

cPCI-3610 Series

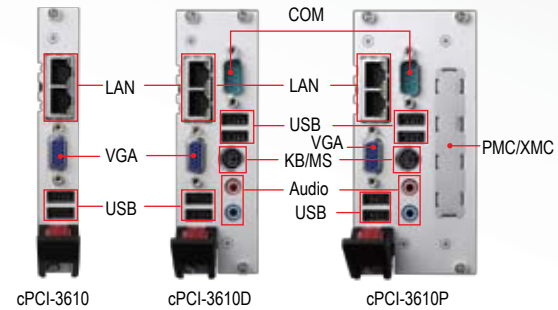
3U CompactPCI® Dual-Core Intel® Atom™ Entry Level Processor Blade



EXTENDED TEMPERATURE

Features

- Supports dual-core Intel® Atom™ D510
- Up to 2GB DDR2-800 soldered memory
- Fanless operation with Atom™ N450
- Optional PMC/XMC site
- Up to QXGA 2048x1536 CRT display



Specifications

Processor & System

CPU	<p>µFC-BGA Intel® Atom™ Processor N450 1.66GHz, 512KB L2 cache, TDP 5.5W</p> <p>µFC-BGA dual-core Intel® Atom™ Processor D510 1.66GHz, 1MB L2 cache, TDP 13W</p> <p>µFC-BGA Intel® Atom™ Processor D410 1.66GHz, 512K L2 cache, TDP 11W</p>
Chipset	Intel® ICH8M I/O Controller Hub
RAM	Single channel DDR2-667/800 SDRAM soldered onboard, up to 2GB capacity
BIOS	AMIBIOS®8, 16Mbit SPI flash memory
CompactPCI Bus	PCI 32bit/ 33MHz, 3.3V or 5V universal V (I/O)
	Host only
Standard	PICMG® 2.0 CompactPCI® R3.0 PICMG® 2.1 Hot Swap R2.0

Connectivity

PMC/XMC	One PCI 32bit/66MHz PMC site or PCI-Express x1 XMC site
Ethernet	Two PCI-Express 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*

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	<p>Microsoft Windows® XP Professional, x64 Edition</p> <p>Microsoft Windows® 7</p> <p>Fedora™ 12</p> <p>RedHat Enterprise Linux 5.3</p> <p>Wind River VxWorks 6.7, 5.5.1</p> <p>(Please contact ADLINK for other OS support)</p>
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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 (optional)
	-40°C to +85°C extreme extended temperature (optional)
Storage Temperature	-40°C to +85°C
RH Humidity	95% non-condensing
Shock	15G peak-to-peak, 11ms duration, non-operating
Vibration	1.88 Grms random vibration, 5-500Hz, each axis, operating
Power Consumption	Atom™ N450 1.60GHz, 512MB soldered DDR2-667 under Windows® XP with 100% CPU loading
	Current(A) Power(W)
	5V 3.04 15.2
	Total 15.2
	Atom™ D510 1.66GHz, 512MB soldered DDR2-667 under Windows® XP with 100% CPU loading
	Current(A) Power(W)
	5V 3.87 19.35
	Total 19.35

Safety & EMI

Certification	CE/ FCC
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I/O Table

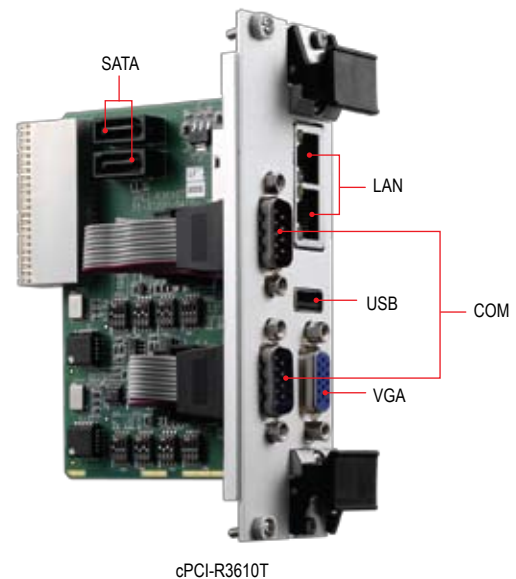
		GbE	USB 2.0	COM	VGA	PS/2 KB/MS	SATA	CF	Line-in	Line-out	PMC/XMC
SBC											
cPCI-3610	Face-plate	2	2		1						
	On-board							1			
cPCI-3610D	Face-plate	2	4	1	1	1			1	1	
	On-board						1	1			
cPCI-3610P	Face-plate	2	4	1	1	1			1	1	
	On-board						1	1			1
RTM											
cPCI-R3610(T)	Face-plate	2 ⁽¹⁾	1	2	1 ⁽¹⁾						
	On-board						2				

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

Ordering Information

Model Number	Description/Configuration
Processor Blade	
cPCI-3610D/N45/M1G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor N450 and 1GB DDR2-667 soldered memory
cPCI-3610D/D51/M1G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor D510 and 1GB DDR2-667/800 soldered memory
cPCI-3610D/D41/M1G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor D410 and 1GB DDR2-667/800 soldered memory
cPCI-3610/N45/M1G	1-slot (4HP) 3U CompactPCI® blade with Intel® Atom™ processor N450 and 1GB DDR2-667 soldered memory
cPCI-3610P/N45/M1G	3-slot (12HP) 3U CompactPCI® blade with Intel® Atom™ processor N450 and 1GB DDR2-667 soldered memory
Rear Transition Module	
cPCI-R3610	8 HP Rear I/O module for cPCI-3610 with GbEx2, COMx2, USBx1, SATAx2, VGA, 50mm depth
cPCI-R3610T	8HP Rear I/O module for cPCI-3610 with GbEx2, COMx2, USBx1, SATAx2, VGA, 80mm depth

Contact your ADLINK representative for different CPU, memory combinations.



cPCI-R3610T