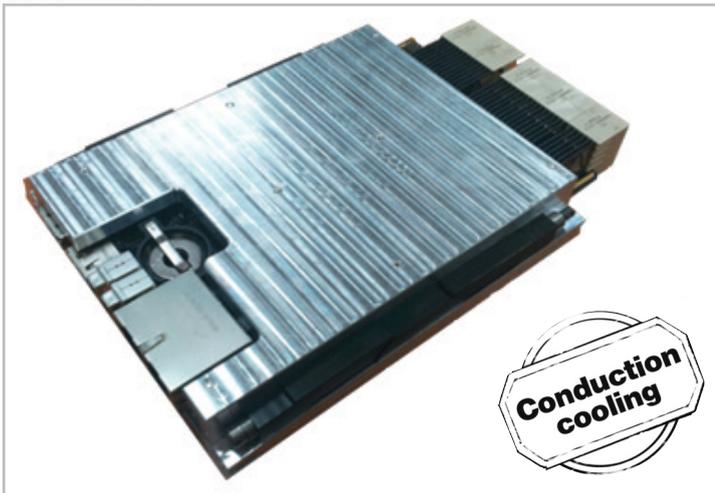


CPC510 3U 5HP Compact PCI S.0 Intel Core i7 CPU Board with Conduction cooling



Features

- Intel IvyBridge processor (2 cores, up to 1,7 GHz);
- Up to 4 GB soldered, dual-channel DDR3 SDRAM with ECC;
- 2x DisplayPort up to 2560×1600@60Hz at the front panel;
- 2x Gigabit Ethernet ports (front panel);
- 2x USB 2.0 (front panel);
- Intermodule communication (PICMG CPCI S.0 CompactPCI® Serial): two x8 FatPipe PCI-E; 3 x USB 2.0; 4x USB 3.0; 3 SATA II, 2 SATA III;
- Conduction cooling;
- Protective coating (optional);
- -40...+85°C;
- Windows 7 Embedded, Linux 2.6, QNX 6.5.

Technical Specification

Intel IvyBridge CPU (2/4 Cores)

- Intel i7-3517UE (DC, 2C/4T, 1,7 GHz, 1600 MHz, 4 MB, 17 W)

Panther Point PCH

Memory

- DDR3L SDRAM 1066, 1333 MHz with ECC up to 4 GB soldered, dual-channel.

Video Output (simultaneous output to 2 monitors)

- Two DisplayPort connectors (resolution up to 2560×1600@60Hz) at the front panel

PCI-E Bus

- CPU Hosts. PCI-E 2.0 support (up to 5GT/s):
 - Output via the PCI-E switch to J1 and J2 CPCI Serial connectors with support for two x8 FatPipe#1 and FatPipe#2 devices;
 - Support for the Non-Transparent mode for FatPipe#1;
 - Output via the PCI-E switch to J4 CPCI Serial connector with support for four x4 devices.
- PCH Hosts. PCI-E 2.0 support (up to 5GT/s):
 - Output to the mezzanine module on the left; support for 1 x4 or 4 x1 devices.

SMBUS Bus

- Compatibility with the 2.0 specification
- Speed up to 100 kbps

FLASH BIOS

- 64 Mbit SPI-Flash

SATA II Interface

- Three ports are routed to the J3 CPCI Serial connector.

SATA III Interface

- Two interfaces are routed to the J3 CPCI Serial connector
- Support for RAID 0, 1, 5, 10

2 ports LAN 10/100/1000 Mbit at PCI-E x4 Gen2

- Two interfaces are routed to the XS5 connector at the front panel
- Implementation of a server network adapter

USB ports

- Two USB2.0 ports are routed to connectors at the front panel
- 8/4 USB2.0 ports are routed to the J3 CPCI Serial connector*
- 4x USB3.0 ports are routed to the J3 CPCI Serial connector*

FRAM Memory

- 32 Kbyte, RAM 1 Kbyte for storing settings of the Bios Setup
- Implemented on the SPI Bus

