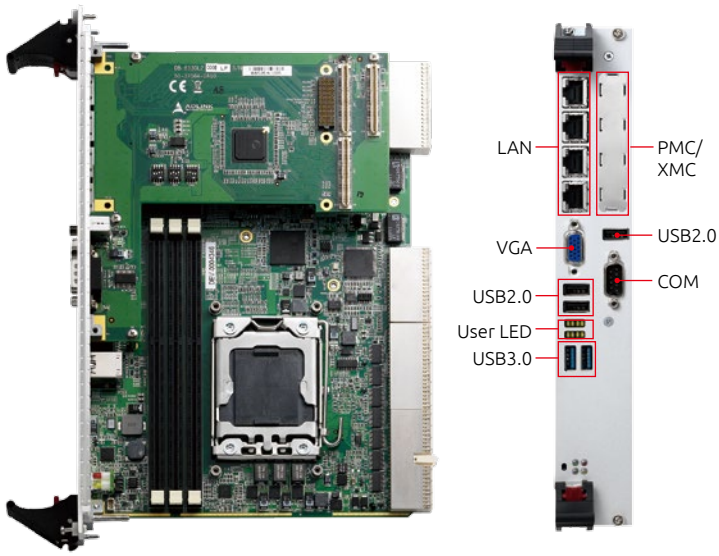
cPCI-6930 Series

6U CompactPCI 10-core 22nm Intel® Xeon® Processor Blade

Features

- Up to 10-core Intel® Xeon processor 1.8GHz and 25MB LLC
- Up to 192GB DDR3 ECC registerd memory by RDIMMs
- Two USB 3.0, four GbE ports on front panel
- Onboard SATA NAND Flash and optional CF, CFast socket
- Optional SAS 6Gb/s port for 2.5” drive onboard

CompactPCI®



Specifications

Processor & System

CPU

LGA1356 ten-core Intel® Xeon® E5-2448L v2 Processor, 1.8GHz, 25MB LLC, TDP 70W

LGA1356 eight-core Intel® Xeon® E5-2428L v2 Processor, 1.8GHz, 20MB LLC, TDP 60W

LGA1356 six-core Intel® Xeon® E5-2418L v2 Processor, 2.0GHz, 15MB LLC, TDP 50W

LGA1356 eight-core Intel® Xeon® E5-2448L Processor 1.8GHz, 20MB LLC, TDP 70W

LGA1356 six-core Intel® Xeon® E5-2428L Processor 1.8GHz , 15MB LLC, TDP 60W

LGA1356 quad-core Intel® Xeon® E5-2418L Processor 2.0GHz, 10MB LLC, TDP 50W

Passive heatsink

Chipset

Intel® C600 PCH

Memory

Three channel DDR3-1600 ECC register SDRAM with three RDIMM slots, up to 192GB capacity (dependent on availability of memory modules)

BIOS

AMI® EFI BIOS, 64Mbit SPI flash memory

CompactPCI Bus

PCI 64-bit, 66MHz, 3.3V or 5V universal V(I/O)

Supports operation in system slot as master or in peripheral slot as stand-alone blade without connectivity to CompactPCI® bus (Satellite mode)

PIGMIG 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 Switch Backplane R1.0

Connectivity

PMC/XMC

One PCI 32/64-bit, 33/66/133MHz PMC site or PCI-Express x8 XMC site

Ethernet

One Intel® 82580 Gigabit Ethernet controller for four 10/100/1000BASE-T ports

Two Intel® 82574L Gigabit Ethernet controllers for two 10/100/1000BASE-T ports to J3 for PICMG 2.16

Two additional 10/100/1000BASE-T ports from Intel® 82576EB on RTM (cPCI-R6100 or cPCI-R6110)

Graphics

SMI SM750 2D graphics chip

16MB embedded 32-bit DDR memory at 166MHz

Two analog RGB signals to front and rear for VGA interfaces with dual display support

Up to 1920x1440 resolution

USB

Two USB 3.0 and three USB 2.0 ports on front panel

Six USB 2.0 ports routed to rear

PS/2

PS/2 keyboard/mouse port to rear

Serial Port

Up to three 16C550 compatible serial ports

One DB-9 RS-232 port on front panel

Two serial ports routed to rear

Audio

High Definition Audio signals routed to rear

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Specifications

Storage

Processor Blade

4GB SATA NAND flash onboard

One SATA 6 Gb/s direct connector for 2.5" onboard drive (removable)

Optional CF or CFast socket (shares space with SATA direct connector)

Optional SAS direct connector for 2.5" onboard drive (shares space with SATA direct connector; not available concurrently with COM, USB, PMC/XMC site on layer 2)

