

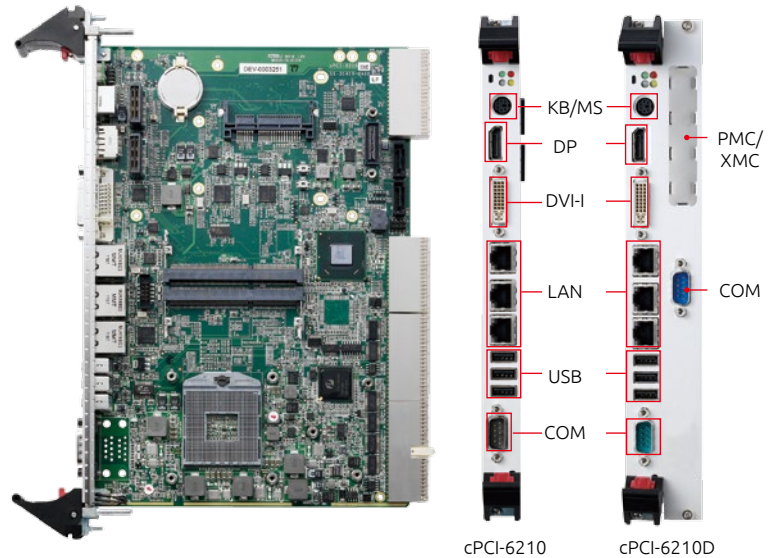
# cPCI-6210 Series

## 6U CompactPCI® Quad-Core 2nd Generation Intel® Core™ i7 Processor Host/Peripheral Blade

### Features

- Quad-core Intel® Core™ i7-2710QE processor @ 2.1GHz
- DisplayPort, DVI and VGA graphics interfaces
- SATA 6 Gb/s and CFast storage interfaces
- PCI Express x8 XMC slot in 8HP version
- Remote management support

**CompactPCI®**



### Specifications

#### Processor & System

##### CPU

- uFC-PGA Intel® Core™ i7-2710QE Processor 2.1GHz (Turbo boost to 3GHz), 6MB LLC, 45W TDP (4C)
- uFC-PGA Intel® Core™ i5-2510E Processor 2.5GHz (Turbo boost to 3.2GHz), 3MB LLC, 35W TDP (2C)
- uFC-PGA Intel® Celeron® B810 Processor 1.6GHz, 2MB LLC, 35W TDP (2C)
- Supports Intel® Hyper-Threading and Turbo Boost Technology for Core™ i5/i7 processors

##### Chipset

Intel® QM67 PCH

##### Memory

Dual channel DDR3-1066/1333/1600 SDRAM via two SODIMM sockets, up to 16GB capacity (dependent on available memory modules)

##### BIOS

AMI® EFI BIOS, 64M bit SPI flash memory

##### CompactPCI Bus

PCI 64 bit/ 66 MHz, 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 2.0 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

One PCI 32 bit, 33/66MHz PMC or PCIe x8 XMC site (8HP only)

##### Ethernet

Three PCI Express Intel® 82574L GbE and one Intel® 82579LM PHY controllers for four 10/100/1000BASE-T ports

Three RJ-45 ports on front panel; two to J3 for PICMG 2.16 (one switched from front panel)

Supports KVM Redirection and SOL

##### Graphics

Integrated in Intel® Core™ processor, 3D engine

One DVI-I (digital+analog) port on front panel, analog RGB is switchable to rear, supports up to QXGA 2048 x 1536 pixels @75Hz, 32 bits

One dual mode DisplayPort on front panel, supports up to 2560 x 1600 pixels @ 60Hz; DVI, VGA and HDMI interfaces are available by adapter cables

One DVI port routed to rear

Up to four independent displays

##### USB

Up to three USB 2.0 front panel ports

Six USB ports routed to rear

##### PS/2

Front panel PS/2 keyboard/mouse port

##### Serial Port

Up to two serial ports on front panel (1 for 4HP, 2 for 8HP)

Supports RS-232/422/485 on COM1

Additional two serial ports routed to rear

##### Audio

High Definition Audio signals routed to rear

# Specifications

## • Storage

### SBC

One SATA 6 Gb/s direct connector for 2.5" onboard HDD/SSD  
One SATA 6 Gb/s signal connector (7-pin) on board  
Onboard CFast socket on SATA 3 Gb/s

### RTM

Up to 3 SATA ports  
CF (x1) and SD (x1) sockets  
Eight SAS ports by LSI SAS1068E with hardware RAID by two mini SAS x4 connectors

## • Operating System

### OS

Microsoft Windows® XP  
Microsoft Windows® 7  
RedHat Enterprise Linux 6  
Fedora 14  
Wind River VxWorks 6.9, 6.8, 5.4  
(Please contact ADLINK for other OS support)

## • Miscellaneous

### LED

Power, WDT, Hard Disk, Hot Swap

### Battery

Coin cell lithium battery onboard for RTC CMOS RAM

### TPM

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/8HP CompactPCI®  
233.33mm x 160mm (LxW)  
Equipped with CompactPCI connectors J1, J2, J3, J5

