cPCI-6530(BL) Series

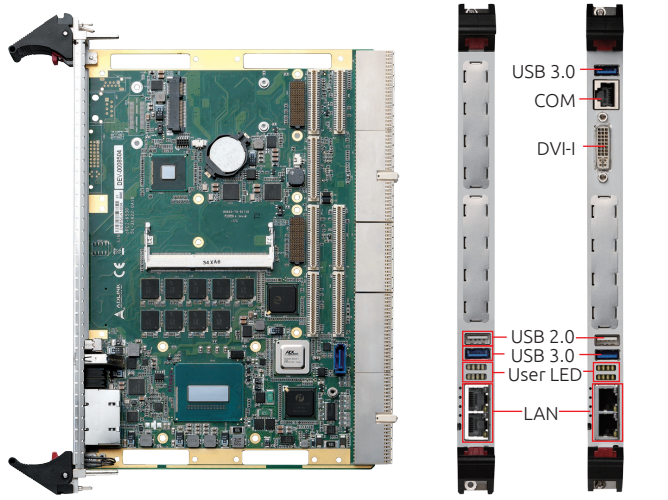
6U CompactPCI 5th/4th Generation Intel® Core™ Processor Blade with two PMC/XMC sites

Features

- Quad-core 5th/4th Generation Intel® Core™ i7 processor with ECC
- Dual channel DDR3L ECC memory, soldered and SO-CDIMM, up to 32GB
- Versatile storage: SSD, CFAST, mSATA
- Dual PMC/XMC sites
- Remote management and TPM support

CompactPCI®

EXTENDED TEMPERATURE



cPCI-6530(BL) cPCI-6530(BL)V

Specifications

Processor & System

CPU

New µFC-BGA quad-core Intel® Core™ i7-5850EQ processor, 2.7/3.4GHz, 6MB SmartCache, 47/37W TDP, Intel® Iris Pro Graphics 6200

New µFC-BGA quad-core Intel® Core™ i7-5700EQ processor, 2.6/3.4GHz, 6MB SmartCache, 47/37W TDP

µFC-BGA quad-core Intel® Core™ i7-4700EQ processor, 2.4/3.4GHz, 6MB SmartCache, 47/37W TDP

uFC-BGA dual-Core Intel® Core™ i5-4402E processor, 1.6/2.7GHz, 3MB SmartCache, 25W TDP

Chipset

Intel® QM87 Express Chipset

Memory

Dual channel DDR3L-1600 SDRAM with ECC, up to 32GB*

* With onboard 16GB memory, the overall DDR frequency will be 1067MHz

One channel in SO-CDIMM socket up to 16GB; one channel soldered onboard up to 16GB (dependent on availability of memory devices and modules)

BIOS

AMI® EFI BIOS, 8MB SPI flash memory

CompactPCI Bus

PCI 64-bit, 66MHz, 3.3V or 5V universal V(I/O)

Supports operation in system slot and in peripheral slot with CompactPCI® bus communication (Universal mode)

Standard

PICMG 2.0 CompactPCI R3.0

PICMG 2.1 Hot Swap R2.0

PICMG 2.9 System Management R1.0

PICMG 2.16 Packet Switch Backplane R1.0

Connectivity

PMC/XMC

Up to Two PMC/XMC sites

PMC1 or XMC1: 64b/33,66,133M or PCIe x8 Gen2 (space shared with I/Os & onboard drive)

PMC2 or XMC2: 64b/33,66,133M or PCIe x8 Gen2 with rear I/O

Ethernet

Three Intel® I210 Gigabit Ethernet controllers and one Intel® I217 PHY controller

Two 10/100/1000BASE-T ports on front panel with iAMT support on one port

Two 10/100/1000BASE-T ports to J3 for PICMG 2.16

Two additional 10/100/1000BASE-T ports from Intel® Ethernet controller on RTM (cPCI-R6100 series)

Graphics

Integrated in Intel® processor with up to DX 11.2 and OGL4.3

One DVI-I port on front panel

One VGA, eDP and DVI routed to rear

All graphics interfaces are independent channels

Supports three independent displays

Additional graphics MXM with AMD GPU or nVidia supporting two DVI ports on RTM (cPCI-R6500 series)

USB

Up to two USB 3.0 and one USB 2.0 ports on front panel

Six USB 2.0 ports routed to rear

PS/2

PS/2 keyboard/mouse port to rear

Serial Port

Up to three 16C550 compatible serial ports

One RJ-45 RS-232 port on front panel

Two serial ports routed to rear

Audio

High Definition Audio signals routed to rear

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Specifications

Storage

SBC

One SATA 6Gb/s direct connector for 2.5” removable drive
One mSATA socket
Optional CFAST socket by replacing 2.5” SATA drive direct connector

