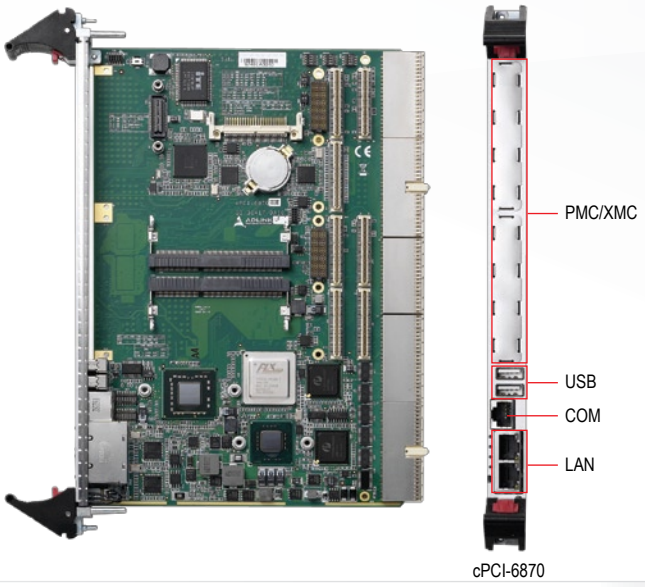
cPCI-6870 Series

6U CompactPCI® Intel® Core™2 Duo Universal Blade with two PMC/XMC sites



cPCI-6870

Features

- Intel® Core™2 Duo SV, LV, ULV processors, up to 2.26GHz
- Up to 8GB DDR3-1066 memory
- Two 64-bit/133MHz PMC sites or
- Two PCI-Express x8 XMC sites
- Supports system/peripheral universal mode

EXTENDED TEMPERATURE

Specifications

Processor & System

CPU	µFC-BGA Intel® Core™2 Duo Processor SP9300 2.26GHz, 6MB L2, FSB 1066MHz, TDP 25W
	µFC-BGA LV Intel® Core™2 Duo Processor SL9400 1.86GHz, 6MB L2, FSB 1066MHz, TDP 17W
	µFC-BGA ULV Intel® Core™2 Duo Processor SU9300 1.2GHz, 3MB L2, FSB 800MHz, TDP 10W
	µFC-BGA Intel® Celeron® Processor ULV 723 1.2GHz, 1MB L2, FSB 800MHz, TDP 10W
Chipset	Intel® GS45 with ICH9M-SFF
RAM	Dual channel DDR3-800/1066 SDRAM with two SO-DIMM sockets, up to 8GB capacity
BIOS	AMI® BIOS, 16Mbit SPI Flash memory
CompactPCI Bus	PCI 64-bit/66MHz, 3.3V or 5V universal V (I/O)
	Supports operation in system and peripheral slots with CompactPCI® bus communication (Universal 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 Switching Backplane R1.0

Connectivity

PMC/XMC	Two PCI 64-bit/133MHz PMC sites or two PCI-Express x8 XMC sites
Ethernet	Four PCI-Express Intel® 82574L Gigabit Ethernet controllers
	Two 10/100/1000BASE-T front panel ports
	Two 10/100/1000BASE-T PICMG® 2.16 ports
	Two additional 10/100/1000BASE-T ports from Intel® 82576EB on RTM cPCI-R6101
Graphics	Integrated in Intel® GS45, powered by Gen-5.0 Graphics Architecture
	Analog VGA signal to rear
	Analog monitor support up to QXGA
USB	Two USB 2.0 front panel ports
	Six USB ports routed to RTM
PS/2	PS/2 Keyboard Mouse port routed to rear
Serial Port	Up to three 16C550 compatible serial ports from Super IO
	One RJ45 COM port on front panel
	Two serial ports routed to rear
Audio	High Definition Audio signals routed to rear

