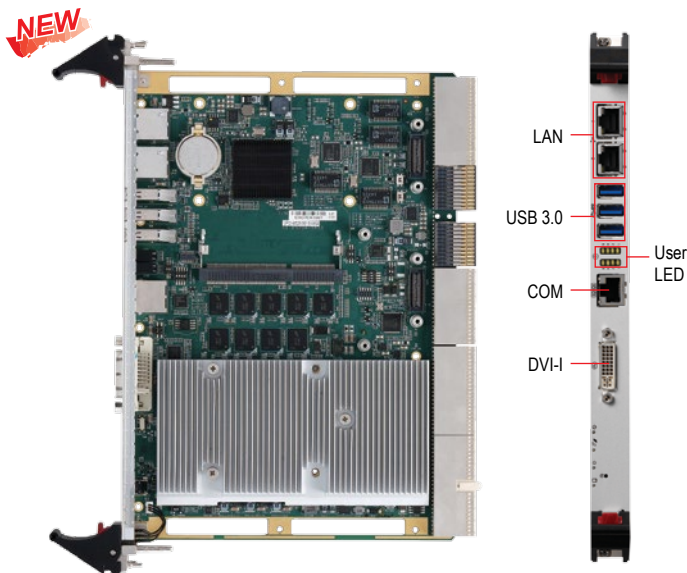


# cPCI-6525 Series

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



### Features

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

**CompactPCI®**



### Specifications

#### Processor & System

CPU	<p>µFC-BGA quad-core Intel® Core™ i7-3615QE processor, 2.3GHz, 6MB L3 cache, 45W TDP</p> <p>µFC-BGA quad-core Intel® Core™ i7-3612QE processor, 2.1GHz, 6MB L3 cache, 35W TDP</p> <p>Passive heatsink</p>
Chipset	Intel® QM77 PCH
Memory	<p>Dual channel DDR3-1600 SDRAM with ECC, up to 16GB</p> <p>One channel in SO-CDIMM socket up to 8GB; one channel soldered onboard up to 8GB (dependent on availability of memory modules and chips)</p>
BIOS	AMI® EFI BIOS, 64Mbit SPI flash memory
CompactPCI Bus	<p>PCI 32/64-bit, 33/66MHz, 3.3V or 5V universal V(I/O)</p> <p>Supports operation in system slot as master or in peripheral slot as stand-alone blade without connectivity to CompactPCI® bus (Satellite mode)</p>
PICMG Standards	<p>PICMG 2.0 CompactPCI R3.0</p> <p>PICMG 2.1 Hot Swap R2.0</p> <p>PICMG 2.9 System Management R1.0</p> <p>PICMG 2.16 Packet Switch Backplane R1.0</p>

#### Connectivity

Ethernet	<p>Four Intel® 82574IT GbE controllers</p> <p>Two 10/100/1000BASE-T ports on front panel, switchable to rear</p> <p>Two 10/100/1000BASE-T ports to J3 for PICMG 2.16</p>
Graphics	<p>Integrated in Intel® processor</p> <p>One DVI-I on front panel with RGB signal switchable to rear</p> <p>Two DVI to rear</p>
USB	<p>Three USB 3.0 ports on front panel</p> <p>Six USB 2.0 ports routed to rear</p>
PS/2	PS/2 keyboard/mouse port to rear
Serial Port	<p>Up to four 16C550 compatible serial ports</p> <p>One DB-9 RS-232/422/485 serial port on front panel</p> <p>One RS-232/422/485 to rear and additional two Tx/Rx to rear</p>
Audio	High Definition Audio signals routed to rear

#### Storage

SBC	<p>One SATA 6 Gb/s direct connector for 2.5" onboard drive</p> <p>One CFast socket via adapter board</p>
RTM*	<p>Up to three SATA ports</p> <p>Support PCIe x16 to J4, PCIe x4 to J5</p> <p>Eight SAS ports supporting hardware RAID via two mini-SAS x4 connectors (cPCI-R66S0)</p> <p>Optional MXM slot supporting NVIDIA MXM (cPCI-R66G0, cPCI-R66N0)</p> <p>*Available interfaces dependent on RTM model selected</p>

#### Operating System

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

LED	Power, WDT, Hard Disk, Hot Swap and Port 80 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	<p>6U 4HP (single slot) CompactPCI</p> <p>233.33mm x 160mm (LxW)</p> <p>Equipped with J1, J2, J3, J5 connectors</p>
Operating Temperature	<p>0°C to +60°C standard</p> <p>-20°C to +70°C extended temperature (cPCI-ET6525)</p>
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		4 (DVI-I, 3x DVI-D)			1 (Mic-in, Line-out)		
	Onboard	2	1 <sup>(3)</sup>	1 <sup>(2)</sup>		3			1	
cPCI-R66N0	Faceplate	2 + 2x M12	1	1	2 (DVI-I, DVI-D)			M12 x1	M12 x1	
	Onboard		1 <sup>(3)</sup>	1 <sup>(2)</sup>		3 (7-pin)		1 (10-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

Model Number	Description/Configuration
<b>Processor Blades</b>	
cPCI-6525/3615Q/M8-0	6U 4HP cPCI-6525 with Intel® Core™ i7-3615QE processor and 8GB DDR3-1333 soldered memory with 2x GbE, 3x USB 3.0, COM, DVI-I, SATA, Cfast, PCIe16 to rear
<b>Rear Transition Modules</b>	
cPCI-R66G0	6U 8HP Rear I/O module with DVI-I, DVI-D x3, GbE x2, USB, PS/2 KB/MS, audio, MXM slot w/o 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 w/o MXM module
cPCI-R66S0	6U 8HP Rear I/O module with GbE x4, COM, SAS x8, DVI-D x2, USB x3, PS/2, Audio
<b>Accessories</b>	
cPCI-R66X0/NV960	NVIDIA M960 MXM module kit

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