RTM

Up to three SATA ports
CF (x1) and SD (x1) sockets when mating with cPCI-R6100 series
*Available interfaces dependent on RTM model selected

Operating System

OS

Microsoft Windows 10 (64-bit), Windows 7/8 (32/64-bit)
Red Hat Enterprise Linux 6.4
Wind River VxWorks 6.9
(Please contact ADLINK for other OS support)

Miscellaneous

LED

Power, WDT, Hard Disk, Hot Swap and Port 80 user LED

Battery

Coin cell lithium battery onboard for RTC CMOS RAM

TPM

Version 1.2
Atmel AT97SC3204 (optional support upon request)

Watchdog Timer

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

Hardware Monitor

Monitors CPU temperature, system temperature, Vcore and DC voltages

Mechanical & Environmental

Form Factor

6U 4HP (single slot) CompactPCI
233.33mm x 160mm (LxW)
Equipped with J1, J2, J3, J4, J5 connectors

Operating Temperature

-20°C to +70°C extended temperature
-40°C to +85°C extreme extended temperature for Core™ i7 4700EQ, 5700EQ, 5850EQ CPU adjusted to 37W by cTDP

Storage Temperature

-50°C to +100°C

RH Humidity

95% non-condensing

Shock

15G peak-to-peak, 11ms duration, non-operating

Vibration

2 Grms random vibration, 5-500Hz, each axis, operating

Power Consumption

2.73A @ 3.3V, 11.65A @ 5V, total 67.26W

Weight

500.2g (cPCI-6530 with heatsink assembled)

Safety & EMI

Certification

CE/ FCC Class A

I/O Table

		GbE	USB 2.0	USB 3.0	COM	DVI	VGA	PMC/ XMC	SATA	CFast	CF	mSATA	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
cPCI-6530(BL)	Faceplate	2	1	1													
	Onboard							2	1 (7-pin)			1					
cPCI-6530(BL)V	Faceplate	2	1	2	1 (RJ-45)	DVI-I											
	Onboard							1	2	1(1)		1					
cPCI-R6002	Faceplate	2	2		1	1 (VGA signal only)											
	Onboard								2 (7-pin)								
cPCI-R6002D	Faceplate	2	4		1	1 (VGA signal only)							1	1	1		
	Onboard								3 (2x 7-pin+1x 2.5" sapce)(2)								
cPCI-R6100	Faceplate	4	4		1 (RJ-45)	1	1								1		
	Onboard								2 (7-pin)		1					1	
cPCI-R6110	Faceplate	2	4				1								1		
	Onboard								3(2)		1						
cPCI-R6120	Faceplate	2	4				1 (VGA only)										
	Onboard								2 (2.5" SATA drive onboard)								
cPCI-R65N0	Faceplate	2	2		1	2 (DVI-I, DVI-D)									1		
	Onboard				1 (Tx/Rx, 10-pin header)				3 (7-pin)				1 (10-pin)	1 (10-pin)			
cPCI-R6500	Faceplate	2	1			DVI-I DVI-D											
	Onboard								3(7-pin)								
cPCI-R6500D	Faceplate	2	1			DVI-I DVI-D											
	Onboard		1 (10-pin header)		1 (Full, 10-pin header) 1(TX/RX, 10-pin header)				3 (2x 7-pin+1x 2.5" space)				1 (10-pin header)		1 (10-pin header)		
cPCI-R6501D	Faceplate	2	2		1	DVI-I DVI-D									1		
	Onboard				1 (TX/RX, 10-pin header)				3 (7-pin)								

(1) Removable adapter design. SATA adapter by default, can be replaced with CFast adapter
(2) Two 7-pin signal connectors onboard for external HDDs and one direct connector for onboard 2.5" SATA drive. SATA direct connector can be replaced with CompactFlash adapter (DB-6920CF)

