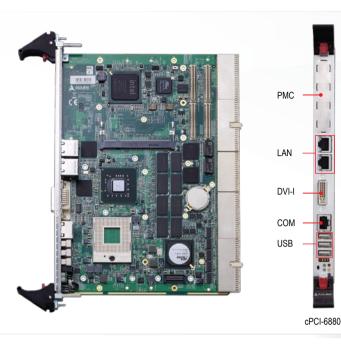
# cPCI-6880 Series

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



#### **Features**

- 45nm Intel<sup>®</sup> Core<sup>™</sup>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



## **Specifications**

### **Processor & System**

uFC-PGA Intel® Core™2 Duo Processor SV 2.53GHz (T9400).

6MB L2, FSB 1066MHz, TDP 35W

uFC-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

RAM 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

One DVI-I (digital+analog) port on front panel (Contact ADLINK if

need DVI support on RTM)

Analog CRT signal routed to RTM, mirror display with front VGA

Analog monitor supports up to QXGA

Three USB 2.0 front panel ports

Six USB ports routed to RTM PS/2 PS/2 Keyboard Mouse port routed to RTM

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 Serial ATA direct connector for 2.5" onboard HDD Optional CompactFlash socket to replace SATA direct connector

(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**

Microsoft Windows® XP Professional

Microsoft Windows® XP x64 Edition Microsoft Windows® Vista x64 Edition

Microsoft Windows® 7 Red Hat Enterprise Linux 5.1

VxWorks® 6.6 (Please contact ADLINK for other OS support)

#### Miscellaneous

LED Power, WDT, Hot Swap, Hard Disk

Coin cell lithium battery onboard for RTC CMOS RAM Battery Watchdog Timer System Reset and NMI, with Programmable Interval,

1-65535 seconds or minutes

Monitors CPU & system temperatures, Vcore and DC voltages Hardware Monitor

#### **Mechanical & Environmental**

6U 4HP CompactPCI® Form Factor

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 0°C to +60°C standard

Operating Temp.

-20°C to +70°C extended temperature (cPCI-ET6880)

-40°C to +85°C Storage Temp.

95% @60°C, non-condensing Rel. Humidity

15G peak-to-peak, 11ms duration, non-operating Shock

Net weight 858g with heatsink

Vibration 1.88 Grms, 5-500Hz, each axis, operating (with CF card) Single Core™2 Duo T9400, 4GB DDR2-800, 100GB SATA HDD **Power Consumption** 

onboard under Windows® XP with 100% CPU loading

Current (A) Power (W) 3.3V 7.26 Total 49.56

Weight

Certifications CE. FCC

Safety & EMI

USB

Serial Port

## I/O Table

		GbE	USB 2.0	сом	DVI	VGA	РМС	SATA	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
						SBC	;							
cPCI-6880	Faceplate	2	3	1 (RJ-45)	1 (D	VI-I)								
	Onboard						1	1(1)	1(1)					
						RTM	Л							
cPCI-R6002	Faceplate	2	2	1 (DB-9)		1								
CPCI-N0002	Onboard		1 (5-pin)	1 <sup>(2)</sup> (10-pin)				2 (7-pin)						
cPCI-R6002D	Faceplate	2	4	1 (DB-9)		1				1	1	1		
	Onboard		1 (5-pin)	1 <sup>(2)</sup> (10-pin)				3(3)	1 (optional) <sup>(3)</sup>					
	Faceplate	2	2	1 (DB-9)		1								
cPCI-R6000P	Onboard		1 (5-pin)	1 (10-pin)			1 (PIM)	2 (7-pin)						
cPCI-R6100	Faceplate	4	4	1 (RJ-45)		1						1		
CPCI-NO100	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 <sup>(2)</sup> (10-pin)				3(3)	1 (optional)(3)					4 (SFF-8087)

<sup>(1)</sup> 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.

Tx, Rx signals only

**Model Number** 

**CPU** Board

## **Ordering Information**

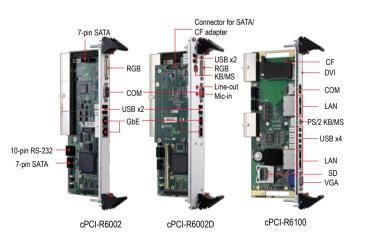
cPCI-6880/T94/M2-0	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor and 2GB soldered DDR2-800 memory
cPCI-6880/T94/M0-2	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor and 2GB DDR2-800 SODIMM
cPCI-6880/T94/M4-0	6U CompactPCI® blade with Core™2 Duo 2.53GHz (T9400) processor, 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 include	d in package of CPU board
Rear Transition Module	•
cPCI-R6002	4HP Rear I/O module with GbE x2, COM x2, USB x3, SATA x2, VGA
cPCI-R6002D	8HP Rear I/O module with GbE x2, COM x2, USB x5, SATA x2, VGA, PS/2 and Mic-in, Line-out
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-R6200	8HP Rear I/O module with GbE x2, USB x6, VGA, SATA x3, Mic-in, Line-out, PS/2 KB/MS, SAS x8

Description/Configuration

#### Mezzanine

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.



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