

SOM-4463

Intel® Atom N450/D510 ETX CPU Module

Preliminary



Features

- Embedded Intel® Atom N450 1.67 GHz single core processor/Atom D510 1.67 GHz dual core processor + ICH8M
- Intel Gen 3.5 DX9, MPEG2 Decode in HW, multiple display: VGA, 18-bit LVDS
- Supports 4 PCI masters
- Supports 2 SATAII ports, 4 USB2.0 ports, ISA
- Supports embedded software APIs and Utilities

Software APIs:



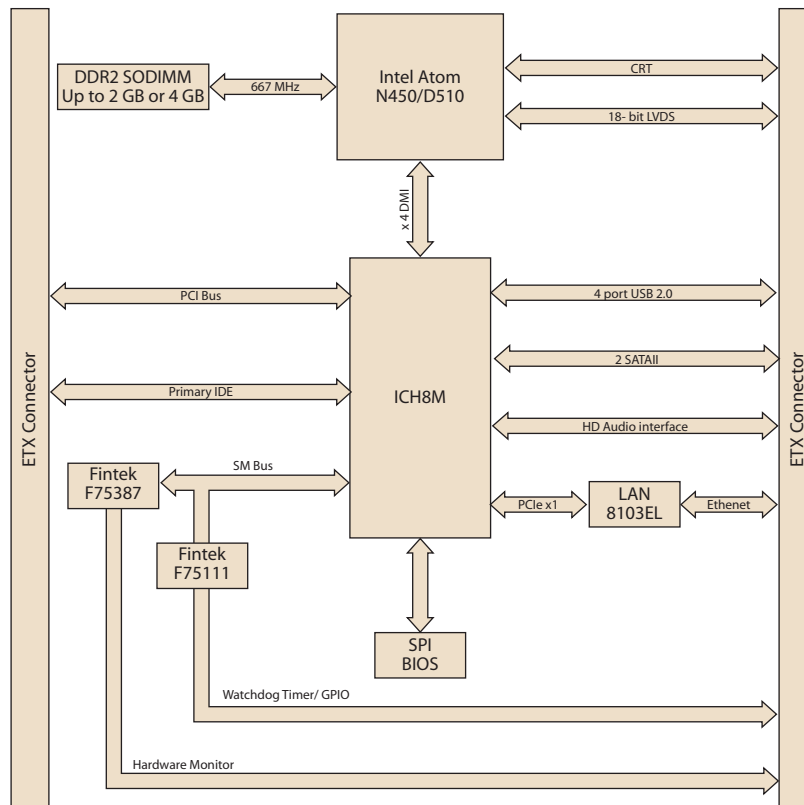
Utilities:



Specifications

Form Factor		ETX 3.0
Processor System	CPU	Intel Atom N450 1.67 GHz (single core), 512 KB L2 Cache Intel Atom D510 1.67 GHz (dual core), 1 MB L2 Cache
	System Chipset	ICH8M
	BIOS	AMI 16 Mbit Flash BIOS
Memory	Technology	DDR2 667 MHz
	Max. Capacity	up to 2 GB
	Socket	1 x 200-pin SODIMM sockets
Display	Chipset	Intel Atom N450 or Intel Atom D510
	Graphic Engine	Intel Gen 3.5 DX9, MPEG2 Decode in HW
	LVDS	18-bit LVDS
	VGA	Intel Atom N450 Single Core up to 1400 x 1050 (SXGA) Intel Atom D510 Dual Core up to 2048 x 1536
	DVI	N/A
	TV Out	N/A
	SDVO	N/A
	Dual Display	CRT + LVDS
Ethernet	Chipset	Realtek 8103EL 10/100 Mbps Ethernet
	Speed	10/100 Base-T
WatchDog Timer		256 levels timer interval, from 0 to 255 sec or min setup by software, jumperless selection, generates system reset
Expansion		ISA, 4 PCI masters
I/O	PATA	1 x EIDE (UDMA 100)
	SATA	2 x SATAII (300 MB/s)
	USB	4 x USB 2.0
	Audio	High definition audio interface
	GPIO	2-bit GPIO
Power	Power Type	ATX, AT
	Power Supply Voltage	+5 V (+5 Vsb for ATX)
	Power Consumption (Typical)	TBD
	Power Consumption (Max, test in HCT)	TBD
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
	Operation Humidity	0% ~ 90% relative humidity, non-condensing
Mechanical	Dimension	95 x 114 mm (3.74" x 4.5")

Board Diagram



Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	10/100 LAN	HD Audio	PCI	USB 2.0	SATA	SMBUS	ATX Power	AT Power	Thermal Solution	Operation Temp.
SOM-4463FL-S6A1E	Atom N450	512 KB L2	Intel Pineview	18-bit	V	1	V	4	4	2 x SATAII	1	V	V	Active	0 ~ 60° C
SOM-4463FL-S7A1E	Atom D510	1 MB L2	Intel Pineview	18-bit	V	1	V	4	4	2 x SATAII	1	V	V	Active	0 ~ 60° C

Development Board

Part No.	Description
SOM-DB4400G-00A2E	Development Board for ETX Rev.A2

Packing List

Part No.	Description	Quantity
	SOM-4463 CPU Module	1
	Utility CD	1
	Heatspreader	1