

cPCI-3615 Series

3U CompactPCI® Dual-Core Intel® Atom™
Entry Level Processor Blade

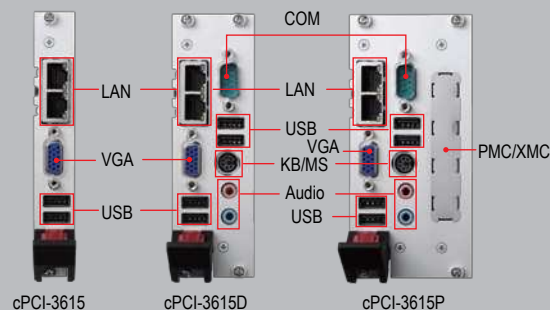


CompactPCI®



Features

- Supports dual-core Intel® Atom™ D525
- Up to 4GB DDR3-800 soldered memory
- Fanless operation with Atom™ N455
- Optional PMC/XMC site
- Up to QXGA 2048x1536 RGB display



Specifications

Processor & System

CPU	μFC-BGA Intel® Atom™ Processor N455 1.66GHz, 512KB L2 cache, TDP 6.5W μFC-BGA dual-core Intel® Atom™ Processor D525 1.8GHz, 1MB L2 cache, TDP 13W
Chipset	Intel® ICH8M I/O Controller Hub
Memory	Single channel DDR3-800 SDRAM soldered onboard, up to 2GB for N455 processor, 4GB for D525 processor
BIOS	AMIBIOS®8, 16Mbit SPI flash memory
CompactPCI Bus	PCI 32-bit/33 MHz, 3.3V or 5V universal V (I/O)
	Host only
PICMG Standards	PICMG® 2.0 CompactPCI® R3.0 PICMG® 2.1 Hot Swap R2.0

Connectivity

PMC/XMC	One optional PCI 32-bit/66 MHz PMC site or PCI-E x1 XMC site on 2nd or 3rd layer
Ethernet	Two PCI-E Intel® 82574L Gigabit Ethernet controllers Two 10/100/1000BASE-T front panel ports, switchable to rear
Graphics	Integrated in Intel® Atom™ processor DB-15 VGA port on front panel, switchable to rear Analog monitor support up to QXGA 2048x1536 pixels @60Hz, 32-bit
USB	Up to four USB 2.0 front panel ports One USB port on RTM
PS/2	Front panel PS/2 KB/MS port*
Serial Port	Three RS-232/422/485/485+ selectable serial ports One DB-9 port on front panel*, two on rear
Audio	Line-in and line-out ports on front panel*
PCI-Express	One PCI-Express lane to J2
GPIO	Four GPIO pins to J2

Storage

SBC	One Serial ATA direct connector for 2.5" onboard HDD* CompactFlash socket
RTM	Two 7-pin SATA signal connectors

*Note: 8HP & 12HP versions only.

Operating System

OS	Microsoft Windows® XP Professional, x64 Edition Microsoft Windows® 7 Fedora™ 8, 12 Red Hat Enterprise Linux 5.3 Wind River VxWorks 6.8, 6.6, 5.5.1 (Please contact ADLINK for other OS support)
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Miscellaneous

LED	Power (green), WDT (red)
Battery	Coin cell lithium battery onboard for RTC CMOS RAM
Watchdog Timer	System Reset and NMI, with programmable interval, 1-65535 seconds or minutes
Hardware Monitor	Monitors CPU temperature, system temperature and DC voltages

Mechanical & Environmental

Form Factor	3U 4HP/8HP/12HP CompactPCI® 100mm x 160mm (LxW)		
Operating Temperature	0°C to +60°C -20°C to +70°C extended temperature (cPCI-ET3615) -40°C to +85°C extreme extended temperature (cPCI-EX3615)		
Storage Temperature	-40°C to +85°C		
Rel. 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	Atom™ D525 1.8GHz, 4GB soldered DDR3-800 memory under Windows® XP with 100% CPU loading		
	Current(A)	Power(W)	
	5V	3.48	17.4
	Total		17.4
Weight	Net weight 466g (8HP dual slot version with heatsink)		
Certifications	CE/ FCC		

I/O Table

		GbE	USB 2.0	COM	VGA	PS/2 KB/MS	SATA	CF	Line-in	Line-out	PMC/ XMC
SBC											
cPCI-3615	Faceplate	2	2		1						
	Onboard							1			
cPCI-3615D	Faceplate	2	4	1	1	1			1	1	
	Onboard						1 (for 2.5" HDD)	1			
cPCI-3615P	Faceplate	2	4	1	1	1			1	1	
	Onboard						1 (for 2.5" HDD)	1			1
RTM											
cPCI-R3610(T)	Faceplate	2 ⁽¹⁾	1	2	1 ⁽¹⁾						
	Onboard						2 (7-pin)				

(1) Switchable to front or rear by software selection.

Ordering Information

Model Number	Description/Configuration
Processor Blades	
cPCI-3615D/N455/M2G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor N455 and 2GB DDR3-800 soldered memory
cPCI-3615/D525/M2G	1-slot (4HP) 3U CompactPCI® blade with Intel® Atom™ processor D525 and 2GB DDR3-800 soldered memory
cPCI-3615D/D525/M4G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ Processor D525 and 4GB DDR3-800 soldered memory
cPCI-3615P/N455/M2G	3-slot (12HP) 3U CompactPCI® blade with Intel® Atom™ processor N455 and 2GB DDR3-800 soldered memory
cPCI-EX3615D/D525/M4G	-40° C to 85° C screened cPCI-3615D/D525/M4G
cPCI-ET3615D/D525/M2G	-20° C to 70° C screened cPCI-3615D/D525/M4G
Rear Transition Modules	
cPCI-R3610	8HP Rear I/O module for cPCI-3615 with GbE x2, COM x2, USB x1, SATA x2, VGA, 50mm depth
cPCI-R3610T	8HP Rear I/O module for cPCI-3615 with GbE x2, COM x2, USB x1, SATA x2, VGA, 80mm depth

Contact your ADLINK representative for different CPU, memory combinations.

