Building Forward Together | ADLINK

cPCI-A3515 Series

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

New

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

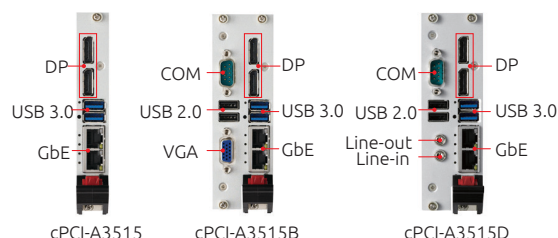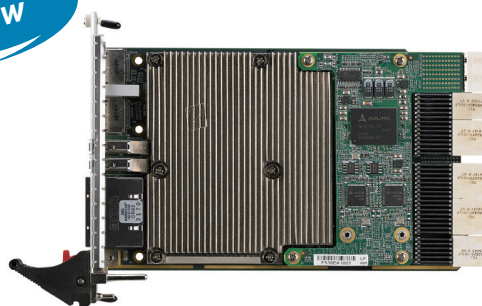cPCI-A3515   cPCI-A3515B   cPCI-A3515D

Specifications

Processor & 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 Interface	Interfaces below are routed to backplane through P1 to P5 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 socket

Operating System

OS	Microsoft 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

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 & 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

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