

# cPCI-6860A Series

6U CompactPCI Dual Low Voltage Intel® Xeon® Processor Host SBC



The cPCI-6860's dual Low Voltage Intel® Xeon® processor, quad Gigabit Ethernet ports and Ultra-320 SCSI interface combine to provide the highest performance computing solution available today. As a 32/64-bit, 33/66MHz CompactPCI system board, the cPCI-6860A series supports PICMG 2.16 packet switching backplane for high-end computing servers, telecommunication computers, and mission-critical applications.

## Features

- PICMG 2.16 CompactPCI Packet Switching Backplane Compliant
- Supports Dual 1.6/2.0/2.4GHz Low Voltage Intel® Xeon® Processor
- Up to 4GB DDR 266 ECC Registered Memory
- 64-bit/66MHz CompactPCI bus
- Up to Quad 10/100/1000Mbps Ethernet ports with single 10/100Mbps port
- Supports Ultra-160/320 SCSI on RTM
- Supports Intel pre-boot execution environment (PXE) for remote boot

## Ordering Information

cPCI-6860A/DX24/M1G	cPCI-6860A with Dual 2.4GHz LV Xeon CPU and 2 x 512MB DDR SDRAM
cPCI-6860A/DX24/M2G	cPCI-6860A with Dual 2.4GHz LV Xeon CPU and 2 x 1GB DDR SDRAM
cPCI-R6860A	Rear I/O Transition Module for cPCI-6860A with Ultra-320 SCSI and extra dual GbE
cPCI-R6860L	Passive Rear I/O Transition Module for cPCI-6860A

Note 1: All front boards come with specially designed heat-pipe copper-made heat-sink  
 Note 2: Contact us for more CPU and memory options

## Specifications

### CPU / Chipset / RAM

CPU	Dual Low Voltage Intel® Xeon® 1.6/2.0/2.4GHz with 512KB L2 cache Single normal Xeon 2.4/2.8GHz with 512KB L2 cache
FSB	400/533MHz
Chipset	Intel® E7501 with ICH3-S and P64H2
RAM	Two 184-pin DIMM sockets, up to 4GB Registered ECC DDR-200/266 memory

### Bus

Standards	PICMG 2.0 R3.0, PICMG 2.1 R2.0, PICMG 2.16 R1.0
CompactPCI Bus	Intel® 21154BE 64-bit/66MHz PCI to PCI bus bridge

### BIOS

Chip	Award 4Mb flash memory
Features	Intel® PXE pre-boot on Ethernet Serial Console

### I/O Interfaces

Display	ATI RageXL with 8MB VRAM, supports up to SXGA (1280 x 1024) graphics
Ethernet	Dual Gigabit Ethernet ports by Intel® 82546EB, support front panel I/O, rear I/O and PICMG 2.16 Additional dual Gigabit Ethernet ports by Intel® 82546EB on RTM (cPCI-R6860A and cPCI-R6860) Single 10/100Mbps Ethernet ports by Intel 82562EM, front panel I/O
IDE	ATA-100, dual channels, built-in 2.5" HDD housing and CF socket on RTM
SCSI	LSI Ultra-320 on RTM
USB	USB 1.1, 2 ports on front panel, 2 ports on RTM
Front Panel I/Os	COM1 (RS-232), PS2 KB & MS (combo), VGA, 10/100 LAN x 1, Gigabit LAN x 2, USB x 2
Backplane I/Os (rear I/O)	J3: KB, MS, FDD, IDE1, LAN1 & 2 (PICMG 2.16), Buzzer, COM2, USB x 1 J4: COM3 (management), IDE2, USB x 1, VGA, hub-link

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## 6U CompactPCI Dual Low Voltage Intel® Xeon® Processor Host SBC

### Mechanical and Environmental

Form Factor	6U CompactPCI
Dimensions	233mm x 160mm (L x W), 2 slots (8HP) wide
Operating Temp.	0 to 50°C (inside-chassis temp, CPU type dependant, external air-flow required)
Storage Temp.	-20 to 80°C
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz, each axis Operation: 0.5Grms, 5-500Hz, each axis
Measured Power Consumption	Single normal Xeon 2.0GHz CPU with 2GB RAM: 10.0A @ +5V, 12.2A @ +3.3V, 0.54A @ +12V  Dual Low Voltage Xeon 1.6GHz CPU with 2GB RAM: 11.0A @ +5V, 11.6A @ +3.3V, 0.5A @ +12V
Compliance	CE, FCC Class A

### Other Features

Hardware Monitoring	Monitoring CPU temperature, FAN speed, system temperature, Vcore and DC voltages
Watchdog Timer	1-255 sec or 1-255 min software programmable. Generates system reset.
Operating System Compatibility	Microsoft® Windows 2000/XP, Red Hat Linux 8.0/9.0 (Other OS please contact ADLINK for availability)

### Accessories

Flash Storage	Apply Flash2000 2.5" flash drive on IDE CompactFlash socket on RTM
RTM	cPCI-R6860A, cPCI-R6860L

## Peripheral Connectivity

I/O	cPCI-6860A	RTM (cPCI-R6860A)		RTM (cPCI-R6860L)	
	Faceplate	Faceplate	On-Board	Faceplate	On-Board
Serial Port (COM1)	Y (DB-9)	--	--	--	--
Serial Port (COM2)	--	Y (J3, DB-9)	--	Y (J3, DB-9)	--
Mgmt Port (BMC)	--	Y (J4, DB-9)	--	Y (J4, DB-9)	--
PS2 Keyboard	Y (PS2)	Y (J3, PS2)	--	Y (J3, PS2)	--
PS2 Mouse	Y (PS2)	Y (J3, PS2)	--	Y (J3, PS2)	--
VGA	Y (DB-15)	Y (J4, DB-15)	--	Y (J4, DB-15)	--
USB A (port 1, port 2)	Y (dual USB)	--	--	--	--
USB B (port 3, port 4)	--	Y (dual USB)	--	Y (dual USB)	--
Gigabit Ethernet Port 1	Y (RJ-45, LED)	Y (RJ-45, LED)	--	Y (RJ-45, LED)	--
Gigabit Ethernet Port 2	Y (RJ-45, LED)	Y (RJ-45, LED)	--	Y (RJ-45, LED)	--
Gigabit Ethernet Port 3	--	Y (RJ-45, LED)	--	--	--
Gigabit Ethernet Port 4	--	Y (RJ-45, LED)	--	--	--
ATA-100 Primary IDE	--	Y (J3, CF)	Y (J3, 40-pin and 44-pin)	Y (J3, CF)	Y (J3, 40-pin and 44-pin)
ATA-100 Secondary IDE	--	--	Y (J4, 40-pin)	--	Y (J4, 40-pin)
SCSI	--	Y (SCSI-68)	Y (SCSI-68)	--	--
Floppy	--	--	Y (J3, 34-pin)	--	Y (J3, 34-pin)
PC Buzzer	--	--	Buzzer	--	Buzzer
General Purpose LED	Y	--	--	--	--
Reset button	Y	--	--	--	--

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