### Operating Temperature

0°C to +60°C  
-40°C to +70°C extended temperature (cPCI-ET6210 models)  
-40°C to +85°C extreme extended temperature  
(CPUs with 35W TDP, 8HP only)

### Storage Temperature

-40°C to +85°C

### RH Humidity

95% non-condensing

### Shock

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

### Vibration

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

### Power Consumption\*

1.35A@3.3V, 7.9A@5V, total 44W for Core i5-2510E  
1.36A@3.3V, 13.56A@5V, total 72.3W for Core i7-2710QE  
\*100% CPU loading under Windows XP with Turbo Boost and Hyper-Threading enabled

### EMI/EMC

EN 55022 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3

## I/O Table

		GbE	USB 2.0	COM	DVI	VGA	DP	PMC/ XMC	SATA	CFast	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC																
cPCI-6210	Faceplate	3	3	1 <sup>(1)</sup> (DB-9)	1 (DVI-I)		1							1		
	Onboard								2 <sup>(3)</sup>	1						
cPCI-6210D	Faceplate	3	3	2 <sup>(1)</sup> (DB-9)	1 (DVI-I)		1							1		
	Onboard							1	2 <sup>(3)</sup>	1						
RTM																
cPCI-R6100	Faceplate	4	4	1 (RJ-45)	1	1								1		
	Onboard								2 (7-pin)		1 <sup>(6)</sup>				1	
cPCI-R6110	Faceplate	2	4			1								1		
	Onboard								3 <sup>(5)</sup>		1 <sup>(6)</sup>				1	
cPCI-R6200	Faceplate	2	5	1 (DB-9)	1 (DVI-I)							1	1	1		4 (SFF-8088)
	Onboard		1 (5-pin)	1 <sup>(4)</sup> (10-pin)					3 <sup>(5)</sup>		1 <sup>(5)</sup>					4 (SFF-8087)
cPCI-R6500D	Faceplate	2	1		2 (DVI-I+DVI-D)											
	Onboard		1 (10-pin)	2 <sup>(2)</sup>					3 <sup>(7)</sup> (7-pin)				1 (10-pin)	1 (10-pin)		
cPCI-R65N0	Faceplate	2	1	1	2									1		
	Onboard		1	1 (Tx/Rx)					3 (7-pin)				1(10-pin)			

(1) RS-232/422/485 selectable

(2) One RS-232/422/485 selectable, one Tx, Rx signals only

(3) One for onboard 2.5" SATA, one 7-pin connector for external HDD

(4) Tx, Rx signals only

(5) Two 7-pin signal connectors onboard for external HDDs and one direct connector for onboard 2.5" SATA HDD.

SATA direct connector can be replaced by CompactFlash adapter (DB-6920CF) for CF slot

(6) Converted from USB

(7) Space is reserved onboard for one 2.5" SATA drive.

## Ordering Information

### Processor Blades

- **cPCI-6210/710Q/M8G**  
4HP cPCI-6210 with Intel® i7-2710QE processor and 2x 4GB DDR3-1333 SODIMM with GbE x3, COM, DP, DVI-I, USB x3, SATA x2, PS/2 KB/MS, CFast
- **cPCI-6210/510E/M4G**  
4HP cPCI-6210 with Intel® i5-2510E processor and 2x 2GB DDR3-1333 SODIMM with GbE x3, COM, DP, DVI-I, USB x3, SATA x2, PS/2 KB/MS, CFast
- **cPCI-6210D/710Q/M8G**  
8HP cPCI-6210 with Intel® i7-2710QE processor and 2x 4GB DDR3-1333 SODIMM with GbE x3, COM x2, DP, DVI-I, USB x3, SATA x2, PS/2 KB/MS and PMC/XMC, CFast

### Rear Transition Modules

- **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, USB x4, SATA x3, VGA, PS/2, CF, SD socket
- **cPCI-R6200**  
8HP Rear I/O module with GbE x2, USB x6, DVI-I, SATA x3, Mic-in, Line-out, PS/2 KB/MS, SAS x8
- **cPCI-R65N0**  
8HP 6U CompactPCI Rear Transition Module with NVIDIA GeForce GTX660M MXM 3.0 module, supports DVI-I, DVI-D, USB 2.0, 2x GbE, COM (RS-232/422/485), PS/2 KB/MS
- **cPCI-R6500D**  
2-slot 8HP cPCI-R6500DAC with AMD Radeon E6760 MXM module, 2x GbE, 1x DVI-I, 1xDVI-D, 1x USB, , 3x SATA and 10-pin KB/MS, audio, 2x COM headers
- **cPCI-R65N0**  
8HP 6U CompactPCI Rear Transition Module with NVIDIA GeForce GTX660M MXM 3.0 module, supports DVI-I, DVI-D, USB 2.0, 2x GbE, COM (RS-232/422/485), PS/2 KB/MS

See 6U RTM selection guide for more options

## 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, HDD and CFast combinations.

See 6U RTM selection guide for more options.

