cPCI-3510(BL) Series

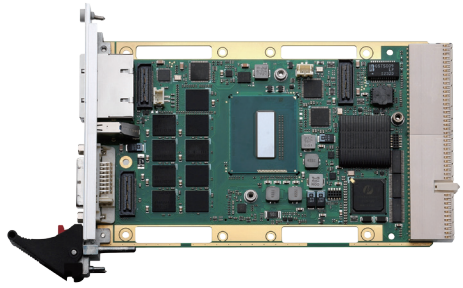
3U CompactPCI 4th/5th Generation Intel® Core™ i7 Processor Blade with ECC

Features

- Quad-core 4th/5th Generation Intel® Core™ i7 processor
- Up to 8GB DDR3L ECC soldered memory onboard (up to16GB for cPCI-3510BL)
- Up to three independent displays
- System/Peripheral slot operation
- Intel® AMT 9.0 support

CompactPCI®

EXTENDED TEMPERATURE





cPCI-3510(BL) cPCI-3510(BL)D cPCI-3510(BL)G cPCI-3510L cPCI-3510M cPCI-3510T

Specifications

Processor & System

CPU

New

Quad-core Intel® Core™ i7-5700EQ Processor 2.6GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP (cPCI-3510BL only)

Quad-core Intel® Core™ i7-4700EQ Processor 2.4GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP

Dual-core Intel® Core™ i5-4402E Processor 1.6GHz (Turbo boost up to 2.7GHz), 3M Cache, 25W

Supports Intel® Hyper-Threading and Turbo Boost Technology, VT-x, VT-D, vPro Technology

Chipset

Intel® QM87 Chipset

Memory

DDR3L-1333 SDRAM ECC soldered, up to 16GB (cPCI-3510BL)

DDR3L-1600 SDRAM ECC soldered, up to 8GB (cPCI-3510)

BIOS

AMI EFI BIOS, 64Mbit SPI Flash memory

CompactPCI Bus

PCI 32-bit, 33/66 MHz, 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)

PICMG Standards

PICMG 2.0 CompactPCI R3.0

PICMG 2.1 Hot Swap R2.0

PICMG 2.9 System Management (R1.0)

Connectivity

PMC/XMC

Optional PCI 64-bit/66MHz PMC site or PCIe x1 XMC site

Ethernet

One Intel® I217LM controller for one Gigabit Ethernet front panel port with Intel® AMT 9.0 support

Three Intel® I210 controllers for one Gigabit Ethernet front panel port and two rear ports

Additional two Intel® 82574L controllers for two Gigabit

Ethernet front panel ports on riser card (cPCI-3510L/cPCI-3510T)

Graphics

Integrated in Intel® processor, 3D engine

One DVI-I (digital+analog) port on front panel, analog switchable to rear, supports up to QXGA 2048x1536 pixels@75Hz, 32-bits

Two DisplayPorts on riser card, support up to 2560×1440 pixels @ 60Hz, DVI, VGA and HDMI interfaces are available by adapter cables (cPCI-3510(BL)G only)

Three independent displays with different /contents

USB

Single USB 3.0 port on front panel, and up to three USB ports on front panel on selected SKUs

Three USB ports to rear, two on RTM panel

Audio

Line-in and Line-out ports on front panel (cPCI-3510(BL)D only)

PS/2

Keyboard/Mouse on cPCI-3510(BL)D and cPCI-3510(BL)G

Serial Port

Up to four serial ports

One RS-232/422/485 selectable port on front panel (cPCI-3510(BL)D/ cPCI-3510L/cPCI-3510T)

One RS-232/422/485 10-pin header on riser card (cPCI-3510(BL) G only)

Two serial ports on rear panel: one with Tx/Rx signal only, one converted from USB signal

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Specifications

Storage

Blade

One SATA direct connector for 2.5" onboard HDD (8HP & 12HP version only)

CFast socket or mSATA socket

Optional onboard 32GB SSD (by replacing CFast adapter board)

