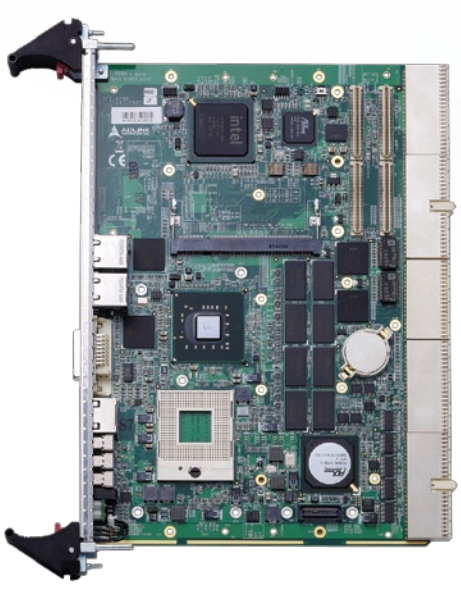
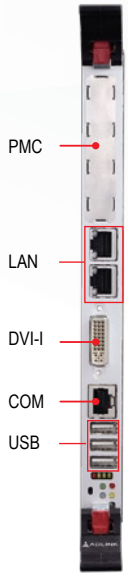
cPCI-6880 Series

6U CompactPCI® 45nm Intel® Core™2 Duo Processor Blade





cPCI-6880

Features

- 45nm Intel® Core™2 Duo 2.53GHz, 6MB L2 cache
- Up to 8GB DDR2-800 memory (soldered + SO-DIMM)
- DVI + VGA display interfaces
- Four PCI-Express GbE ports
- Supports system/peripheral operation

CompactPCI®

EXTENDED TEMPERATURE

Specifications

Processor & System

CPU	µFC-PGA Intel® Core™2 Duo Processor SV 2.53GHz (T9400), 6MB L2, FSB 1066MHz, TDP 35W
	µFC-PGA Intel® Core™2 Duo Processor LV 2.26GHz (P8400), 3MB L2, FSB 1066MHz, TDP 25W
	µFC-PGA Intel® Core™2 Duo Processor 2.2GHz (T7500), 4MB L2, FSB 800MHz, TDP 35W
	µFC-PGA Intel® singal-core Celeron® M 2.0GHz (575), 1MB L2, FSB 667MHz, TDP 31W
	uFC-PGA Intel® dual-core Celeron® 1.9GHz (T3100), 1MB L2, FSB 800MHz, TDP 35W
Chipset	Intel® GM45 with ICH9M
Memory	Dual channel DDR2-667/800 SDRAM, up to 8GB
	One channel for soldered memory, up to 4GB; one channel for SO-DIMM socket
BIOS	AMIBIOS®8 dual 16Mbit SPI Flash memory
	Supports failover
CompactPCI Bus	PCI 64bit/ 66MHz, 3.3V or 5V universal V (I/O)
	Supports operation in system slot and peripheral slot (cPCI-6880P cannot be installed in a peripheral slot with CT bus backplane)
PICMG Standards	PICMG® 2.0 CompactPCI R3.0
	PICMG® 2.1 Hot Swap R2.0
	PICMG® 2.9 System Management v1.5 R1.0
	PICMG® 2.16 Packet Switching Backplane R1.0

Connectivity

PMC	One PCI 64bit/66MHz PMC site
Ethernet	Four PCI-Express Intel® 82573L 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-R6100
Graphics	Integrated in Intel® GM45, powered by Gen-5.0 Graphics Architecture
	One DVI-I (digital+analog) port on front panel (Contact ADLINK if need DVI support on RTM)
	Analog VGA signal routed to RTM (mirror of VGA)
	Additional discrete ATI/AMD E4690 GPU supporting two DVI-I ports on RTM cPCI-R6700
	Analog monitor supports up to QXGA
USB	Three USB 2.0 front panel ports
	Six USB ports routed to RTM
PS/2	PS/2 Keyboard Mouse port routed to RTM
Serial Port	Max. three 16C550 compatible serial ports
	One RJ45 port on front panel, two serial ports routed to RTM

Storage

SBC	Built in 4GB USB NAND flash onboard (Standard temperature range support only)
	One removable SATA direct connector for 2.5" onboard HDD
	Optional CF socket to replace SATA direct connector (Standard temperature range support only)
RTM*	Up to 3 SATA ports
	CF (x1) and SD (x1) sockets
	*Available interfaces dependent on RTM model selected

Operating System

OS	Microsoft Windows® XP Professional
	Microsoft Windows® XP x64 Edition
	Microsoft Windows® Vista x64 Edition
	Microsoft Windows® 7
	Red Hat Enterprise Linux 5.1
	Wind River VxWorks 6.8, 6.6, 5.5.1
	(Please contact ADLINK for other OS support)

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, 1-65535 seconds or minutes
Hardware Monitor	Monitors CPU & system temperatures, Vcore and DC voltages

