serial blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, Line-in, Line-out, mSATA socket and SATA connector

Accessories

- **DP-DVI cable**
DisplayPort to DVI adapter cable
- **DP-VGA cable**
DisplayPort to VGA adapter cable
- **DP-HDMI cable**
DisplayPort to HDMI adapter cable
- **cPCI-A3H10**
3U CompactPCI Serial 2.5" SATA storage carrier with hot-swap support, anti-shock and anti-vibration storage kit
- **cPCI-A3X10**
3U CompactPCI Serial XMC module carrier

Contact us for different CPU, memory, SSD/HDD and mSATA combinations.



cPCI-A3H10



cPCI-A3X10