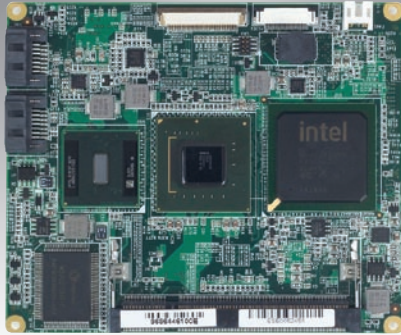


# SOM-4461

Intel® Atom™ N270 ETX CPU Module

**NEW**



## Features

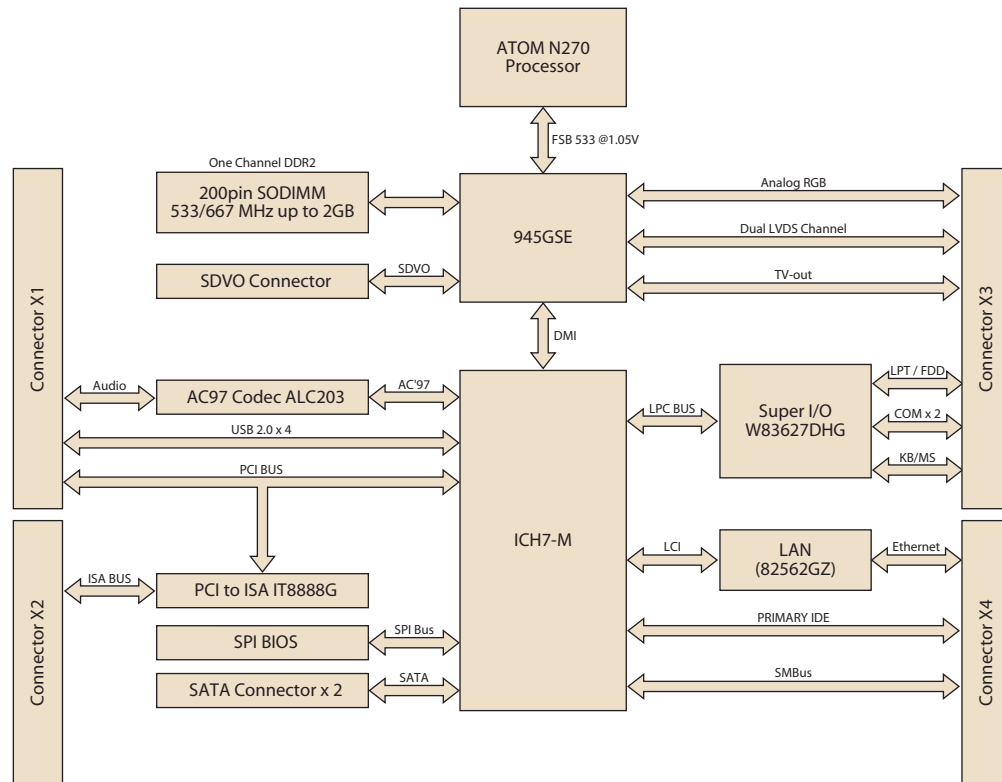
- Embedded Intel ATOM N270 1.6 GHz processor with low power consumption
- Intel Atom N270+ 945GSE+ ICH7M
- Supports one DDR2 SODIMM up to 2 GB
- Intel GMA950, Microsoft DirectX\* 9.1
- Support multiple display: VGA, LVDS, SDVO, TV out
- Intel 10/100 Mbps LAN
- Expansion: 4 PCI master, ISA
- 4 x USB 2.0, 2 x SATA on board, 1 EIDE, 2 COMs, FDD/LPT port



## Specifications

Form Factor		ETX 3.0
Processor System	CPU	Embedded Intel ATOM N270 1.6 GHz processor
	Front Side Bus	533 MHz FSB
	System Chipset	Intel 945GSE/ ICH7M
	BIOS	AWARD™ 8 Mbit Flash BIOS
Memory	Technology	DDR2 400/533 MHz
	Max. Capacity	up to 2 GB
	Socket	1 x 200-pin SODIMM socket
Display	Chipset	Intel 945GSE
	VRAM	DVMT 3.0 support up to 224 MB
	Graphic Engine	Intel GMA950, Microsoft DirectX* 9.1
	LVDS	36-bit LVDS
	VGA	up to 2048 x 1536
	DVI	N/A
	TV Out	Supports NTSC/PAL, S-Video and Composite Output interfaces
	SDVO	1 SDVO Port
Ethernet	Dual Display	CRT + LVDS, TV out + LVDS, TV out + CRT (Note: SDVO function is supported by customized BIOS)
	Chipset	Intel 82562GZ 10/100Mbps Ethernet
WatchDog Timer	Speed	10/100Base-T
Expansion		256 levels timer interval, from 0 to 255 sec or min setup by software, jumperless selection, generates system reset
I/O		4 x PCI master, ISA
	PATA	1 x EIDE (UDMA 100)
	SATA	2 x SATA (On ETX CPU module)
	USB	4 x USB 2.0
	Audio	Realtek ALC203 AC97 Codec support Line-in / out, MIC-in
	GPIO	2-bit GPIO (Support by customized BIOS)
	COM	2 COM ports
	FDD/LPT	1 x FDD or LPT
Power	SSD	N/A
	Power Type	ATX, AT
	Power Supply Voltage	+5V only (+5VSB needs for ATX)
	Power Consumption (Typical)	Typical: (1 GB DDRII 533) +5 V @ 1.15 A
Environment	Power Consumption (Max, test in HCT)	Max: (1 GB DDRII 533) +5 V @ 1.98 A
	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Mechanical	Operation Humidity	0% ~ 90% relative humidity, non-condensing
	Dimension	114 x 95 mm (4.5" x 3.74")

## Board Diagram



## Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	SDVO	TV out	10/100 LAN	AC97 Audio	PCI	USB 2.0	SATA	LPT/ Floppy	KB/ MS	ATX Power	AT Power	Thermal Solution	Operation Temp.
SOM-4461FL-S6A1E	ATOM N270 1.6 GHz	512 KB L2	945GSE	36-bit	Yes	1	Yes	Yes	Yes	4	4	2	Note1	Yes	Yes	Yes	Passive	0 ~ 60 °C

Note1: Select Parallel function and floppy via BIOS selection. Default mode is Parallel mode.

## Development Board

Part No.	Description
SOM-DB4400-00A2E	Development Board for ETX Rev.A2
SOM-DB4700-00A1E	Development Board for ETX Rev.A1

## Packing List

Part No.	Description	Quantity
	SOM-4461 CPU Module	1
	Utility CD	1
	Heatspreader	1

## Optional Accessories

Part No.	Description
1960012091T00S	Semi-Heatsink 114 x 96 x 15 mm