RTM*

Up to three SATA ports

CF (x1) and SD (x1) sockets

Eight SAS ports supporting hardware RAID via two mini-SAS x4 connectors (LSISAS1068E)

cPCI-R6200, contact ADLINK for assistance

*Available interfaces dependent on RTM model selected

Operating System

OS

Microsoft Windows 7 32/64-bit

Microsoft Windows Server 2008 64-bit

Red Hat Enterprise Linux 6.1

Fedora 15

Wind River VxWorks 6.9 (Please contact ADLINK for other OS support)

Miscellaneous

LED

Power, WDT, Hard Disk, Hotswap and Port 80 User LEDs

Battery

Coin cell lithium battery onboard for RTC CMOS RAM

TPM

Infineon SLB 9635 TT1.2 (optional, support upon reques)

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 4/8HP (single/dual slot) CompactPCI

233.33mm x 160mm (LxW)

Operating Temperature

0°C to +55°C with forced air flow

Storage Temperature

-40°C to +85°C

RH Humidity

95% non-condensing

Shock

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

Vibration

2 Grms random vibration, 5-500Hz, each axis, operating

Power Consumption

8-C Xeon E5-2448L processor, 12GB DDR3-1600 under Windows 7 with 100% CPU usage

19.6A@5V, 4.6A@3.3V, total 113.2W when Turbo boost and HT enabled; 16.7A@5V, 4.4A@3.3V, total 98W when Turbo boost and HT disabled

Weight

Net weight 1087.6g with heatsink

EMI/EMC

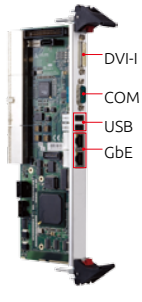
EN 55022 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3

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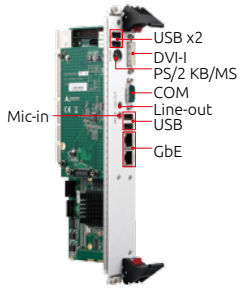
I/O Table

		GbE	USB 2.0	USB 3.0	COM	DVI	VGA	PMC/ XMC	SATA	CFast	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC																
cPCI-6930 (4HP)	**Faceplate**	4	2	2			1									
	Onboard															
cPCI-6930D (8HP)	**Faceplate**	4	3	2	1		1	1								
	Onboard								1(1)	1(1)	1(1)					1(1)
RTM																
cPCI-R6002	**Faceplate**	2	2		1	1 (VGA signal only)										
	Onboard								2(7-pin)							
cPCI-R6002D	**Faceplate**	2	4			1 (VGA signal only)						1	1	1		
	Onboard								3 (2x 7-pin+1x 2.5" sapce)(3)							
cPCI-R6100	**Faceplate**	4	4		1 (RJ-45)		1							1		
	Onboard								2 (7-pin)		1				1	
cPCI-R6110	**Faceplate**	2	4											1		
	Onboard								3 (2x 7-pin+1x 2.5" space)(3)							
cPCI-R6120	**Faceplate**	2	4											1		
	Onboard								2 (2.5" SATA drive onboard)							
cPCI-R6500	**Faceplate**	2	-			DVI-I DVI-D										
	Onboard								3(7-pin)							
cPCI-R6500D	**Faceplate**	2	1			DVI-I DVI-D										
	Onboard		1(10-pin header)		1 (Full, 10-pin header) 1(TX/RX, 10-pin header)				3 (2x 7-pin+1x 2.5" space)(5)			1 (10-pin header)		1(10-pin header)		
cPCI-R6501D	**Faceplate**	2	1		1 (DB-9)	2 (DVI-I+DVI-D)										
	Onboard		1 (10-pin)		1(2) (10-pin)				3(5) (7-pin)			1 (10-pin)		1 (10-pin)		
cPCI-R65N0	**Faceplate**	2	1		1	2								1		
	Onboard		1		1 (Tx/Rx)				3 (7-pin)			1 (10-pin)				

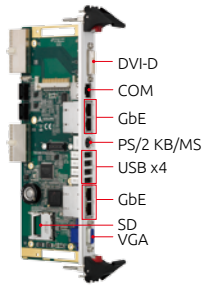
(1) Removable adapter design. SATA adapter by default, can be replaced with CF, CFast or SAS adapter.
(2) Tx, Rx signals only.
(3) Two 7-pin signal connectors onboard for external HDDs and one direct connector for onboard 2.5" SATA drive. SATA direct connector can be replaced by CompactFlash adapter (DB-6920CF) for CF slot.
(4) Converted from USB.
(5) Space is reserved onboard for one 2.5" SATA drive.



