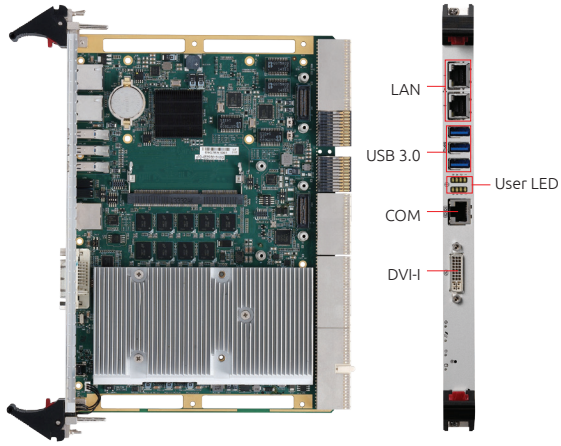
cPCI-6525 Series

6U CompactPCI 3rd Gen Intel® Core™ i7 Processor Blade with PCIe x16 to Rear IO

Features

- Low power 22nm 3rd generation Intel® Core™ i7/i5 processor
- Up to 16GB DDR3 ECC memory via one channel soldered and one channel SO-DIMM
- Supports PCIe x16 to rear IO, convertible to 2 PCIe x8
- Up to 4 Ethernet GbE ports to rear
- Onboard SATA, CFast socket



Specifications

Processor & System

CPU

µFC-BGA quad-core Intel® Core™ i7-3615QE processor, 2.3GHz, 6MB SmartCache, 45W TDP

µFC-BGA quad-core Intel® Core™ i7-3612QE processor, 2.1GHz, 6MB SmartCache, 35W TDP

uFC-BGA dual-core Intel® Core™ i5-3610ME processor, 2.7GHz, 3MB SmartCache, 35W TDP

Passive heatsink

Chipset

Intel® QM77 PCH

Memory

Dual channel DDR3-1600 SDRAM with ECC, up to 16GB

One channel in SO-CDIMM socket up to 8GB; one channel soldered up to 8GB

BIOS

AMI® EFI BIOS, 64Mbit SPI flash memory

CompactPCI Bus

PCI 32/64-bit, 33/66MHz, 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)

Note: The cPCI-6525 J4 supports PCIe x16, which has a signal conflict with PICMG 2.5 backplanes. Do not insert the cPCI-6525 into a peripheral slot of backplanes supporting PICMG 2.5.

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 Switch Backplane R1.0

Connectivity

Ethernet

Four Intel® 82574IT GbE controllers

Two 10/100/1000BASE-T ports on front panel, switchable to rear

Two 10/100/1000BASE-T ports to J3 for PICMG 2.16

Graphics

Integrated in Intel® processor

One DVI-I on front panel with RGB signal switchable to rear

Two DVI to rear

USB

Three USB 3.0 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 four 16C550 compatible serial ports

One DB-9 RS-232/422/485 serial port on front panel

One RS-232/422/485 to rear and additional two Tx/Rx to rear

Audio

High Definition Audio signals routed to rear

Storage

SBC

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

One CFast socket via adapter board

RTM*

Up to three SATA ports

Support PCIe x16 to J4, PCIe x4 to J5

Eight SAS ports supporting hardware RAID via two mini-SAS x4 connectors (cPCI-R66S0)

Optional MXM slot supporting NVIDIA MXM (cPCI-R66G0, cPCI-R66N0)

*Available interfaces dependent on RTM model selected

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Specifications

Operating System

OS

Windows XP 32-bit, Windows 7 32/64-bit
Red Hat Enterprise Linux 6.5 and higher
Fedora 20
Wind River VxWorks 6.9 (Please contact ADLINK for other OS support)

Miscellaneous

LED

Power, WDT, Hard Disk, Hot Swap and Port 8h user LED

Battery

Coin cell lithium battery onboard for RTC CMOS RAM

TPM

Atmel AT97SC3204 (optional, support upon request)

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 (single slot) CompactPCI
233.33mm x 160mm (LxW)
Equipped with J1, J2, J3, J5 connectors, optional J4 connector by HM (cPCI-6525) or UHM (cPCI-6525U) connector

