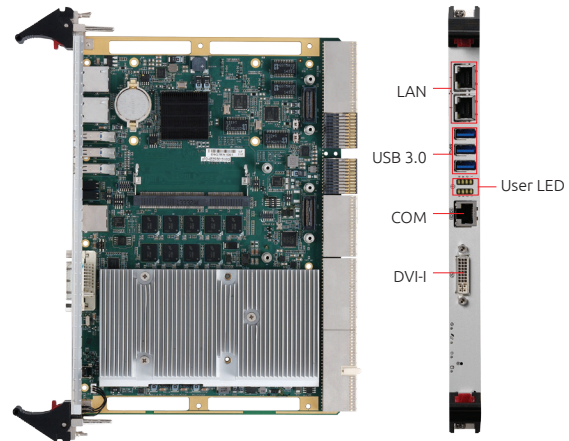


# cPCI-6525 Series

## 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

## 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 <sup>(3)</sup>	1 <sup>(2)</sup> (10-pin)		3 (7-pin)			1	
cPCI-R66N0	Faceplate	2 + 2x M12 <sup>(1)</sup>	1 (2.0)	1	2 (DVI-I, DVI-D)			M12 x1	M12 x1	
	Onboard		1 <sup>(3)</sup>	1 <sup>(2)</sup> (10-pin)		3 (7-pin)				
cPCI-R66S0	Faceplate	4 <sup>(1)</sup>	3 (2.0)	1	2 (DVI-D)			1 (Mic-in, Line-out)	1	4 (SFF-8088)
	Onboard			1 <sup>(2)</sup> (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

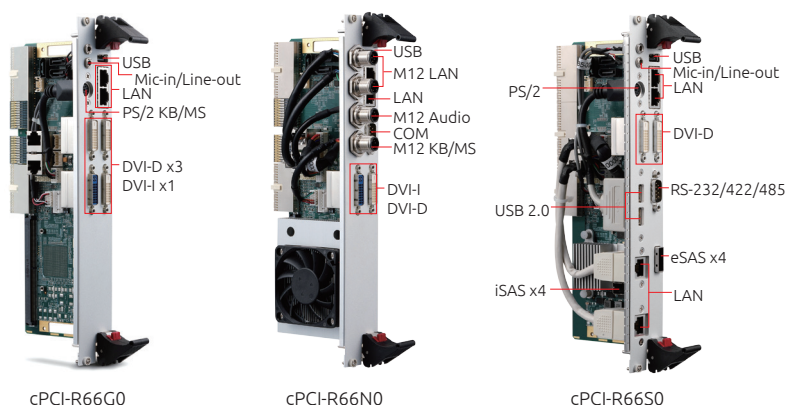
## Processor Blades

- **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, PCIe16 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.



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## ADLINK Technology:

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