RTM

Three 7-pin SATA signal connectors

Supports SATA RAID 0/1/5/10

Operating System

OS

Microsoft Windows 7/8/10, 32/64-bit

Microsoft Windows Embedded Standard 2009 (for cPCI-3510 Haswell)

Red Hat Enterprise Linux 6.4

Fedora 18

Wind River VxWorks 6.9, 32/64-bit

QNX Software Development Platform (SDP 7.0)

(Please contact ADLINK for other OS support)

Miscellaneous

LEDs

Power, WDT, Storage Drive, Overheat, General Purpose

Battery

Coin cell lithium battery onboard for RTC

CMOS RAM for BIOS configuration

Watchdog Timer

System Reset and NMI, with Programmable Interval, 1-65535 sec or 1-65535 minutes

Hardware Monitor

Monitors CPU temperature, system temperature and DC voltages by IPMI

TPM

Atmel TPM AT97SC3204 (optional support upon request)

Mechanical & Environmental

Form Factor

3U 4HP/8HP/12HP CompactPCI

100mm x 160mm (L x W)

Operating Temperature

-20°C to +70°C (Core™ i7-4700EQ and i7-5700EQ 47W)

-40°C to +85°C (screened, Core™ i5-4402E, Core™ i7-4700EQ and i7-5700EQ 47W adjusted to 37W by Intel® cTDP)

Storage Temperature: -50°C to +100°C

RH Humidity

95% non-condensing

Shock

20G peak-to-peak, 11ms duration, operating

Vibration

2Grms random vibration, 5 to 500Hz in 3 axes, operating

Weight

Net weight 713.55g (cPCI-3510(BL)D with heatsink)

Net weight 718.20g (cPCI-3510(BL)G with heatsink)

Certifications

CE/ FCC

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I/O Table

		GbE	USB	COM	Display	PS/2 KB/MS	Storage	Onboard SSD	Audio	PMC/XMC
SBC										
cPCI-3510(BL) (4HP)	**Faceplate**	2 (RJ-45)	1 (3.0)		1 (DVI-I)					
	Onboard						1 (CFast)	optional[2]		
cPCI-3510(BL)D (8HP)	**Faceplate**	2 (RJ-45)	1 (3.0) 2 (2.0)	1 (DB9)	1 (DVI-I)	1				
	Onboard						1 (SATA) 1 (CFast)	optional[2]	1 (Line-in) 1 (Line-out)	
cPCI-3510(BL)G (8HP)	**Faceplate**	2 (RJ-45)	1 (3.0) 1 (2.0)	1 (RJ-45)	1 (DVI-I) 2 (DP)	1				
	Onboard			1 (10-pin)			1 (SATA) 1 (CFast)	optional[2]		
cPCI-3510L (8HP)	**Faceplate**	4 (RJ-45)	1 (3.0) 1 (2.0)	1(DB9)	1 (DVI-I)					
	Onboard						1 (SATA) 1 (CFast)	optional[2]		
cPCI-3510M (8HP)	**Faceplate**	2 (RJ-45)	1 (3.0) 2 (2.0)	2 (DB9)	1 (DVI-I) 2 (DVI-D)	1			1 (Line-in) 1 (Line-out)	
	Onboard						1 (SATA) 1 (CFast)	optional[2]		
cPCI-3510P (12HP)	**Faceplate**	2 (RJ-45)	1 (3.0) 2 (2.0)	1 (DB9)	1 (DVI-I)	1			1 (Line-in) 1 (Line-out)	
	Onboard						1 (SATA) 1 (CFast)	optional[2]		1
cPCI-3510S (8HP)	**Faceplate**	2 (RJ-45)	1 (3.0)		1 (DVI-I)					
	Onboard						1 (CFast)			1
cPCI-3510T (8HP)	**Faceplate**	2 (RJ-45) 2 (M12)	1 (3.0)	1 (DB9)	1 (DVI-I)					
	Onboard						1 (SATA) 1 (CFast)	optional[2]		
RTM										
cPCI-R3P00(T)	**Faceplate**	2 (RJ-45)	2 (2.0)	2 (DB9)	1 (VGA)[1]					
	Onboard						3 (SATA)			

