PXM- C388

Intel® Pineview based PC/104 embedded board base on PC/104 v2.5 and SUMIT AB interface v1.5 compliant.

Portwell PEM-P388 is a SUMIT-ISM PC/104 module designed with Intel® Pineview N455 single core 1.66 GHz processor paired with the ICH8M I/O controller hub. Due to low power consumption, high performance and fan less requirement, it is suitable for Automation, Medical, Transportation, Security, Military and HMI applications.
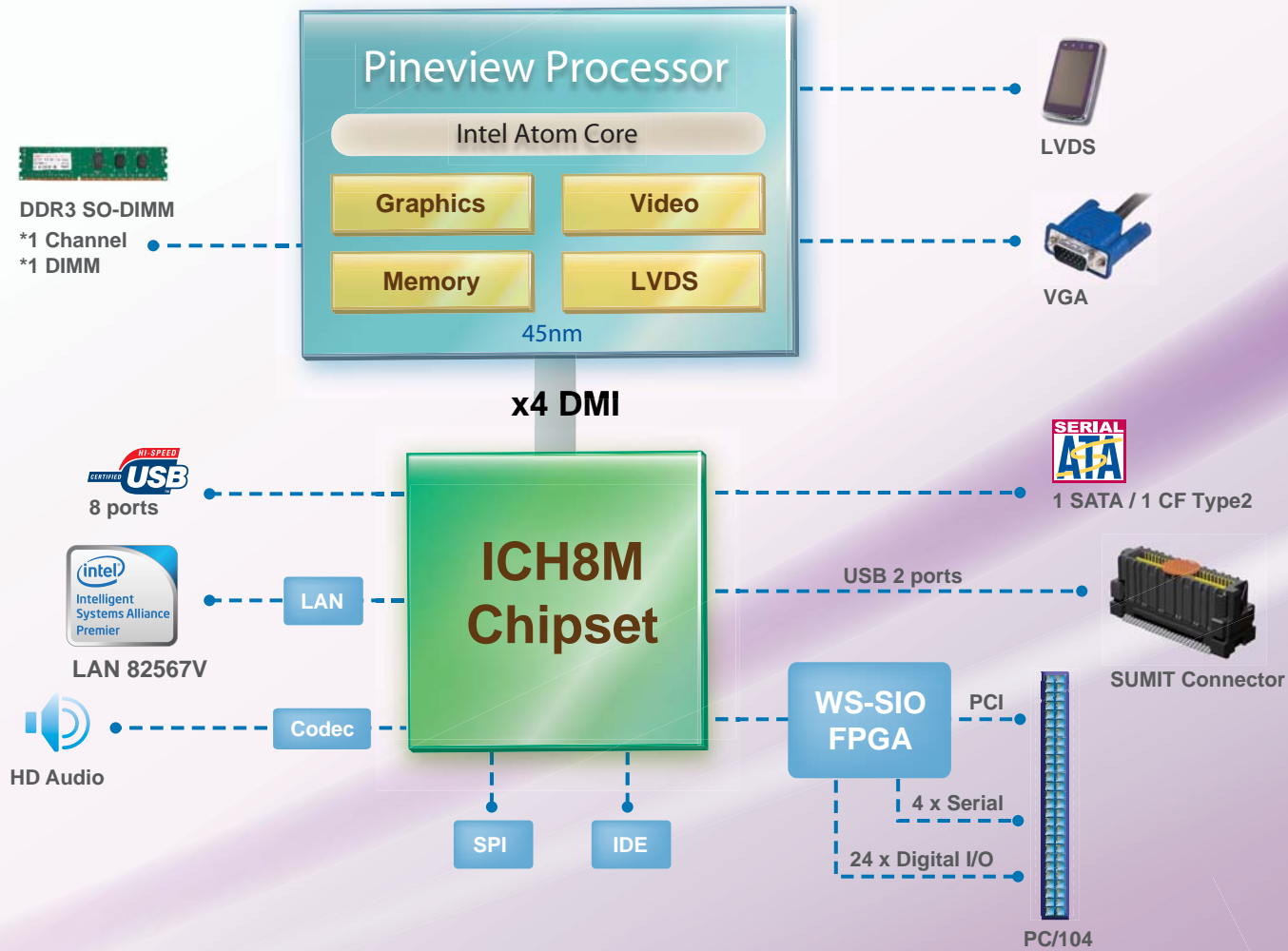
The PC/104 module is a full-featured unit with on-board I/O that supports CRT/LVDS simultaneously, Gigabit Ethernet port, eight USB 2.0 ports, four RS232 (two 422/485 selectable COM channels), 24 digital I/O lines with event sense, HD audio, watchdog timer and two SUMIT connectors. It also has a PC/104 connector for additional I/O expansion. With the low power, high performance and fan less requirement, it is suitable for Automation, Medical, Transportation, Security, Military and HMI applications.

FEATURES

■ The Intel® Atom N455 embedded processor and ICH8M platform that provides cost effective solutions with low power and single core processor technology
■ Supports one DDR3 800MB SDRAM, UP to 2GB
■ Supports eight USB2.0, four RS232 (two 422/485 selectable)
■ Supports dual independent displays of 18/ 24bits LVDS and VGA

ORDERING GUIDE

AB1-3872Z	(R).PXM-C388-N455.PC104
B8305090	PXM-C388.Heat Sink
B8305080	PXM-C388.Heat Spreader

Portwell

M.I.T

PCOM

PQ7

PC/104

Compliance

Pineview Processor

Intel Atom Core

| Graphics | Video |
| Memory | LVDS |

45nm

DDR3 SO-DIMM
*1 Channel
*1 DIMM

LVDS

VGA

x4 DMI

HI-SPEED USB CERTIFIED
8 ports

intel Intelligent Systems Alliance Premier
LAN 82567V

LAN

HD Audio

Codec

ICH8M Chipset

SPI

IDE

SERIAL ATA
1 SATA / 1 CF Type2

USB 2 ports

SUMIT Connector

WS-SIO FPGA

PCI

4 x Serial

24 x Digital I/O

PC/104

Processor Core

◆ Pineview Core (45nm) N455
◆ 512KB Shared Last Level Cache
◆ SMT: 4 threads/core
◆ Turbo mode

Highlights

◆ Integrated Memory Controller:
  1 Channels of Native DDR3
  support
◆ Integrated Native PCI-E Gen 1
  support

Memory

◆ DDR3-800 MT/s, N455 up to 2GB
◆ 1 Memory Channels
◆ 6.4GB/s Peak Memory Bandwith

Platform Thermal Design Power

N455	6.5W
intel ICH8M	2.4W
Watt	15.4W