



APPLICATIONS

The EM Compact ICP-CP85 is a high-end 3U CompactPCI PlusIO CPU-Board for versatile requirements in embedded and ruggedized applications

- ▶ Industrial Control and Automation
- ▶ Measurement and Control
- ▶ Medical
- ▶ Infotainment
- ▶ Energy Management
- ▶ Environmental Management
- ▶ Military

ICP-CP85-XX

Intel® Core™ i7 3U CompactPCI PlusIO CPU Board



4 HP Version

ICP-CP85-XX

FEATURES

- ▶ Intel® Core™ i7 / i5 up to 2.66 GHz
- ▶ Up to 8 GB DDR3 800/1066MHz memory
- ▶ Three independent Gigabit Ethernet controller on 4HP with Rear I/O module
- ▶ Front-panel DVI-I
- ▶ High Speed Communication via Rear I/O CompactPCI PlusIO (4x PCIe x1/SATA/USB)
- ▶ Up to 8 USB 2.0 ports
- ▶ Up to 4 Serial ATA channels 3Gbps
- ▶ 4 HP system master with up to 7 PCI bus master or stand-alone
- ▶ 32-bit/33MHz CompactPCI® interface
- ▶ High Versatility through Rear I/O and 8 HP extensions
- ▶ Design, Production and Support "Made in Germany"

BENEFITS

- ▶ Low emission, high immunity
- ▶ Long term availability
- ▶ Optional free of rotating parts
- ▶ Rugged & reliable choice for demanding embedded applications
- ▶ Integration- and application-services, trainings



OVERVIEW

The EM Compact ICP-CP85 is powered by the latest Intel® processor technology and the Mobile Intel® QM57 Express Chipset. The perfect fusion of low power consumption and high performance.

SPECIFICATION SUMMARY

- ▶ Flash BIOS with embedded OS
- ▶ One PCI Express™ Mini card socket
- ▶ Three Gigabit Ethernet ports @ 4HP with Rear I/O module
- ▶ SATA Interfacing
- ▶ Dual Independent Display

SPECIFICATIONS

CPU

Intel® Core™ i7 SV - i7-620M -
2.66 GHz - 4 MB LLC Cache
Intel® Core™ i7 LV - i7-620LE -
2.0 GHz - 4 MB LLC Cache
Intel® Core™ i7 ULV - i7-620UE -
1.06 GHz - 4 MB LLC Cache
Intel® Core™ i5 SV - i5-520E -
2.4 GHz - 3 MB LLC Cache

PLATFORM CONTROLLER HUB

Mobile Intel® QM57 Express Chipset

SPI FLASH BIOS

UEFI-BIOS

SYSTEM MEMORY

Up to 8 GB DDR3 dual channel with 800 MHz and 1066 MHz support (Non-ECC)
Intel Flex Memory Technology
Both channels provided as SODIMM sockets

SOLID STATE DRIVE

Optional 8 GB SSD on PCI Express™ Mini Card Socket

GIGABIT ETHERNET

Three independent 10/100/1000Base-T Ethernet controller @ 4HP (one on optional Rear I/O module)

GRAPHIC INTERFACE

DVI-I with Analog VGA and Digital Video Interface

HARDDISK CARRIER

All 8HP versions have a harddisk carrier option for one 2,5" SATA harddisk.

FRONT PANEL INTERFACE

4HP version:

- ▶ 2x USB 2.0
- ▶ 2x GbE
- ▶ DVI-I
- ▶ System Status LED (green/red)
- ▶ HDD LED (green)

8HP version 1 (additional to 4HP):

- ▶ 3x USB 2.0
- ▶ 1x GbE
- ▶ 1x COM
- ▶ 1x PS/2 (Keyboard/Mouse)

8HP version 2 (additional to 4HP):

- ▶ 2x USB 2.0
- ▶ 2x DVI-D

8HP version 3 (additional to 4HP):

- ▶ 2x USB 2.0
- ▶ 2x DisplayPort

COMPACTPCI PLUSIO

The EM Compact ICP-CP85 is available with or without Rear I/O following the PICMG 2.30 R1.0 specification

Nomenclature for Interfaces with Rear I/O:
1PCI33/4PCIE2.5/4SATA3/4USB2/1ETH1G

Nomenclature for Interfaces without Rear I/O:
1PCI33/0PCIE/0SATA/0USB2/0ETH1G

DIMENSION

160 mm x 100 mm (L x W)

TEMPERATURE RANGE

Operating: 0°C to +60°C Storage: -40°C to +85°C
Operating temperature depends on processor version and available airflow in the system.
Other temperature ranges upon request

HUMIDITY

Max. rel. humidity of atmosphere
non condensing
Working 5% to 95%