Ordering Information

Processor Blades

- **cPCI-6530BLV/5850E/M8-0**
  New
  4HP cPCI-6530BLV with Intel® Core™ i7-5850EQ and 8GB DDR3L-1600 ECC soldered memory with 2x GbE, 1x USB 2.0, 2x USB 3.0, 1x RJ-45 COM and single PMC/XMC site
- **cPCI-6530BLV/5700E/M8-0**
  New
  4HP cPCI-6530BLV with Intel® Core™ i7-5700EQ and 8GB DDR3L-1600 ECC soldered memory with 2x GbE, 1x USB 2.0, 2x USB 3.0, 1x RJ-45 COM and single PMC/XMC site
- **cPCI-6530V/4700E/M8-8**
  4HP cPCI-6530V with Intel® Core™ i7-4700EQ and 8GB DDR3L-1600 ECC soldered memory and 8GB SODIMM module with 2x GbE, 1x USB2.0, 2x USB 3.0, 1x RJ-45 COM and single PMC/XMC site
- **cPCI-6530V/4700E/M4-4**
  4HP cPCI-6530V with Intel® Core™ i7-4700EQ and 4GB DDR3L-1600 ECC soldered memory and 4GB SODIMM module with 2x GbE, 1x USB 2.0, 2x USB 3.0, 1x RJ-45 COM and single PMC/XMC site
- **cPCI-6530V/4402E/M4-0**
  4HP cPCI-6530V with Intel® Core™ i5-4402E and 4GB DDR3L-1600 ECC soldered memory with 2x GbE, 1x USB 2.0, 2x USB 3.0, 1x RJ-45 COM and single PMC/XMC site

Contact us for different CPU, memory options.

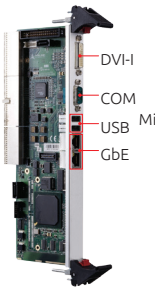
Rear Transition Modules

- **cPCI-R6002**
  4HP Rear I/O module with GbE x2, COM x2, USB x3, SATA x2, DVI-I
- **cPCI-R6002D**
  8HP Rear I/O module with 2x GbE, 2x COM, 5x USB, 2x SATA, VGA, PS/2 KB/MS
- **cPCI-R6100**
  4HP Rear I/O module with GbE x4, COM, USB x4, SATA x2, DVI, VGA, PS/2, CF, SD socket
- **cPCI-R6110**
  4HP Rear I/O module with GbE x2, COM, USB x4, SATA x3, DVI, VGA, PS/2, CF, SD socket
- **cPCI-R6120**
  8HP Rear I/O module with 2x GbE, 4x USB, 2x SATA, VGA, PS/2 KB/MS, CF, SD w/space for dual SATA drives
- **cPCI-R65N0/NV950**
  6U 8HP Rear I/O module with NVIDIA GTX950M MXM 3.0 graphics module Type A with DVI-I x1, DVI-D x1, GbE x2, USB x2, COM x1, PS/2 x1, SATA x3
- **cPCI-R6500/A8860**
  4HP Rear I/O module with AMD E8860MF MXM 3.0 graphics module with DVI-I x1, DVI-D x1, GbE x2, USB x1
- **cPCI-R6500D**
  8HP Rear I/O module with AMD X3AE676-AN MXM 3.0 graphics module with DVI-I x1, DVI-D x1, GbE x2, USB x2, COM x2, PS/2 x1, audio, SATA x3
- **cPCI-R6501D**
  8HP Rear I/O module with AMD X3AE676-AN MXM 3.0 graphics module with DVI-I x1, DVI-D x1, GbE x2, USB x1, 2.5" SATA drive space, SATA x3 (one reserved for SATA drive)

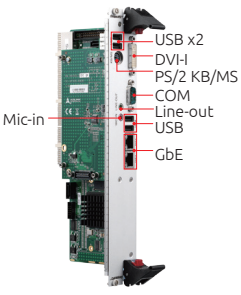
See 6U RTM selection guide for more options.

Accessory

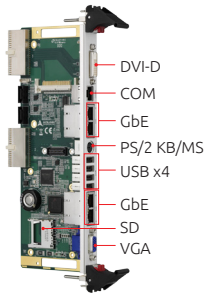
- **DB-CFast**
  CFast socket adapter board with screws for cPCI-6530



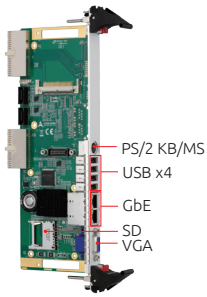
cPCI-R6002



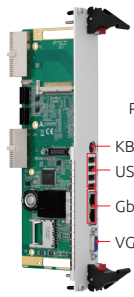
cPCI-R6002D



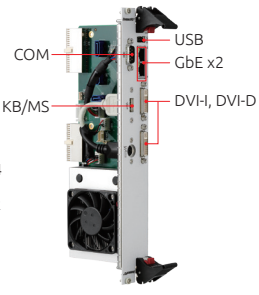
cPCI-R6100



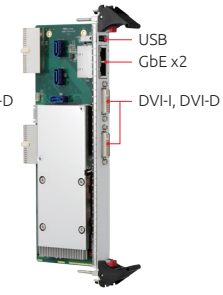
cPCI-R6110



cPCI-R6120



cPCI-R65N0



cPCI-R6500

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