Operating Temperature

0°C to +60°C standard
-20°C to +70°C extended temperature (cPCI-ET6525)

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

EMI/EMC

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

I/O Table

		GbE	USB	COM	Display	SATA	CFast	Audio	PS/2 KB/MS	SAS
cPCI-6525	Faceplate	2	3 (3.0)	1 (RJ-45)	1 (DVI-I)					
	Onboard					1	1			
cPCI-R66G0	Faceplate	2	1 (2.0)		4 (DVI-I, 3x DVI-D)			1 (Mic-in, Line-out)		
	Onboard	2	1[3]	1[2] (10-pin)		3 (7-pin)			1	
cPCI-R66N0	Faceplate	2 + 2x M12[1]	1 (2.0)	1	2 (DVI-I, DVI-D)			M12 x1	M12 x1	
	Onboard		1[3]	1 [2] (10-pin)		3 (7-pin)				
cPCI-R66S0	Faceplate	4[1]	3 (2.0)	1	2 (DVI-D)			1 (Mic-in, Line-out)	1	4 (SFF-8088)
	Onboard			1[2] (10-pin)		3 (7-pin)				4 (SFF-8087)

(1) Two LAN ports switched from front panel.
(2) One 10-pin header convert 2x Tx/Rx signals.
(3) One 10-pin header convert 2x USB 2.0 signals.

Ordering Information

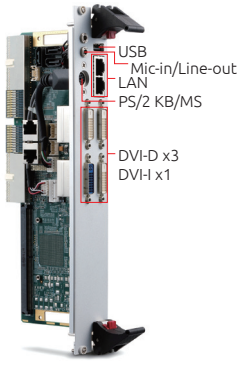
Processor Blades

- **cPCI-6525/3615Q/M8-0**
  6U 4HP cPCI-6525 with Intel® Core™ i7-3615QE processor and 8GB DDR3-1333/1600 soldered memory with 2x GbE, 3x USB 3.0, COM, DVI-I, SATA, CFast, PCIex16 to rear HM J4, 0°C~60°C
- **cPCI-6525/3610M/M4-0**
  6U 4HP cPCI-6525 with Intel® Core™ i5-3610ME processor and 4GB DDR3-1333/1600 soldered memory with 2x GbE, 3x USB 3.0, COM, DVI-I, SATA, CFast, w/o J4, 0°C~60°C
- **cPCI-6525U/3615Q/M8-0**
  6U cPCI-6525 with Intel® Core™ i7-3615QE processor and 8GB DDR3-1333/1600 ECC soldered memory with 2x GbE, 3x USB 3.0, COM, DVI-I, SATA, CFast, PCIe x16 to rear UHM J4, 0°C~60°C

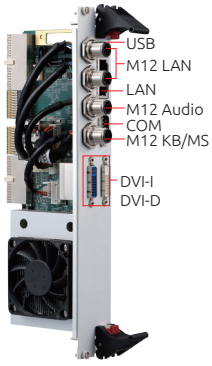
Rear Transition Modules

- **cPCI-R66G0/NV960**
  6U 8HP Rear I/O module with DVI-I, DVI-D x3, GbE x2, USB, PS/2 KB/MS, audio, MXM slot with NVIDIA GTX960M MXM module
- **cPCI-R66N0**
  6U 8HP Rear I/O module with RJ-45 GbE x2, M12 GbE x2, M12 audio, M12 KB/MS, DVI-I, DVI-D, COM, MXM slot with NVIDIA MXM module
- **cPCI-R66S0**
  6U 8HP Rear I/O module with GbE x4, COM, SAS x8, DVI-D x2, USB x3, PS/2, Audio

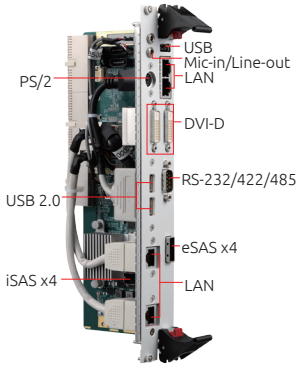
Contact your ADLINK representative for different CPU, memory and storage combinations.



cPCI-R66G0



cPCI-R66N0



cPCI-R66S0

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