Real time clock (RTC)

- Power is supplied from a CR 2032 lithium battery (3V)

Watch dog timer

- Internal with a possibility of programmed control

SGPIO Interface

- Support for signaling according to the SFF-8485 Specification

Hardware monitor

- Implemented via PECI/SMBUS interfaces
- Monitoring of three supply voltages
- Monitoring of the CPU temperature
- Monitoring of the PCB temperature
- Monitoring of the RAM temperature

Support for the power source management Indication

- Board Startup Diagnostics LED / Hot Swapping Light.SATA/SD Drives Access LED

- Two software-controlled LEDs (user-defined)
- Temperature state LED
- PCI Express Interconnections state LED

OS Programming Compatibility

- Windows 7 Embedded
- Linux 2.6
- QNX 6.5

Power Requirements

- Power voltage +12V, +5V_STBY (option)

Operating temperature range

- From -40°C to +85°C

Humidity

- Up to 80% non-condensing

Vibration / Single shock resistance

- 5g/100g

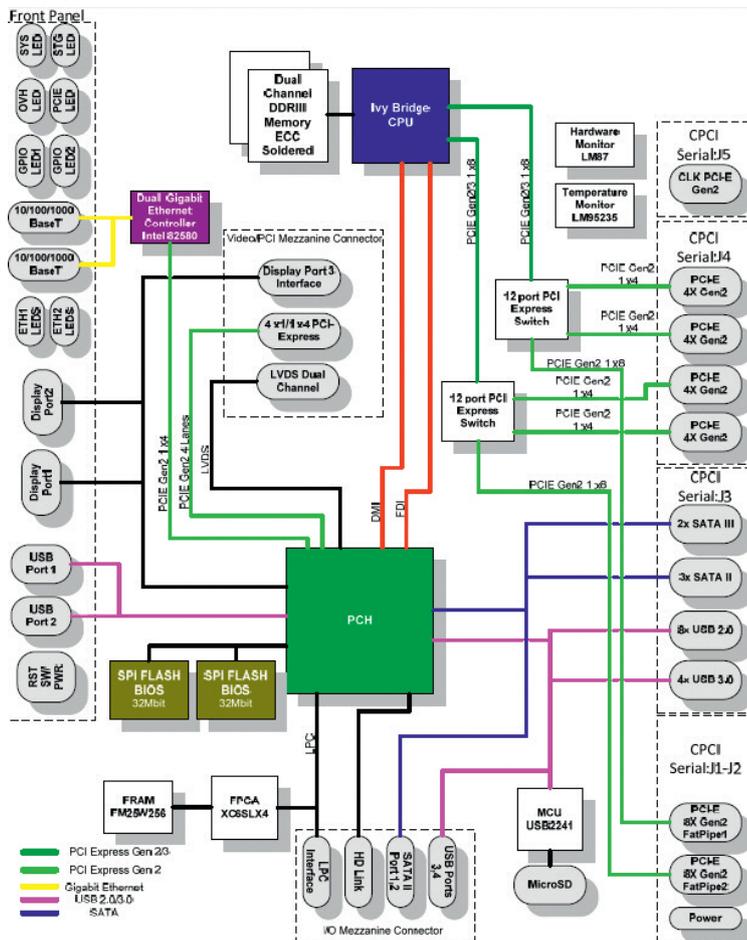
MTBF

- More than 100,000 hours

* when USB 3.0 is used, four USB 2.0 ports are utilized by the USB 3.0 ports

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Board Layout



Ordering Information

CPC510 Configuration

CPC510 - 01 - i72C1.7 - RAM4096 - RC - I

CPC510 Available Options

Coating	
COATED	Protective Coating
Operating System Presetting	
LNX	Linux 2.6
Win7e	Windows 7 Embedded
QNX	QNX 6.5

Other configurations and options are available upon request.

Delivery checklist

1. CPC510 module;
2. Package.

Corporate Offices

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Product specifications are subject to change without notice