

cPCI-6210 Series

6U CompactPCI® Quad-Core 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
- Compliant with PICMG 2.0, 2.1, 2.9, 2.16

**EXTENDED
TEMPERATURE**

Specifications

Processor & System

CPU	uFC-PGA Intel® Core™ i7-2710QE Processor 2.1GHz (Turbo boost to 3GHz), 6MB L2 cache, 45W TDP uFC-PGA Intel® Core™ i7-2510E Processor 2.5GHz (Turbo boost to 3.2GHz), 3MB L2 cache, 35W TDP Supports Intel® Hyper-Threading and Turbo Boost Technology
Chipset	Intel® QM67 PCH
RAM	Dual channel DDR3-1067/1333 SDRAM via two SODIMM sockets, up to 16GB capacity (dependent on available memory modules)
BIOS	AMI® EFI BIOS, 64Mbit SPI flash memory
CompactPCI Bus	PCI 64bit/ 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)
Standard	PICMG 2.0 CompactPCI R3.0 PICMG 2.1 Hot Swap R2.0 PICMG 2.9 System Management R1.0 (4HP version only) PICMG 2.16 Packet Switch Backplane R1.0 (4HP version only)

Connectivity

PMC/XMC	One PCI 32bit, 33/66MHz PMC site or PCI Express x8 XMC site (8HP version only)
Ethernet	Three PCI Express Intel® 82574L Gigabit Ethernet controllers and one Intel® 82579LM PHY controller 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)
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 2048x1536 pixels @75Hz, 32bits One DisplayPort on front panel, supports up to 2560x1600 pixels @60Hz; DVI, VGA and HDMI interfaces are available by adapter cables One DVI port routed to rear Dual independent displays, maximum three displays with two different contents
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 three serial ports, one for 4HP and two for 8HP version Two RS-232/422/485 selectable ports and one RS-232 on front panel 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 One SATA 6 Gb/s signal connector (7-pin) on board, additional SATA 3Gb/s signal connector on 8HP version Onboard CFast socket on SATA 3Gb/s
RTM	Up to 3 SATA ports CF (x1) and SD (x1) sockets One internal and one external 68-pin SCSI connector by LSI53C1020 SCSI Ultra320 controller (RAID 1) 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 Wind River VxWorks (Please contact ADLINK for other OS support)
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Miscellaneous

LED	Power, WDT, Hard Disk, General Purpose
Battery	Coin cell lithium battery onboard for RTC CMOS RAM
TPM	TBD
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) cPCI-6210: equipped with CompactPCI connectors J1, J2, J3, J5 cPCI-6210D: equipped with CompactPCI connectors J1, J2
Operating Temperature	0°C to 60°C -20°C to 70°C extended temperature (optional, dual core CPU 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	TBD

Safety & EMI

Certification	CE/ FCC
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I/O Table

		GbE	USB 2.0	COM	DVI	VGA	DP	PMC/XMC	SATA	SCSI	CFast	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC																	
cPCI-6210	Faceplate	3	3	1 ⁽¹⁾ (DB-9)	1 (DVI-I)		1								1		
	Onboard								2 ⁽³⁾		1						
cPCI-6210D	Faceplate	3	3	3 ⁽²⁾ (DB-9)	1 (DVI-I)		1								1		
	Onboard						1	1	3 ⁽⁴⁾		1						
RTM																	
cPCI-R6000	Faceplate	2	2	1 (DB-9)	1 (DVI-I)					1							
	Onboard		1 (5-pin)	1 ⁽⁵⁾ (10-pin)					2	1							
cPCI-R6000D	Faceplate	2	4	1 (DB-9)	1 (DVI-I)								1	1	1		
	Onboard		1 (5-pin)	1 ⁽⁵⁾ (10-pin)					3 ⁽⁶⁾			1 ⁽⁶⁾					
cPCI-R6100	Faceplate	4	4	1 (RJ-45)	1	1									1		
	Onboard								2 (7-pin)			1 ⁽⁷⁾				1	
cPCI-R6110	Faceplate	2	4			1									1		
	Onboard								3 ⁽⁶⁾			1 ⁽⁶⁾				1	
cPCI-R6200	Faceplate	2	5	1 (DB-9)	1 (DVI-I)								1	1	1		4(SFF-8088)
	Onboard		1 (5-pin)	1 ⁽⁵⁾ (10-pin)					3 ⁽⁶⁾			1 ⁽⁶⁾					4(SFF-8087)

(1) RS-232/422/485 selectable

(2) Two RS-232/422/485 selectable ports and one RS-232 port

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

(4) One for onboard 2.5" SATA, two 7-pin connectors for external HDDs

(5) Tx, Rx signals only

(6) 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

(7) Converted from USB

Ordering Information

Model Number	Description/Configuration
CPU Board	
cPCI-6210/710Q/M8G	4HP cPCI-6210 with Intel® i7-2710QE processor and 2x 4GB DDR3-1066/1333 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® i7-2510E processor and 2x 2GB DDR3-1066/1333 SODIMM with GbE x3, COM, DP, DVI-I, USB x3, SATA x2, PS/2 KB/MS, CFast
cPCI-6210D/510E/M2G	8HP cPCI-6210 with Intel® i7-2510E processor and 2x 1GB DDR3-1066/1333 SODIMM with GbE x3, COM x3, DP, DVI-I, USB x3, SATA x3, PS/2 KB/MS and PMC
Rear Transition Module	
cPCI-R6000	4HP Rear I/O module with GbE x2, COM x2, USB x3, SATA x2, SCSI, DVI-I
cPCI-R6000D	8HP Rear I/O module with GbE x2, COM x2, USB x5, Floppy, SATA x2, SCSI, VGA, PS/2 and Mic-in, Line-out
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, 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

Accessory

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.