

cPCI-6910 Series

6U CompactPCI® Dual-Core™ Intel® Xeon® Processor LV / ULV Universal Blade❖



6U CompactPCI® universal board cPCI-6910 incorporates Dual Core™ Intel® Xeon® processor. The latest Intel® Dual core™ architecture can not only effectively provide higher performance, but efficiently lower the power consumption while executing multi task at the same time. The server grade chipset Intel® E7520 and 6300ESB is also adopted. For the applied device regarding large data requiring and critical tasks dealing, cPCI-6910 supports the latest Serial Attached SCSI (SAS) interface to make the whole storage components as a total solution. Besides, cPCI-6910 also provides one PMC slot on 64-bit/66 MHz bus, which let cPCI-6910 more versatile to extend I/O interface.

Features

- Supports Single Dual-Core™ Intel® Xeon® LV or ULV processors
- Front Side Bus 667 MHz
- Up to 2 GB DDR2 400MHz soldered SDRAM with ECC
- Supports 4 Gigabit Ethernet ports on PCI-Express® bus
- Up to 4 USB 2.0 ports
- One 64-bit/66 MHz PMC slot
- Multiple storage interfaces: Serial ATA, IDE, CF, Serial Attached SCSI, SCSI
- PICMG® 2.0, 2.1, 2.9, 2.16 compliant

Ordering Information

cPCI-6910/DCX20/M2G	6U cPCI Dual-Core™ Xeon® LV 2.0 GHz blade with 2 GB DDR2 ECC/REG soldered RAM with SATA and IDE adaptor boards
cPCI-6910/DCX20/M1G	6U cPCI Dual-Core™ Xeon® LV 2.0 GHz blade with 1 GB DDR2 ECC/REG soldered RAM with SATA and IDE adaptor boards
cPCI-6910/DCX16/M2G	6U cPCI Dual-Core™ Xeon® ULV 1.66 GHz blade with 2 GB DDR2 ECC/REG soldered RAM with SATA and IDE adaptor boards
cPCI-6910/DCX16/M1G	6U cPCI Dual-Core™ Xeon® ULV 1.66 GHz blade with 1 GB DDR2 ECC/REG soldered RAM with SATA and IDE adaptor boards
cPCI-6910/DXL16/M2G	6U cPCI Dual-Core™ Xeon® LV 1.66 GHz blade with 2 GB DDR2 ECC/REG soldered RAM with SATA and IDE adaptor boards
cPCI-6910/DXL16/M1G	6U cPCI Dual-Core™ Xeon® LV 1.66 GHz blade with 1 GB DDR2 ECC/REG soldered RAM with SATA and IDE adaptor boards
cPCI-R6910	6U cPCI Rear I/O Board for cPCI-6910 with SATA and SAS adaptor boards
cPCI-R6911	6U cPCI Rear I/O Board for cPCI-6910 with two GbE, two USB, COM, SATA, CF, IDE and SCSI
DB-6910CF	CF adaptor board for cPCI-6910

Specifications

CPU / Chipset / RAM

CPU	Single Micro FCPGA Dual-Core Intel® Xeon® Processor (Sossaman) in 65 nm process LV: 2.0 GHz, 2 MB L2, 31W ; 1.66 GHz, 2 MB L2, 15 W ULV: 1.66 GHz, 2 MB L2, 15 W
FSB	667 MHz
Chipset	Intel® E7520 with 6300ESB
RAM	Up to 2 GB soldered DDR2 400 registered SDRAM with ECC (larger density depends on the process technology of SDRAM)

Bus

CompactPCI® Standards	PICMG® 2.0 R3.0, PICMG® 2.1 R2.0, PICMG® 2.9 R1.0, PICMG® 2.16 R1.0
CompactPCI® Bus	64-bit/66 MHz CompactPCI® Bus Operating in system slot or peripheral slot

Note: cPCI-6910 can not work on the peripheral slot with CT bus backplane(H.110)

BIOS

Chip	Award-Phoenix 4 Mb flash memory
Features	Intel® PXE pre-boot on Ethernet Remote Console Intel® Speed Step

I/O Interfaces

Display	ATI ES1000 controller on PCI™ bus, up to 250 MHz memory speed with 2D Graphics accelerator
Ethernet	Four Gigabit Ethernet ports , 2 on the front panel, and the other 2 on the rear panel (PICMG® 2.16) with Intel 82571EB PCI-Express® Controllers
IDE	One channel for 2.5" HDD on-board, the other channel for CompactFlash® or 40 pin IDE connector on RTM
Serial ATA	Supports two-Channel SATA devices, one on the front, one on the rear
SAS	Support one Channel SAS device on RTM
PMC	One PMC slot on PCI 64-bits/66 MHz bus
Serial Port	One RS-232 COM port on the front, one RS-232 COM port on the rear
KB/MS	One PS/2 Keyboard/Mouse Combo connector
SCSI	LSI Ultra-320 on RTM, support hardware RAID 1
CF	One CF socket on RTM
USB	USB 2.0, two ports on front panel, 2 on the rear panel
Front Panel I/Os	COM1 (RS-232), PS2 KB & MS (combo), VGA, two USB, two Gigabit Ethernet
Onboard Connectors	PMC, SATA/ IDE/CF
Rear Panel I/O	COM2 (RS-232), two Gigabit Ethernet, two USB, SCSI

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Other Features

Hardware Monitoring	Monitoring CPU temperature, FAN speed, system temperature, Vcore and DC voltages
Watchdog Timer	Two stage, System Reset and NMI, with Programmable interval, 0-255 sec.
Operation Systems	Compatible with Microsoft® Windows® 2000, Windows® Server® 2003, Windows® XP, Red Hat® Fedora® core 6, Linux® AS 3 & 4 (other OS please contact ADLINK for availability)

Mechanical and Environmental

Form Factor	6U CompactPCI®
Dimensions	233.33 mm x 160 mm (L x W), 1 slot (4HP) wide
Operating Temp.	0°C to +70°C with ULV processor 0°C to +55°C with LV processor Extended temperature optional
Storage Temp.	0°C to +80°C
Shock	15 G peak-to-peak, 11 ms duration, non-operation
Vibration	Non-operation: 1.88 Grms, 5-500 Hz, each axis Operation: 0.5 Grms, 5-500 Hz, each axis
Measured Power Consumption	cPCI-6910 with 2 MB SDRAM max 40 W at ULV 1.66 GHz max 44 W at LV 1.66 GHz max 49 W at LV 2.0 GHz
Certificate or Test	CE, FCC class A//

Peripheral Connectivity

I/O	cPCI-6910		RTM (cPCI-R6910)		RTM (cPCI-R6911)	
	Face-plate	On-Board	Face-plate	On-Board	Face-plate	On-Board
Serial Port	Y	--	Y (J5)	--	Y (J5)	--
USB	Y x 2	--	Y (J5) x 2	--	Y (J5) x 2	--
Gigabit Ethernet	Y x 2	--	Y (J3) x 2 (2.16)	--	Y (J3) x 2 (2.16)	--
SCSI	--	--	--	--	Y (J3)	Y (J3)
PS/2 Keyboard/Mouse	Y	--	--	--	--	--
VGA	Y	--	--	--	--	--
IDE	--	Y (44-pin)*	--	--	--	Y (J4,40-pin)
Compact Flash®	--	Y*	--	Y	--	Y
SATA	--	Y*	--	Y(J5)*	--	Y (J5)
SAS	--	--	Y (J5)*	--	--	--
PMC	Y	--	--	--	--	--
General Purpose LED	Y	--	--	--	--	--
Reset button	Y	--	--	--	--	--

* Removable adapter design

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