cPCI-3620 Series

3U CompactPCI Quad-Core Intel Atom® Processor Blade

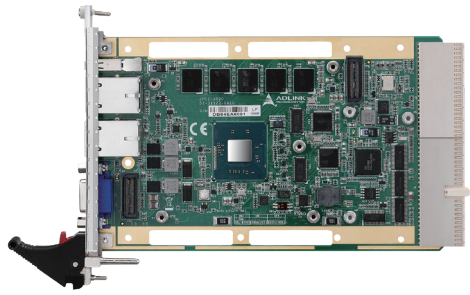
Features

- Low power quad-core Intel Atom® Processor E3845 SoC
- Up to 4GB DDR3L-1333 ECC soldered memory
- Onboard 32GB SSD support
- Smart Embedded Management Agent (SEMA) for system health monitoring
- Optional additional GbE ports with MIL-STD M12 connectors

EN 50155 Compliant

CompactPCI®

EXTENDED TEMPERATURE





cPCI-3620 cPCI-3620D cPCI-3620S cPCI-3620T cPCI-3620TR cPCI-3620N

Specifications

Processor & System

CPU

µFC-BGA quad-core Intel Atom® processor E3845 SoC, 1.9GHz, 2MB L2 cache, TDP 10W

Memory

Single channel DDR3L-1333 ECC soldered, up to 4GB

BIOS

AMI EFI BIOS, dual 64M Bit SPI flash memory

CompactPCI Bus

PCI 32-bit, 33/66MHz, 3.3V or 5V universal V(I/O)

Supports operation in system slot as master or in peripheral slot as stand-alone blade without connectivity to CompactPCI bus (Satellite mode)

PICMG standards

PICMG 2.1 CompactPCI R3.0

PICMG 2.1 Hot Swap R2.0

Connectivity

PMC/XMC

One optional PCI 32-bit/66 MHz PMC site or PCIe x1 XMC site on 2nd or 3rd layer daughter board

Ethernet

Two 10/100/1000BASE-T Gigabit Ethernet Ports on faceplate by Intel® I210 controllers, switchable to J2

Two additional GbE in M12 MIL-STD connectors on layer 2 daughter board by Intel® I210 (cPCI-3620T only)

Graphics

Integrated in Intel® processor

One VGA on faceplate switchable to rear transition module by BIOS option

Serial Port

Optional serial port on selected dual-slot SKUs (cPCI-3620D, cPCI-3620T, cPCI-3620TR)

Two serial ports routed to rear transition module

PS/2

Optional PS/2 keyboard mouse on cPCI-3620D

USB

One USB 3.0 on front panel

One USB 2.0 routed to rear transition module

Two additional USB 2.0 on cPCI-3620D

Audio

Optional Mic-in, Line-out on cPCI-3620D

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Specifications

Storage

Blade

One onboard 32GB SSD on daughter board

One Serial ATA direct connector for 2.5" onboard HDD on selected SKUs (shared with SATA to RTM)

RTM

One SATA 3Gb/s port routed to RTM
(shared with cPCI-3620 layer 2 SATA port)

Operating System

OS

Windows 7/8/10 32/64-bit

Red Hat Enterprise Linux 6.5

Fedora 20

Wind River VxWorks 5.5 (by request), 6.4, 6.9

(Please contact ADLINK for other OS support)

Miscellaneous

LED

Power, WDT, Storage Drive, Thermal, General Purpose

Battery

Coin cell lithium battery onboard for RTC backup power
(optional Gold Capacitor)

Watchdog Timer

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

Controlled by SEMA

Hardware Monitor

Monitors CPU temperature, system temperature, Vcore and DC voltage by SEMA

Mechanical & Environmental

Form Factor

3U 4HP/8HP CompactPCI

100mm x 160mm (L x W)

Operating Temperature

Standard: -40°C to 70°C (fanless)

Extreme: -40°C to +85°C (screened, with forced air flow)

Storage Temperature

-50°C to +100°C

Relative Humidity

95% non-condensing

Shock

20G peak to peak, 11ms duration, operating

Vibration

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

Power Consumption

2.75A@5V, 13.75W (Windows 8, max. load)

Weight

cPCI-3620: 350g (with heat sink)

cPCI-3620T: 470g (with heat sink)

