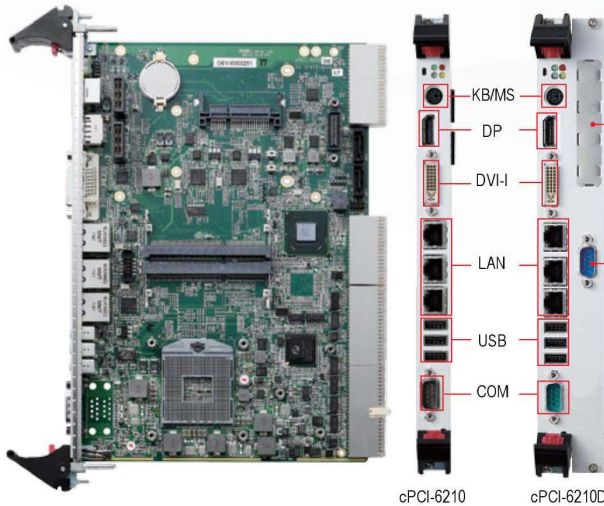


# cPCI-6210 Series

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

6U cPCI Blades



## 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 Additional discrete ATI/AMD E4690 GPU supporting two DVI-I ports on RTM cPCI-R6700 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

### 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 L5SISAS1068E 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
<b>SBC</b>																
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						
<b>RTM</b>																
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>(6)</sup>					4 (SFF-8087)
cPCI-R6700D	Faceplate	2	3	1 (DB-9)	2 (DVI-I)									1		
	Onboard		2	1 <sup>(4)</sup> (10-pin)					3 <sup>(7)</sup> (7-pin)				1 (10-pin)			
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

Model Number	Description/Configuration
<b>Processor Blades</b>	
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
<b>Rear Transition Modules</b>	
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-R6700D	8HP Rear I/O module with discrete GPU ATI/AMD E4690, DVI-I x2, GbE x2, USB x3, COM x2, PS/2, SATA x3, audio
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

Note: All specifications are subject to change without further notice.

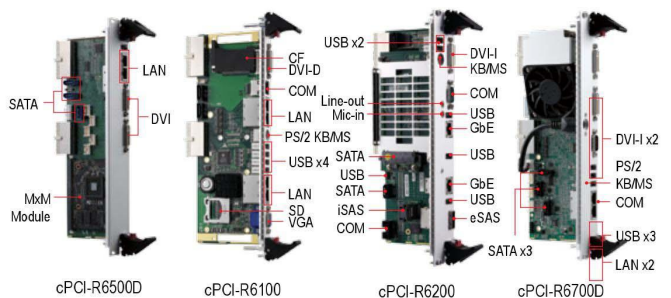
cPCI-R65N0 8HP 6U CompactPCI Rear Transition Module with NVIDIA GeForce GTX660M MXM 3.0 module, supports DVI-I, DVI-D, USB 2.0, 2x GbE, COM (RS-232/422/485), PS/2 KB/MS

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.



cPCI-R6500D

cPCI-R6100

cPCI-R6200

cPCI-R6700D