

SOM-4463

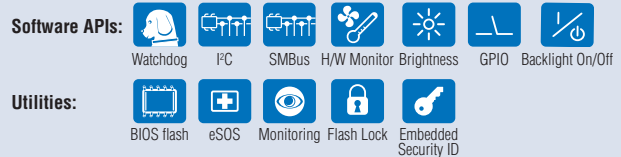
Intel® Atom N450/D510 ETX CPU Module

Preliminary



Features

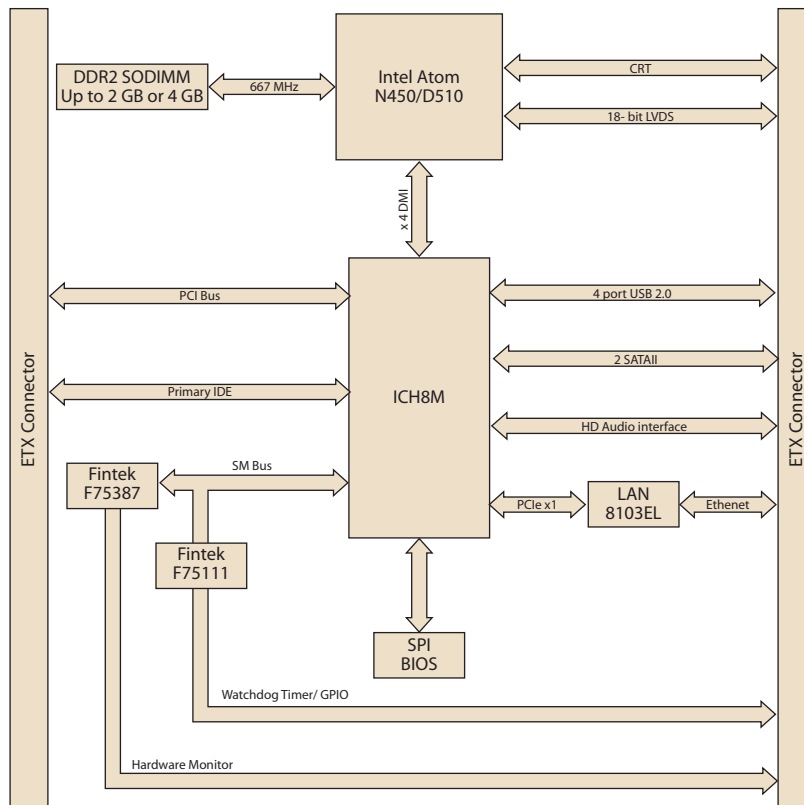
- Embedded Intel® Atom N450 1.67 GHz single core processor/Atom D510 1.67 GHz dual core processor + ICH8M
- Intel Gen 3.5 DX9, MPEG2 Decode in HW, multiple display: VGA, 18-bit LVDS
- Supports 4 PCI masters
- Supports 2 SATAII ports, 4 USB2.0 ports, ISA
- Supports embedded software APIs and Utilities



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
	Technology	DDR2 667 MHz
Memory	Max. Capacity	up to 2 GB
	Socket	1 x 200-pin SODIMM sockets
	Chipset	Intel Atom N450 or Intel Atom D510
Display	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
	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
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