Safety & EMI

Certification

CE/FCC

I/O Table

		GbE	Display[3]	USB	COM	PS/2 KB/MS	Storage[2]	SSD	Audio	XMC
SBC										
cPCI-3620 (4HP)	Faceplate	2 (RJ-45)	1 (VGA)	1 (3.0)						
	Onboard							1		
cPCI-3620D (8HP)	Faceplate	2 (RJ-45)	1 (VGA)	1 (3.0) 2 (2.0)	1 (DB9)	1			1 (Line-in) 1 (Line-out)	
	Onboard						1 (SATA)	Optional [4]		
cPCI-3620S (8HP)	Faceplate	2 (RJ-45)	1 (VGA)	1 (3.0)						
	Onboard							Optional [4]		1
cPCI-3620T (8HP)	Faceplate	2 (RJ-45)[1] 2 (M12)	1 (VGA)	1 (3.0)	1 (DB9)					
	Onboard						1 (SATA)	Optional [4]		
cPCI-3620TR (8HP)	Faceplate	4 (RJ-45)	1 (VGA)	1 (3.0)	1 (DB9)					
	Onboard						1 (SATA)	Optional [4]		
RTM										
cPCI-R3610(T)	Faceplate	2 (RJ-45)	1 (VGA)	1 (2.0)	2 (DB9)					
	Onboard						1 (SATA)			

(1) Two RJ-45 connectors from Intel® I210 GbE controllers and two M12 MIL-STD connectors from Intel® 82574L GbE controllers
(2) SATA port is shared with rear transition module SATA port
(3) Switchable to front or rear by BIOS selection
(4) Available by soldering SSD module to 3DB-SSD adapter board

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Ordering Information

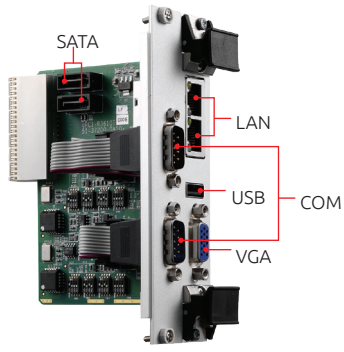
CPU Board

- **cPCI-3620/E3845/M4G/S32**
  1-slot (4HP) 3U CompactPCI blade with Intel Atom® processor E3845 and 4GB DDR3L-1333 soldered memory, supports VGA, USB 3.0, 2x GbE and onboard 32GB SSD
- **cPCI-3620D/E3845/M4G**
  2-slot (8HP) 3U CompactPCI blade with Intel Atom® processor E3845 and 4GB DDR3L-1333 soldered memory, supports VGA, USB 3.0, 2x GbE, COM (RS-232/422/485), 2x USB 2.0, PS/2 keyboard mouse, line-in, line-out, and SATA connector
- **cPCI-3620N/E3845/M4G/S32**
  1-slot (4HP) 3U CompactPCI blade with Intel Atom® processor E3845 and 4GB DDR3L-1333 soldered memory, no I/O only LEDs (Power, HDD, WDT, GP, GbE LEDs), and onboard 32GB SSD
- **cPCI-3620S/E3845/M4G**
  2-slot (8HP) 3U CompactPCI blade with Intel Atom® processor E3845 and 4GB DDR3L-1333 soldered memory, supports VGA, USB 3.0, 2x GbE XMC site on Layer-2
- **cPCI-3620T/E3845/M4G**
  2-slot (8HP) 3U CompactPCI blade with Intel Atom® processor E3845 and 4GB DDR3L-1333 soldered memory, supports VGA, USB 3.0, 2x GbE in RJ-45 and 2x GbE in MIL-STD M12 connectors, COM (RS-232/422/485), and SATA connector
- **cPCI-3620TR/E3845/M4G (available by request)**
  2-slot (8HP) 3U CompactPCI blade with Intel Atom® processor E3845 and 4GB DDR3L-1333 soldered memory, supports VGA, USB 3.0, 4x GbE in RJ-45 connectors, COM (RS-232/422/485), and SATA connector

Rear Transition Module

- **cPCI-R3610**
  8HP Rear I/O module with 2x GbE, 1x USB 2.0, VGA, 2x COM, 1x SATA 3Gb/s, 50mm depth
- **cPCI-R3610T**
  8HP Rear I/O module with 2x GbE, 1x USB 2.0, VGA, 2x COM, 1x SATA 3Gb/s, 80mm depth

Contact us for different CPU, memory and storage combinations.



cPCI-R3610T

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