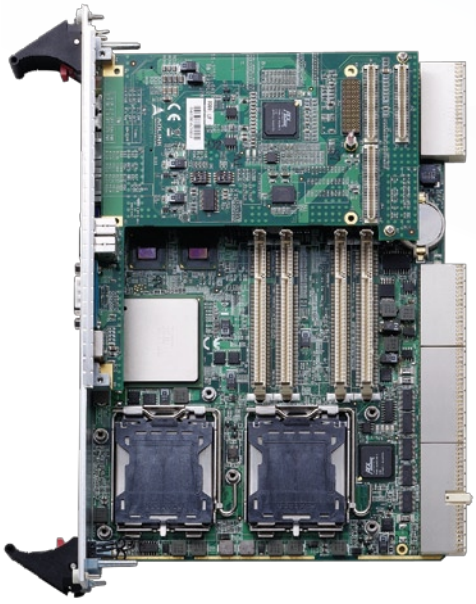
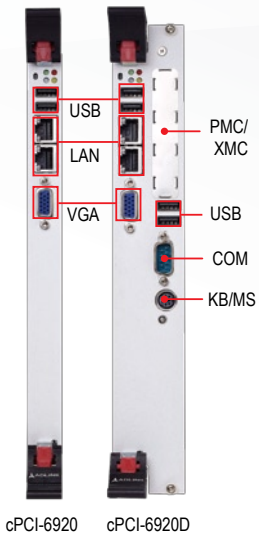
cPCI-6920 Series

6U CompactPCI® Dual Quad-Core Intel® Xeon® Processor Blade





Features

- 2x Quad-Core/Dual-Core Intel® Xeon® LV Processors
- Four SO-RDIMMs for up to 16GB REG/ ECC memory
- Four PCI-Express Gigabit Ethernet ports
- 64bit/66MHz PMC/PCI-Express x8 XMC
- Onboard SATA HDD, CompactFlash and USB NAND flash storage

Specifications

Processor & System

CPU	FC-LGA771 Quad-Core Intel® Xeon® Processor 2.13GHz (L5408), 12MB L2 cache, 1066MHz FSB
	FC-LGA771 Dual-Core Intel® Xeon® Processor LV 2.13GHz (5138), 4MB L2 cache, 1066MHz FSB
	Passive heatsink
	Single processor on 4HP cPCI-6920
	Dual processors on 8HP cPCI-6920D
Chipset	Intel® 5100 MCH and ICH9R I/O Controller Hub
RAM	Dual channel DDR2-667 REG/ECC, up to 16GB
	4HP: Two 200-pin SO-RDIMM sockets
	8HP: Four 200-pin SO-RDIMM sockets
BIOS	AMIBIOS®8 16Mbit SPI flash memory
CompactPCI Bus	64bit/66MHz CompactPCI® Bus, V(I/O) 3.3V only
	Supports operation in system slot as system master or in peripheral slot as stand-alone server blade without connectivity to CompactPCI® bus
PICMG Standards	PICMG® 2.0 CompactPCI® R3.0
	PICMG® 2.1 Hot Swap R2.0
	PICMG® 2.9 System Management v.1.5 R1.0
	PICMG® 2.16 Packet Switch Backplane R1.0

Connectivity

PMC/XMC	PCI 64bit/66MHz PMC or PCI-Express x8 XMC site, 3.3V PCI signaling (8HP version only)
Ethernet	Two PCI-Express Intel® 82571EB dual port GbE controllers
	Two 10/100/1000BASE-T front panel ports
	Two 10/100/1000BAST-T PICMG® 2.16 ports
	Two additional 10/100/1000BASE-T ports from Intel® 82576EB on RTM cPCI-R6100
Graphics	AMD ATI ES1000 on PCI 32bit/33MHz bus
	DDR2-533 64MB graphics memory
	Analog RGB up to 32bit 1600x1200 @60Hz refresh rate
	DB-15 VGA ports on front and rear panels mirror display
USB	Up to four USB 2.0 ports on front panel
	Six USB 2.0 ports routed to rear
PS/2	One PS/2 Keyboard/Mouse Combo Port on front panel or rear panel (8HP version only)
Serial Port	One DB-9 16C550 compatible RS-232 port on front panel (8HP version only)
	Two serial ports routed to rear

Storage

SBC	Built-in 4GB USB NAND flash onboard
	Removable CompactFlash socket onboard
	Optional SATA port for 2.5" HDD direct mounting
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)
	Onboard Floppy pin header
	Eight SAS ports by LSISAS1068E with hardware RAID by two mini SAS x4 connectors
	*Available interfaces dependent on RTM model selected

Operating System

OS	Microsoft Windows® XP Professional
	Microsoft Windows® Server 2003
	Fedora™ 8
	VxWorks 6.6

Miscellaneous

LED	Power, WDT, Hot Swap, Hard Disk
Battery	Coin cell lithium battery onboard for RTC CMOS RAM
WatchDog Timer	System Reset and NMI, with Programmable Interval, 1-255 seconds or minutes
Hardware Monitor	Monitors CPU & system temperatures, Vcore and DC voltages