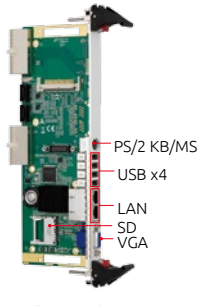
cPCI-R6002



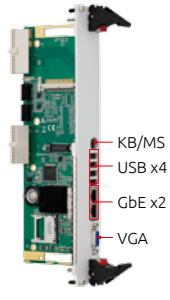
cPCI-R6002D



cPCI-R6100



cPCI-R6110



cPCI-R6120

Ordering Information

Processor Blades

- **cPCI-6930/2418/M8G**
  4HP cPCI-6930 with Intel® Xeon® E5-2418 processor and 1x 8GB DDR3-1333 RDIMM with GbE x4, USB 2.0 x3, USB 3.0 x1, VGA
- **cPCI-6930D/2448v2/M96G**
  8HP cPCI-6930D with Intel® Xeon® E5-2448L processor and 3x 32G DDR3L-1600 LR-RDIMM with GbE x4,USB 2.0 x3, USB 3.0 x2,VGA, COM,SATA and PMC/XMC
- **cPCI-6930D/2448/M12G**
  8HP cPCI-6930 with Intel® Xeon® E5-2448L processor and 3x 4GB DDR3-1333 RDIMM with GbE x4, USB 2.0 x3, USB 3.0 x2, VGA, COM, SATA, PMC/XMC
- **cPCI-6930D/2428/M8G**
  8HP cPCI-6930 with Intel® Xeon® E5-2428L processor and 2x 4GB DDR3-1333 RDIMM with GbE x4, USB 2.0 x3, USB 3.0 x2, VGA, COM, SATA, PMC/XMC
- **cPCI-6930D/2418/M6G**
  8HP cPCI-6930 with Intel® Xeon® E5-2418L processor and 3x 2GB DDR3-1333 RDIMM with GbE x4, USB 2.0 x3, USB 3.0 x2, VGA, COM, SATA, PMC/XMC

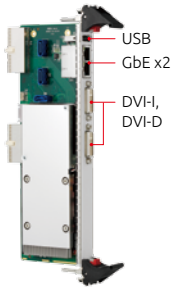
Rear Transition Modules

- **cPCI-R6002**
  4HP Rear I/O module with GbE x2, COM x2, USB x3, SATA x2, DVI-I
- **cPCI-R6002D**
  8HP Rear I/O module with 2x GbE, 2x COM, 5x USB, 2x SATA, VGA, PS/2 KB/MS
- **cPCI-R6100**
  4HP Rear I/O module with GbE x4, COM, USB x4, SATA x2, VGA, PS/2, CF, SD socket
- **cPCI-R6110**
  4HP Rear I/O module with GbE x2, COM, USB x4, SATA x3, DVI, VGA, PS/2, CF, SD socket
- **cPCI-R6120**
  8HP Rear I/O module with 2x GbE, 4x USB, 2x SATA, VGA, PS/2 KB/MS, CF, SD w/space for dual SATA drives
- **cPCI-R6500/A8860**
  4HP Rear I/O module with AMD E8860MF MXM 3.0 graphics module with DVI-I x1, DVI-D x1, GbE x2, USB x1
- **cPCI-R6500D**
  8HP Rear I/O module with AMD X3AE676-AN MXM 3.0 graphics module with DVI-I x1, DVI-D x1, GbE x2, USB x2, COM x2, PS/2 x1, audio, SATA x3
- **cPCI-R6501D**
  8HP Rear I/O module with AMD X3AE676-AN MXM 3.0 graphics module with DVI-I x1, DVI-D x1, GbE x2, USB x1, 2.5" SATA drive space, SATA x3 (one reserved for SATA drive)
- **cPCI-R65N0/NV950**
  6U 8HP Rear I/O module with NVIDIA GTX950M MXM 3.0 graphics module Type A with DVI-I x1, DVI-D x1, GbE x2, USB x2, COM x1, PS/2 x1, SATA x3

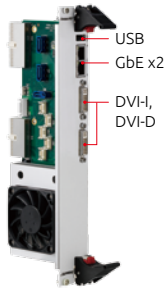
Accessory

- **DB-SAS**
  SAS adapter board
- **DB-CFast**
  CFast socket adapter board with screws

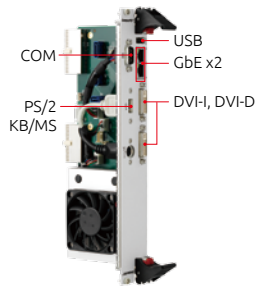
Contact your ADLINK representative for different CPU, memory and storage combinations.
See 6U RTM selection guide for more options



cPCI-R6500



cPCI-R6500D



cPCI-R65N0

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