(1) Switched from front port
(2) Available by replacing CFast or mSATA board with onboard SSD adapter board

Ordering Information

- **cPCI-3510BL/5700E/M16/S32**
  New
  1-slot (4HP) 3U CompactPCI blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0 and onboard 32GB SSD
- **cPCI-3510/4700E/M8/S32**
  1-slot (4HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0 and onboard 32GB SSD
- **cPCI-3510BLD/5700E/M16**
  New
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, COM, 2x USB 2.0, PS/2 KB/MS, Line-in, Line-out, CFast socket and SATA connector
- **cPCI-3510D/4700E/M4**
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, COM, 2x USB 2.0, PS/2 KB/MS, Line-in, Line-out, CFast socket and SATA connector
- **cPCI-3510BLG/5700E/M16**
  New
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory , DVI, 2x GbE, 1x USB 3.0, RJ-45 COM, 2x DisplayPort, PS/2 KB/MS, 1x USB 2.0, CFast socket and SATA connector
- **cPCI-3510G/4700E/M4**
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory , DVI, 2x GbE, 1x USB 3.0, RJ-45 COM, 2x DisplayPort, PS/2 KB/MS, 1x USB 2.0, CFast socket and SATA connector
- **cPCI-3510L/4700E/M4**
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 4x GbE, 1x USB 3.0, 1x USB 2.0, COM, CFast socket and SATA space
- **cPCI-3510M/4700E/M4 (available by request)**
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, 3x DVI, 2x GbE, 1x USB 3.0, 2x USB 2.0, 2x COM, PS/2 KB/MS, Line-in, Line-out, CFast socket and SATA connector
- **cPCI-3510P/4700E/M4 (available by request)**
  3-slot (12HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, COM, 2x USB 2.0, PS/2 KB/MS, Line-in, Line-out, CFast socket, SATA connector and PMC/XMC connector
- **cPCI-3510S/4700E/M4**
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, CFast socket and PMC/XMC connector
- **cPCI-3510T/4700E/M4 (available by request)**
  New
  2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 1x USB 3.0, 2x GbE in RJ-45 and 2x GbE in MIL-STD M12 connectors, COM (RS-232/422/485), CFast socket and SATA space

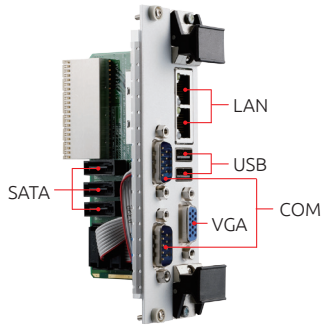
Rear Transition Module

- **cPCI-R3P00**
  8 HP Rear I/O module with 2x GbE, 2x COM, 2x USB 2.0, 3x SATA connectors, VGA, 50mm depth
- **cPCI-R3P00T**
  8 HP Rear I/O module with 2x GbE, 2x COM, 2x USB 2.0, 3x SATA connectors, VGA, 80mm depth

Accessories

- **SATA drive installation kit**
  2.5” SATA drive installation package including bracket, screws
- **Y-cable for keyboard & mouse**
  Y-cable for keyboard & mouse and 200mm in cable length
- **DisplayPort to DVI cable**
  DisplayPort to DVI adapter cable with 150mm cable (one is included in cPCI-3510(BL)G package by default)
- **DisplayPort to VGA cable**
  DisplayPort to VGA adapter cable with 150mm cable
- **DisplayPort to HDMI cable**
  DisplayPort to HDMI adapter cable with 150mm cable
- **RJ-45 to DB9 cable (cPCI-3510(BL)G only)**
  RJ-45 to DB9 COM adapter and 200mm in cable length
- **SCSI 100p to IO cable**
  (cPCI-3510M only and available by request)
  SCSI 100-pin male to 2 x DVI-D female, 2 x DB9 male, 2 x USB female, 2 x PS/2 female, 2 x audio jack, 150 mm cable

Contact us for different CPU, memory, SSD/HDD, CFast and mSATA combinations.



cPCI-R3P00(T)

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