Mechanical & Environmental

Form Factor	6U 4HP/ 8HP CompactPCI®, 233.33mm x 160mm (LxW)
Operating Temp.	0°C to +55°C with forced air flow
Storage Temp.	-40°C to +85°C
Rel. Humidity	90% @60°C (non-condensing)
Shock	15 G peak to peak, 11ms duration, non-operating
Vibration	1.88 Grms, 5-500 Hz, each axis, operating
	IEC68-2-64 standard
Power Consumption	Single Quad-Core L5408, 4x 2GB SO-RDIMMs, 60GB SATA HDD onboard under Windows XP with 100% CPU loading

	Current (A)	Power (W)
5V	13.9	69.5
3.3V	11.9	39.3
Total		108.8

Weight	Net weight 1401.5g with heatsink (cPCI-6920D/D408/M8G)

Safety & EMI

Certifications	CE/FCC Class A

I/O Table

		GbE	USB 2.0	COM	VGA	PMC/ XMC	SATA	SCSI	CF	Mic-in	Line-out	PS/2 KB/MS	FDD	SD	SAS
SBC															
cPCI-6920	**Faceplate**	2	2		1										
	Onboard						1(1)		1(1)						
cPCI-6920D	**Faceplate**	2	4	1 (DB-9)	1										
	Onboard					1	1(1)		1(1)			1			
RTM															
cPCI-R6000	**Faceplate**	2	2	1 (DB-9)	1			1							
	Onboard		1 (5-pin)	1(2) (10-pin)			2 (7-pin)	1					1		
cPCI-R6000D	**Faceplate**	2	4	1 (DB-9)	1			1		1	1	1			
	Onboard		1 (5-pin)	1(2) (10-pin)			3(3)	1	1 (optional)(3)				1		
cPCI-R6100	**Faceplate**	4	4	1 (RJ-45)	1							1			
	Onboard						2 (7-pin)		1(4)					1	
cPCI-R6110	**Faceplate**	2	4		1							1			
	Onboard						3(3)		1(4)					1	
cPCI-R6200	**Faceplate**	2	5	1 (DB-9)	1					1	1	1			4 (SFF-8088)
	Onboard		1 (5-pin)	1(2) (10-pin)			3(3)		1 (optional)(3)						4 (SFF-8087)

(1) SATA connector and CF socket are removable adapters, share the same space and cannot be installed simultaneously.
(2) Tx, Rx signals only
(3) Two 7-pin signal connectors onboard for external HDDs and one direct connector for onboard 2.5" SATA HDD. Optional CompactFlash slot is supported by replacing SATA connector adapter with Compact Flash adapter. SATA HDD and CF cannot be used simultaneously.
(4) Converted from USB

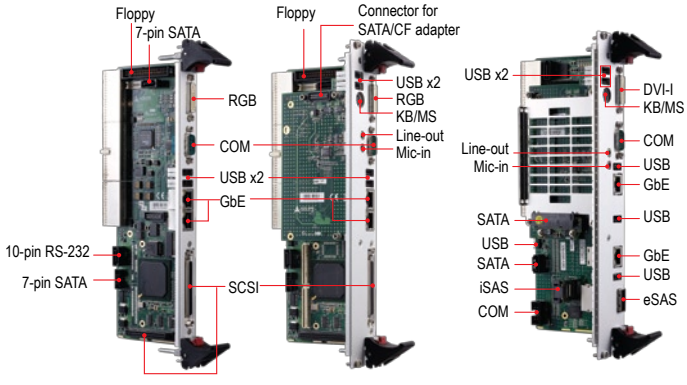
Ordering Information

Model Number	Description/Configuration
CPU Board	
cPCI-6920/S408/M2G	4HP cPCI-6920 with 1 x Quad-Core Xeon® 2.13GHz (L5408), 2GB SO-RDIMM
cPCI-6920/S408/M4G	4HP cPCI-6920 with 1 x Quad-Core LV Xeon® 2.13GHz (L5408), 2x 2GB SO-RDIMM
cPCI-6920D/S408/M4G	8HP cPCI-6920D with 1 x Quad-Core Xeon® 2.13GHz (L5408), 2x 2GB SO-RDIMM
cPCI-6920D/D408/M8G	8HP cPCI-6920D with 2 x Quad-Core Xeon® 2.13GHz (L5408), 4x 2GB SO-RDIMM
cPCI-6920D/D138/M2G	8HP cPCI-6920D with 2 x Dual-Core Xeon® 2.13GHz (5138), 2GB SO-RDIMM
CF socket and SATA connector adapters are included in package	
Rear Transition Module	
cPCI-R6000	4HP Rear I/O module with GbE x2, COM x2, USB x3, Floppy, SATA x2, SCSI, VGA
cPCI-R6000D	8HP Rear I/O module with GbE x2, COM x2, USB x5, Floppy, SATA x3, 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
cPCI-R6110	4HP Rear I/O module with GbE x2, COM, USB x4, SATA x3, VGA, PS/2, CF, SD
cPCI-R6200	8HP Rear I/O module with GbE x2, USB x4, DVI-I, SATA x3, Mic-in, Line-out, PS/2 KB/MS, SAS x8

Mezzanine

DB-CF-SA	CompactFlash socket adapter kit for cPCI-R6000D, cPCI-R6200

Contact your ADLINK representative for different CPU, memory combinations.



cPCI-R6000 cPCI-R6000D cPCI-R6200