Storage

SBC	One removable Serial ATA direct connector for 2.5" onboard HDD, occupies outer PMC site
	CompactFlash socket onboard (Standard temperature range support only)
RTM*	Up to 3 SATA ports
	CF (x1) and SD (x1) sockets
	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® Vista x64 Edition
	RedHat Enterprise Linux 5.1
	Wind River VxWorks 6.8
	Wind River VxWorks 5.5.1
	Wind River VxWorks 6.7
	(Please contact ADLINK for other OS support)

Miscellaneous

LED	Power (green), WDT (red), Hot Swap (blue), Hard Disk (amber)
Battery	Coin cell lithium battery onboard for RTC CMOS RAM
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 CompactPCI®
Operating Temperature	0°C to +60°C standard
	-20°C to +70°C extended temperature (cPCI-ET6870)
Storage Temperature	-40°C to +85°C
Rel. Humidity	95% non-condensing
Shock	15G peak-to-peak, 11ms duration, non-operating
Vibration	1.88 Grms random vibration, 5-500Hz, each axis, operating
Power Consumption	Intel® Core™2 Duo SP9300, 2GB DDR3-1066, 80GB SAS onboard HDD under Windows® XP with 100% CPU loading

	Current (A)	Power (W)
5V	6	30
3.3V	3.59	11.85
Total		41.85

Weight	Net weight 831g with heatsink

Safety & EMI

Certifications	CE/ FCC

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I/O Table

		GbE	USB 2.0	COM	VGA	PMC/XMC	SATA	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC													
cPCI-6870	**Faceplate**	2	2	1 (RJ-45)									
	Onboard					2	1(1)	1					
RTM													
cPCI-R6101	**Faceplate**	4	4	1(RJ-45)	1						1		
	Onboard						1 (7-pin)	1(4)				1	
cPCI-R6111	**Faceplate**	2	4		1						1		
	Onboard						1 (for 2.5" HDD)	1(4)				1	
cPCI-R6201	**Faceplate**	2	5	1(DB-9)	1				1	1	1		4 (SFF-8088)
	Onboard		1 (5-pin)	1(2) (10-pin)			2(3)	1 (optional)(3)					4 (SFF-8087)

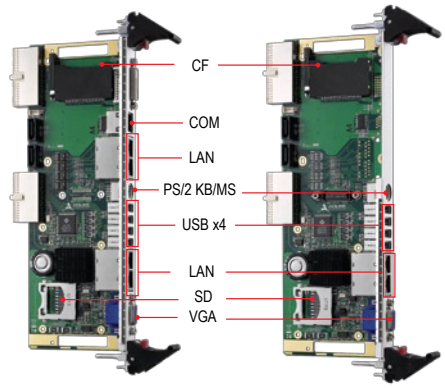
(1) For 2.5" HDD direct connection. 2.5" HDD share the same space with outer PMC site and cannot be installed simultaneously.
(2) Tx, Rx signals only
(3) One 7-pin signal connector onboard for external HDD and one direct connector for onboard 2.5" SATA HDD. Optional CompactFlash slot is supported by replacing SATA connector adapter with CompactFlash adapter. SATA HDD and CF cannot be used simultaneously.
(4) Converted from USB

Ordering Information

Model Number	Description/Configuration
Processor Blades	
cPCI-6870/SP93/M4G	6U CompactPCI® blade with Core™2 Duo 2.26 GHz (SP9300) processor and 2x 2GB DDR3-1066 SODIMM
cPCI-6870/723/M2G	6U CompactPCI® blade with Celeron® 1.2 GHz (723) processor and 1GB DDR3-1066 SODIMM
Rear Transition Modules	
cPCI-R6101	4HP Rear I/O module with GbE x4, COM, USB x4, SATA, VGA,PS/2, CF, SD socket
cPCI-R6111	4HP Rear I/O module with GbE x2, USB x4, SATA, VGA, PS/2, CF, SD socket
cPCI-R6201	8HP Rear I/O module with GbE x2, USB x6, VGA, SATA x2, Mic-in, Line-out, PS/2 KB/MS, SAS x8

Mezzanines

DB-CF-SA	CompactFlash socket adapter card (for cPCI-R6111 and cPCI-R6201)



cPCI-R6101 cPCI-R6111

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