CP62103

6U CompactPCI® processor board based on Intel® Ivy Bridge platform

- Intel QM77/HM76 Chipset
- Intel i3/i5/i7 series processors
- Up to 16GB DDR3 1333/1600 memory
- DVI, VGA, LVDS display output
- four Gigabit Ethernet ports, four RS-232 / TTL (optional) serial interfaces
Overview

CP62103 is a modular design, based on COMexpress® technology, up to 4-core i7 processor from Intel® Ivy Bridge family. CP62103 is designed to meet harsh environment applications like rural communication, military, medical and outdoor video processing.

CP62103 supports up to 3615QE, an Intel® 4-core processor. The 3rd generation Intel® Core™ i3/i5/i7 processors have a completely new microarchitecture, enabling small-sized designs to be created with unmatched computing power, graphics performance and energy efficiency on a small footprint.

CP62103 supports onboard maximum 64GB SATAIII interfaces, maximum 1TB SSD, and sets aside an extrapolation standard SATAIII interface expansion, especially it is provided with hard self-destruct feature.

CP62103 has four RS-232 / TTL (optional) serial interfaces, including two RS-232 / TRS-422 / TTL (optional) serial interfaces, and one RS-232 / TRS-422 / TRLRS-485 / TTL (optional) serial interface.

With up to 16GB ECC memory and rugged design, CP62103 ensures high reliability that makes it best fit for Radar, Sonar, Command & Control, Video surveillance, and other onboard/on-vehicle computers.

Integrated with Intel® HD4000 graphic controller, CP62103 supports Dual-head, Multi-head display output, including VGA, DVI and LVDC. Maximum output resolution is designed as 2048x1536.

The most outstanding advantage of CP62103 is its modular design, whenever and whatever I/O feature set change request is submitted by a customer, LinkedHope™ is able to deliver working samples of a customized CP62103 in 6-8 weeks!

LinkedHope™ developed CP62103 Board-Support-Package (BSP) for VxWorks 5.5/6.8 operating system, as expands its OS support list: Windows, Linux and QNX.

Other feature sets of CP62103 includes, 5V or 12V separate power supply, PS / 2 mouse, keyboard, maximum 8 USB ports (2x USB3.0, 6x USB2.0), up to four Gigabit Ethernet ports etc..

Technical Information

Processor
- Intel® 3rd generation Core™ i3/i5 /i7® processor
- Intel® 3rd generation Celeron® processor

Chipset
- QM77 (i3/i5/i7)
- HM76 (Celeron)

Memory
- 2GB/4GB/8GB/16GB (DDR3 1333/1600)

Display Interface
- integrated Intel® HD4000
- DVI, VGA, LVDS
- CRT resolution up to QXGA (2048x1536)

Ethernet
- 4x Gigabit Ethernet Interface
  3x front I/O
  4x rear I/O (three of them are optionally routed to front)

USB
- 2x USB3.0 (Compatible with USB2.0)
- 6x USB2.0

Storage
- 1x SATAIII SSD (SLC/up to 64GB) on board
- onboard one plug-in 2.5 inch SATAIII SSD (up to 1TB) (support the hard drive self destruction)
- 2x SATAII to rear I/O

Serial Interface
- 4x RS-232/TTL(optional)serial interface
  (2x RS-232/TRS-422/TTL(optional) serial interface, 1x RS-232/TRS-422/TRLRS-485/TTL(optional) serial interface

BUS
- 64-bit/32-bit(33MHz/66MHz) PCI BUS
- 7x REQ/GNT& clock signals
- 5V and 3.3V PCI signal voltage

Rear I/O
- 6x USB2.0
- 4x GbE (three are switchable between Front and Rear)
- 2x SATAII

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**Order Information**

<table>
<thead>
<tr>
<th>Product</th>
<th>Part No.</th>
<th>Description</th>
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<td>CP62103</td>
<td>10-0000-0611</td>
<td>Intel® Corei7-3615QE, 4x2.3GHz, Intel® QM77, Memory4GB, COMx4, GBEx4, USB2.0x6, USB3.0x2, SATAIIIx2, SATAIIIx2, 16GB on board SSD(SLC), VGAx1, LVDSx2, DVIx2, 0°C to +60°C</td>
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<td>CP62103</td>
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<td>Intel® Core i7-3612QE, 4x2.1GHz, Intel® QM77, Memory4GB, COMx4, GBEx4, USB2.0x6, USB3.0x2, SATAIIIx2, 16GB on board SSD(SLC), VGAx1, LVDSx2, DVIx2, 0°C to +60°C</td>
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<td>Intel® Celeron® 1002E, 2x2.2GHz, Intel® HM76, Memory4GB, COMx4, GBEx4, USB2.0x6, USB3.0x2, SATAIIIx2, 16GB on board SSD(SLC), VGAx1, LVDSx2, DVIx2, -40°C to +70°C</td>
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**Front I/O**
- 1x VGA (switchable between Front and Rear)
- 2x USB3.0
- 3x GbE (three are switchable between Front and Rear)
- 1x COM (RS232/TTL optional)

**MTBF**
- >200000h

**Software Support**
- DOS
- Windows
- Linux
- VxWorks
- QNX

**Power Consumption**
- about 50W (as the onboard CPU)
- support CPCI standard power supply, support +12V single power supply

**Environment**
- Operation Temperature: 0°C to +60°C & -40°C to +70°C
- Storage Temperature: -55°C to +85°C (no battery)
- Humidity: 93% RH at 40°C
More optional configuration:

- CPU = i7-3517UE(2x1.7GHz), i3-3120ME(2x2.4GHz), i3-3217UE(2x1.6GHz), Celeron 1047UE(2x1.4GHz), Celeron 927UE(1x1.5GHz)
- Memory = 4GB, 8GB, 16GB
- On board Flash = 4GB, 8GB, 16GB, 32GB, 64GB

Please contact LinkedHope sales for more ordering information.