Mechanical & Environmental

Form Factor	6U 4HP CompactPCI®
	233.33mm x 160mm (LxW)
	cPCI-6880: equipped with CompactPCI connectors J1,J2,J3,J5
	cPCI-6880P: equipped with CompactPCI connectors J1,J2,J3,J4,J5
Operating Temp.	0°C to +60°C standard
	-20°C to +70°C extended temperature (cPCI-ET6880)
Storage Temp.	-40°C to +85°C
Rel. Humidity	95% @60°C, non-condensing
Shock	15G peak-to-peak, 11ms duration, non-operating
Vibration	1.88 Grms, 5-500Hz, each axis, operating (with CF card)
Power Consumption	Single Core™2 Duo T9400, 4GB DDR2-800, 100GB SATA HDD onboard under Windows® XP with 100% CPU loading

	Current (A)	Power (W)
5V	8.46	42.3
3.3V	2.20	7.26
Total		49.56

Weight	Net weight 858g with heatsink
Certifications	CE, FCC

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I/O Table

		GbE	USB 2.0	COM	DVI	VGA	PMC	SATA	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC														
cPCI-6880	**Faceplate**	2	3	1 (RJ-45)	1 (DVI-I)									
	Onboard						1	1(1)	1(1)					
RTM														
cPCI-R6002	**Faceplate**	2	2	1 (DB-9)		1								
	Onboard		1 (5-pin)	1(2) (10-pin)				2 (7-pin)						
cPCI-R6000P	**Faceplate**	2	2	1 (DB-9)		1								
	Onboard		1 (5-pin)	1 (10-pin)			1 (PIM)	2 (7-pin)						
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)
cPCI-R6700	**Faceplate**	2	3	1 (DB-9)	2 (DVI-I)									
	Onboard		2	1(2) (10-pin)				3 (7-pin)		1 (10-pin)		1 (10-pin)		

(1) Removable SATA connector adapter for onboard 2.5" HDD. Optional CompactFlash socket is supported by replacing SATA connector adapter with CompactFlash adapter. 2.5" HDD and CF 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

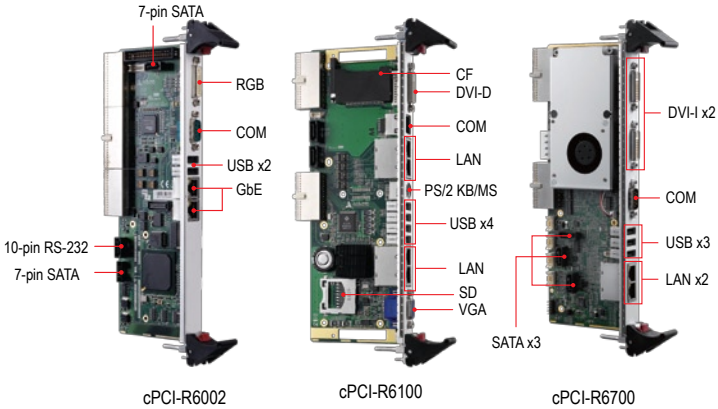
Ordering Information

Model Number	Description/Configuration
Processor Blades	
cPCI-6880/T94/M2-0	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor and 2GB soldered DDR2-800 memory
cPCI-6880/T94/M0-2	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor and 2GB DDR2-800 SODIMM
cPCI-6880/T94/M4-0	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor, 4GB soldered DDR2-667 memory
cPCI-6880/P84/M0-2	6U CompactPCI® blade with Core™2 Duo 2.26GHz (P8400) processor and 2 GB DDR2-800 SODIMM memory
cPCI-6880/T31/M0-2	6U CompactPCI® blade with dual core Celeron® 1.9GHz (T3100) processor and 2GB DDR2-800 SODIMM memory
cPCI-6880P/T94/M0-2	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor and 2GB DDR2-800 SODIMM memory with PIM support
SATA adapter is included in package of CPU board	
Rear Transition Modules	
cPCI-R6002	4HP Rear I/O module with GbE x2, COM x2, USB x3, SATA x2, VGA
cPCI-R6000P	4HP Rear I/O module with GbE x2, COM x2, USB x3, SATA x2, PIM, VGA (for cPCI-6880P)
cPCI-R6100	4HP Rear I/O module with GbE x4, COM, USB x4, SATA x2, VGA, PS/2, CF, SD
cPCI-R6110	4HP Rear I/O module with GbE x2, USB x4, SATA x3, VGA, PS/2, CF, SD
cPCI-R6700	4HP Rear I/O module with discrete GPU ATI/AMD E4690, DVI-I x2, GbE x2, USB x3, COM x2, KB/MS hearder, SATA x3, audio header

Mezzanines

DB-CF-SB	CompactFlash socket adapter kit for cPCI-6880
DB-CF-SA	CompactFlash socket adapter kit for cPCI-R6002D, cPCI-R6200

Contact your ADLINK representative for different CPU, memory combinations.
See 6U RTM selection guide for more options.



cPCI-R6002 cPCI-R6100 cPCI-R6700