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SoM-4463 B1



Embedded Intel® Atom™ Processor N455 1.66 GHz single core/ D525 1.80 GHz dual-core + ICH8M

Intel Gen 3.5 DX9, MPEG2 hardware decoder, multiple display: VGA, 18/24- bit LVDS

Supports DDR3-667 for N455 up to 2GB and DDR3-800 for D525 up to 4GB

Supports 4 PCI, ISA, 2 IDE, 2 SATAII, 4 USB 2.0

SoM-4463N = Passive Thermal Solution (Fanless)

SoM-4463D = Active Thermal Solution

Optional Accessories

1960012091T00S
Semi-Heatsink 114 x 96 x 15 mm

1750001980
Semi-Cooler 114 x 96 x 15 mm

The SoM-4463 B1 is an embedded CPU module that fully complies with the SOM-ETX form factor standard. The new CPU module supports Intel N455 1.66 GHz single core/D525 1.80 GHz dual-core +ICH8M chipsets which supports PCI and ISA interfaces. In a basic form factor of 95mm x 114mm, the SoM-4463 B1 provides a scalable cost effective and easy to integrate solution for customer applications

by utilizing a plug-in CPU module on an application-specific Custom Carrier Board. The SoM-4463 B1 with advanced I/O capacity

incorporates PCI, ISA, IDE, USB 2.0, SATA, and LVDS interfaces.

The SoM-4463 B1 complies with the "Green Function" standard and supports Doze, Standby and Suspend modes. The small size (95 mm x 114 mm) and use of four high capacity connectors based on the proven SOM-ETX form factor, allow the SOM-ETX modules to be easily and securely mounted onto a customized solution board or our standard SoM-DB4400 development board.

Specifications

SOM Type:
PC-Comaptible ETX Modules

Processor

Processor:
Intel Atom N455 / D525
Clock Speed:
1.67 GHz
Real Time Clock:
Processor Misc.:
Processor Options:

Intel Atom N455 1.67 GHz (single core), 512 KB L2 Cache

Intel Atom D525 1.80 GHz (dual core), 1 MB L2 Cache

Memory

BIOS/ Bootloader:
AMI 16 Mbit Flash BIOS
Memory Misc.:
System Memory: 1 x SODIMM; DDR3 667 MHz (Up to 2 GB N455) and 800 MHz (Up to 4 GB D525)
(RAM Memory is not included)

System Chipset: ICH8M

Primary I/O

GPIO:
1-bit GPIO
2-bit GPE
Disk Interface:
2 x EIDE (UDMA 100)
2 x SATAII
Video Out:
Dual Display: Analog VGA + LVDS 18/24-bit up to 1536 x 2048
Audio:
ALC892 Audio
Ethernet:
10/100 Base-T Ethernet
USB:
4x USB 2.0 compliant ports
Serial Ports:
2x COM TTL Ports
Watchdog:
Primary I/O Misc.:

2 x SATAII (300 MB/s)

FDD/LPT: 1x FDD (or) LPT Port

Secondary I/O

LPT Port:

Keypad:

PS/2:

Expansion

Bus Misc.:

Expansion: ISA, 4 PCI masters

Analog

A/D:

D/A:

Dimensions

Dimensions:

3.7 × 4.5 in

Power Requirements

Voltage:

5 V

Power Misc.:

Power Type

ATX, AT

Power Supply Voltage

+5 V (+5VSB is required for ATX power scheme)

Power Consumption

(Typical)

4463N (2 GB DDRIII 1333) +5 V @ 1.82 A

4463D (2 GB DDRIII 1333) +5 V @ 2.18 A

Power Consumption

(Max, test in HCT)

4463N (2 GB DDRIII 1333) +5 V @ 2.25 A

4463D (2 GB DDRIII 1333) +5 V @ 2.73 A

Environmental

Low Operating Temperature:

0 C

High Operating Temperature:

60 C

Upper Operating Humidity:

90%

Environmental Misc.:

Optional: -20 ~ 80° C (NCNR) Optional: -40 ~ 85° C (NCNR)

Pricing

SoM-4463N-S6B1E

Atom N455, VGA/LVDS/LAN/Audio

$310.00

Base Product:

SoM-4463-B1

SoM-4463D-S8B1E
Atom D525, VGA/LVDS/LAN/Audio
$332.00
Base Product:
SoM-4463-B1
SoM-4463DZ-S8B1E
Atom D525, VGA/LVDS/LAN/Audio -20 ~ 80° C (NCNR)
$399.00
Base Product:
SoM-4463-B1
SoM-4463DZ2-S8B1E
Atom D525, VGA/LVDS/LAN/Audio -40 ~ 85° C (NCNR)
$504.00
Base Product:
SoM-4463-B1
SoM-4463NZ-S6B1E
Atom N455, VGA/LVDS/LAN/Audio -20 ~ 80° C (NCNR)
$378.00
Base Product:
SoM-4463-B1
Non-Stock NCNR:
0
Carrier Boards:
SoM-DB4400-0
ETX development carrier board
$0.00
Base Product:
SoM-DB4400

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