Intel® Core™ 2 Duo
Based 3U CompactPCI SBC

Best solutions
to fit your demands!

- Intel Core 2 Duo 533/800 MHz FSB
- Dual Channel DDR II SDRAM up to 4096 MB (soldered)
- Two PCI-E Gigabit Ethernet controllers 10/100/1000 Mbit/s
- CRT support up to 2048×1536
- VGA and LVDS interfaces or two DVI-D interfaces
- Wide range of interfaces via mezzanine modules
- Industrial operating temperature range: −40°C to +85°C
- Protective coating (option)

http://www.fastwel.com
CPC504 is a CompactPCI PICMG 2.0 compliant host processor module based on low power dual-core Intel Core 2 Duo CPUs operating at 1.6 GHz or 2.2 GHz with 4 MB level 2 cache and featuring 800 MHz system bus. The processor executes up to 8 floating point operations per clock cycle and can address up to 4 GB of soldered DDR2 system memory in 64-bit mode.

An increased heatsink for CPU and chipset cooling with effective surface area of up to 682 cm² allows efficient heat dissipation within wide ambient air temperature range.

For high-speed data exchange CPC504 employs two Gigabit Ethernet channels, four x1 PCI Express lanes, and 32-bit PCI bus. The graphics controller of Intel 965GME supports output of two independent video streams to VGA and LVDS interfaces or to two DVI-D interfaces available on 8HP and 12HP modifications.

The firmware of CPC504 supports booting from LAN, from the onboard SD cards, from soldered 4 GB flash memory disk, or from SATA II (up to 300 Mb/s) and IDE drives located on MIC584 mezzanine expansion module or on a rear I/O module.

The MIC584 mezzanine module supports two SATA II interfaces with option to mount either SATA DOM solid-state modules or one standard 1.8” SATA disk drive. Six COM ports, two USB 2.0, PS/2, and audio interfaces are available via the MIC584 module as well.

CPC504 supports Windows XP/XP Embedded, Linux, and QNX operating systems.
MIC584 mezzanine module for CPC504 expands its functions by carrying the following interfaces:

- High definition audio (MicIn, LineIn, LineOut)
- Two USB ports
- Parallel port (IEEE 1284) onboard
- PS/2 interface
- Six COM ports (5 onboard)
- 1×SerialATA onboard
- Passive cooling
- MTBF: 700,000 hours
- Dimensions: short 3U, 88.3x100mm (3.48"x3.94"), 4HP
CPC504 Intel® Core™ 2 Duo Based 3U CompactPCI SBC

Ordering Information

CPC504 Configuration

CPC504 - 01 - P1.8 - I \Options

Configurations
01  NAND Flash 2048MB, no 2xDVI-D
02  no NAND Flash 2048MB, no 2xDVI-D
03  NAND Flash 2048MB, 2xDVI-D
04  no NAND Flash 2048MB, 2xDVI-D

Processor
CS1.0  Intel Celeron Processor ULV 573 (512K Cache, 1.0 GHz, 533 MHz FSB)
C2D1.6  Intel Core 2 Duo Processor L7500 (4M Cache, 1.6 GHz, 800 MHz FSB)
C2D2.2  Intel Core 2 Duo Processor T7500 (512K Cache, 2.2 GHz, 800 MHz FSB)

Memory
2048  2048MB Soldered DDR2 SDRAM
4096  4096MB Soldered DDR2 SDRAM

Cooling system (front panel width)
R1  4HP
R2  8HP

Temperature Range
I  Industrial Range, –40…+85°C
C  Commercial Range, 0…+70°C

CPC504 Available Options

<table>
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<tr>
<td>QNX</td>
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<td>XPE</td>
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<tr>
<td>LNX</td>
<td>Linux 2.6</td>
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</tbody>
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Other configurations and options are available upon request.

Example

CPC504-01-C2D2.2-RAM4096-R2-\COATED\XPE
3U CompactPCI SBC, Intel Core 2 Duo 2.2 GHz, NAND Flash 2048MB, no 2xDVI-D
4096 MB Soldered DDR2 SDRAM
8HP cooling system
Industrial temperature range –40°C to +85°C
Protective coating
Windows XP Embedded

Applications

Embedded  Process Control  Avionics  Transportation

Corporate Offices

FASTWEL GROUP Co. Ltd
108 Profsoyuznaya str.
Moscow, Russia 117437
Tel: +7 (495) 232-1681
Fax: +7 (495) 232-1654
E-mail: info@fastwel.com
Web: www.fastwel.com

FASTWEL Corporation US
45 Main Street, Suite 319
Brooklyn, New York 11201
Tel: 1.718.554.3686
Fax: 1.718.797.0600
Toll free: 1.877.787.8443
(1.877.RURUGGED)
E-mail: info@fastwel.com

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