

SOM-6763

Intel® Atom™ Processor N450/ D510 COM-Express Compact Module



Features

- Embedded Intel® Atom™ Processor N450 SC 1.66 GHz / D510 DC 1.66 GHz + ICH8M
- Intel Gen 3.5 DX9, MPEG2 Decode in HW, supports 18-bit LVDS, VGA
- Supports 2 DDR2-667 SODIMM sockets up to 2 GB
- Supports 5 PCIe x 1, 4 PCI masters, LPC, 3 SATAII, 8 USB 2.0, EIDE, GbE
- Supports Advantech iManager and software APIs

Software APIs:



Utilities:

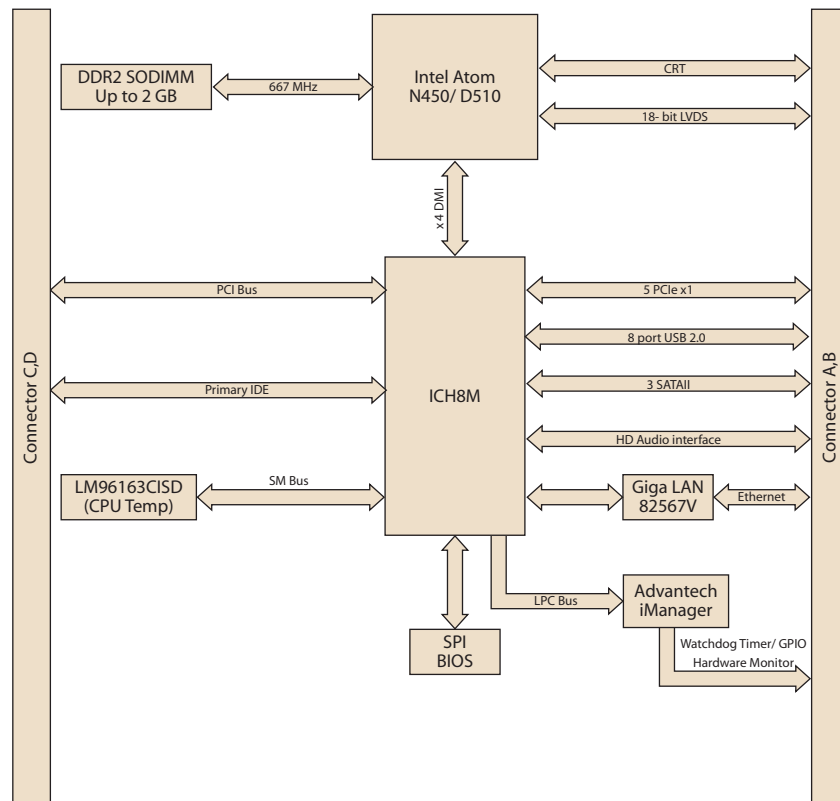


Specifications

Form Factor	COM-Express Compact Module, Type II Pin-out.	
Processor System	CPU	Intel Atom Processor N450 1.66 GHz (single core), 512 KB L2 Cache Intel Atom Processor D510 1.66 GHz (dual core), 1 MB L2 Cache
	System Chipset	ICH8M
	BIOS	AMI 16 Mbit Flash BIOS
Memory	Technology	Supports DDR2 667 MHz only
	Max. Capacity	up to 2 GB (Note 1)
	Socket	2 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 sig-I channel LVDS
	VGA	Intel Atom N450 up to 1400 x 1050 Intel Atom D510 up to 2048 x 1536
	DVI	-
	TV Out	-
	SDVO	-
	Dual Display	CRT + LVDS
Ethernet	Chipset	Intel 82567V Gigabit Ethernet
	Speed	10/100/1000 Mbps
WatchDog Timer	65536 level timer interval, from 0~65535 sec, multi-level, multi-option watchdog timer	
Expansion	LPC, 5 PCIe x1 (1 PCIe x4), 4 PCI masters	
I/O	PATA	1 x EIDE (UDMA 100)
	SATA	3 x SATAII (300 MB/s)
	USB	8 x USB 2.0
	Audio	High definition audio interface
	GPIO	8-bit GPIO
Power	Power Type	ATX, AT
	Power Supply Voltage	+12 V and +5 VSB for ATX, +12V for AT
	Power Consumption (Typical)	6763N (1 GB DDRII 667) +12 V @ 0.67 A 6763D (1 GB DDRII667) +12 V @ 0.93 A
	Power Consumption (Max, test in HCT)	6763N (1 GB DDRII 667) +12 V @ 0.89 A 6763D (1 GB DDRII667) +12 V @ 1.32 A
	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Environment	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Mechanical	Dimension	95 x 95 mm (3.74" x 3.74")

Note 1: Supports 4 GB with D510 by Project Base.

Board Diagram



Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	Giga LAN	HD Audio	PCIe x4	PCIe x1	PCI	USB 2.0	SATA II	LPC	SMBus	ATX Power	AT Power	Thermal Solution	Operating Temp.
SOM-6763N-S6A1E	Atom N450 1.66 GHz	512 KB	ICH8M	18-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Passive	0 ~ 60° C
SOM-6763D-S6A1E	Atom D510 1.66 GHz	1 MB	ICH8M	18-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Active	0 ~ 60° C
SOM-6763NZ-S6A1E	Atom N450 1.66 GHz	512 KB	ICH8M	18-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Passive	-20 ~ 80° C
SOM-6763NZ2-S6A1E	Atom N450 1.66 GHz	512 KB	ICH8M	18-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Passive	-40 ~ 85° C
SOM-6763DZ-S6A1E	Atom D510 1.66 GHz	1 MB	ICH8M	18-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Active	-20 ~ 80° C
SOM-6763DZ2-S6A1E	Atom D510 1.66 GHz	1 MB	ICH8M	18-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Active	-40 ~ 85° C

Development Board

Part No.	Description
SOM-DB5700G-00A2E	Development Board for COM-Express with GLAN

Optional Accessories

Part No.	Description
1960048815N001	Semi-Heatsink 95 x 95 x 17 mm
1960048819N001	Semi-Cooler 95 x 95 x 33.5 mm with 12V fan

Packing List

Part No.	Description	Quantity
-	SOM-6763 CPU Module	1
-	Utility CD	1
1960049022N001	Heatspreader	1

Embedded OS

OS	Part No.	Description
Win XPE	2070009031	XPE WES2009 Lu- Pier V4.0 MUI24