cPCI-A3515 Series

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

Features

- PICMG® CPCI-S.0 CompactPCI® Serial Processor Blade
- Quad-core 4th/5th Generation Intel® Core™ i7 processor
- Up to 16GB DDR3L ECC soldered memory
- Up to three independent displays
- Optional extended operating temperature -40°C to +85°C (with Intel® cTDP)
- Optional PICMG® 2.0 (CompactPCI®) support
- Smart Embedded Management Agent (SEMA) for system health monitoring

CompactPCI®

Serial

Specifications

- **Core System**
  - **CPU**
    - Quad-core Intel® Core™ i7-5700EQ Processor 2.6GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP
    - Quad-core Intel® Core™ i7-4700EQ Processor 2.4GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP
    - Supports Intel® Hyper-Threading and Turbo Boost Technology, VT-x, VT-D, vPro Technology
  - **Chipset**
    - Intel® QM87 Chipset
  - **Memory**
    - DDR3L-1333/1600 SDRAM ECC soldered, up to 16GB
  - **BIOS**
    - AMI EFI BIOS, 128Mbit SPI flash memory
  - **CompactPCI Serial**
    - Interfaces below are routed to backplane through P1 to PS

- **Interface connectors:**
  - One PCIe x8, up to 8GT/s
  - Two PCIe x4, up to 8GT/s
  - Three PCIe x1, up to 5GT/s
  - Four SATA 6Gb/s
  - Two USB 3.0 ports
  - Eight USB 2.0 ports
  - Supports operation in system slot and in peripheral slot

- **PICMG Standards**
  - PICMG CPCI-S.0 CompactPCI Serial R1.0
  - PICMG 2.0 CompactPCI R3.0

- **Connectivity**
  - **Ethernet**
    - Two Gigabit Ethernet faceplate ports
    - Two Gigabit Ethernet interfaces via P6 connector to backplane (Eight Gigabit Ethernet interfaces by request)
    - (Please contact ADLINK for more Ethernet support)
  - **Graphics**
    - High-performance 3D engine integrated in Intel processor, supports up to three independent display outputs
    - One VGA port on faceplate (cPCI-A3515B only)
    - Two DisplayPorts on faceplate, support up to 2560×1440 pixels @ 60Hz, DVI, VGA and HDMI interfaces available via adapter cables
  - **USB**
    - Two USB 3.0 ports on faceplate
    - Two USB 2.0 ports on faceplate (cPCI-A3515B/D only)

- **Serial Port**
  - One RS-232/422/485 port on faceplate (cPCI-A3515B/D only)

- **Storage Blade**
  - One SATA 3 Gb/s direct connector for 2.5" SATA storage drive (cPCI-A3515B/D only)
  - Optional onboard 32GB SSD or mSATA socketE

- **Operating System**
  - **OS**
    - Microsoft Windows 7/8, 32/64-bit
    - Red Hat Enterprise Linux 6.6, 7.0
    - Windows Embedded Standard 7, VxWorks, QNX and other OS support by request
Specifications

- **Miscellaneous**
  - **LEDs**
    - Power, WDT, Drive Activity, 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 SEMA
  - **TPM**
    - Atmel TPM AT97SC3204 (optional by request)

- **Mechanical and Environmental**
  - **Form Factor**
    - 3U 4HP/8HP CompactPCI Serial
    - 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™ 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**
    - 386g (cPCI-A3515 with heatsink)
    - 575g (cPCI-A3515B with heatsink)
    - 578g (cPCI-A3515D with heatsink)
  - **Certifications**
    - CE/FCC
### I/O Table

<table>
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<tr>
<th>Model</th>
<th>GbE</th>
<th>USB</th>
<th>COM</th>
<th>Display</th>
<th>SATA 2.5&quot;</th>
<th>mSATA</th>
<th>Onboard SSD</th>
<th>Audio</th>
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<tbody>
<tr>
<td>cPCI-A3515 (4HP)</td>
<td>Faceplate</td>
<td>2 (RJ-45)</td>
<td>2 (3.0)</td>
<td>2 (DP)</td>
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<td>cPCI-A3515B (8HP)</td>
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<td>2 (3.0)</td>
<td>1 (DB9)</td>
<td>2 (DP)</td>
<td>1 (VGA)</td>
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<td>1 (Line-in) 1 (Line-out)</td>
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(1) Available by replacing onboard SSD with mSATA socket.

(2) Available by replacing mSATA socket with onboard SSD.
## Ordering Information

### Processor Blades

- **cPCI-A3515/5700E/M16/S32**
  1-slot (4HP) 3U CompactPCI Serial blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0 and onboard 32GB SSD

- **cPCI-A3515/4700E/M8/S32**
  1-slot (4HP) 3U CompactPCI Serial blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0 and onboard 32GB SSD

- **cPCI-A3515B/5700E/M16**
  2-slot (8HP) 3U CompactPCI and CompactPCI Serial blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, VGA, mSATA socket, SATA connector, and CompactPCI J1 and J2 connectors

- **cPCI-A3515B/4700E/M8**
  2-slot (8HP) 3U CompactPCI and CompactPCI Serial blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, VGA, mSATA socket, SATA connector, and CompactPCI J1 and J2 connectors

- **cPCI-A3515D/5700E/M16**
  2-slot (8HP) 3U CompactPCI Serial blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, Line-in, Line-out, mSATA socket and SATA connector

- **cPCI-A3515D/4700E/M8**
  2-slot (8HP) 3U CompactPCI Serial blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, 2x DP, 2x GbE, 2x USB 3.0, COM, 2x USB 2.0, Line-in, Line-out, mSATA socket and SATA connector

## Accessories

- **DP-DVI cable**
  DisplayPort to DVI adapter cable

- **DP-VGA cable**
  DisplayPort to VGA adapter cable

- **DP-HDMI cable**
  DisplayPort to HDMI adapter cable

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