SOM-6761

Intel® Atom™ Processor N270 COM-Express Compact Module

Features

- Embedded Intel® Atom™ Processor N270 1.6 GHz + 945GSE+ICH7M
- Intel GMA950, 250MHz, supports DirectX9.1, OpenGL
- Supports VGA, 18-bit 2-CH LVDS, TV-out, 1 SDVO
- Supports one DDR2-533 memory SODIMM socket up to 2 GB
- Supports 3 PCIe x1, 4 PCI Master, LPC, 2 SATA, 1 IDE, 8 USB 2.0, 1 GbE, AC97/HDA
- Supports SUSIAccess and Embedded Software APIs

Software APIs: Watchdog, I²C, SMBus, H/W Monitor, GPIO, Backlight On/Off

Utilities: BIOS flash, Monitoring, Embedded Security ID

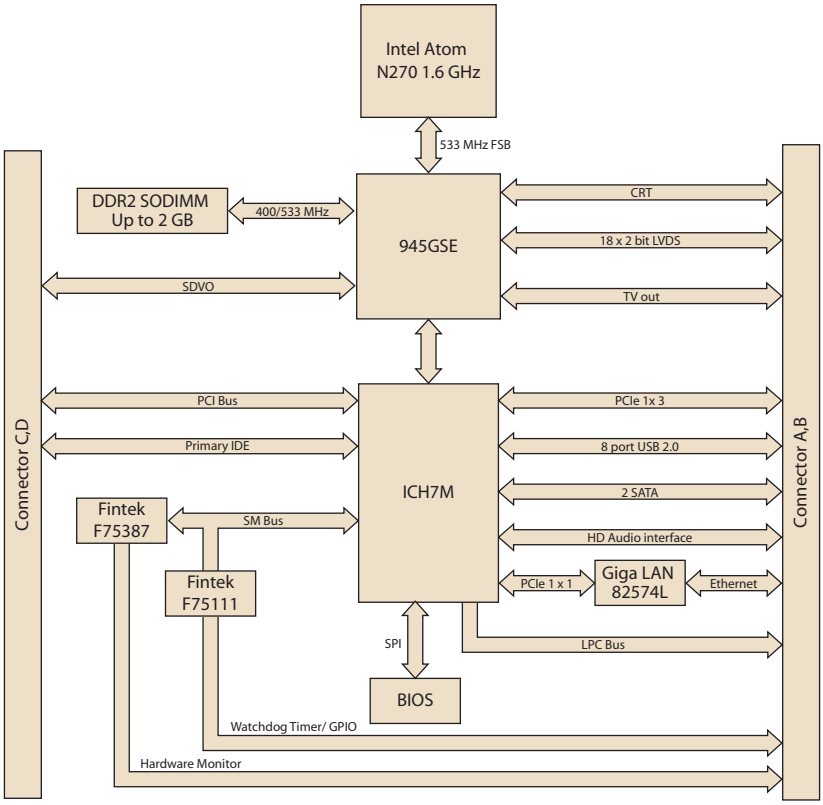
Specifications

Form Factor		COM-Express Compact Module, Type II Pin-out.
Processor System	CPU	Embedded Intel Atom Processor N270 1.6 GHz
	Front Side Bus	533 MHz
	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 supports up to 224 MB
	Graphics Engine	Intel GMA950, 250 MHz, support DirectX9.1, OpenGL
	LCD	18-bit 2-CH LVDS
	VGA	Up to 2048 x 1536
	TV Out	Supports NTSC/PAL, S-Video and Composite Output interfaces
	SDVO	1 SDVO Port (Note: SDVO function is supported by customized BIOS)
	Dual Display	CRT + LCD, TV-out + LCD, TV-out + CRT
Ethernet	Chipset	Intel 82574L Gigabit Ethernet
	Speed	10/100/1000 Mbps
WatchDog Timer		256 timer intervals, from 0 to 255 sec or min setup by software, jumperless selection, generates system reset
Expansion		3 PCIe x 1 (1 PCIe x4 optional), 4 PCI Master, LPC, SMBus, I²C, 4 PCI master
I/O	PATA	1 IDE (UDMA 100)
	SATA	2 SATA (1.5Gb/s)
	USB	8 USB 2.0
	Audio	AC97, High definition audio interface
	GPIO	8-bit GPIO
Power	Power Type	ATX, AT
	Power Supply Voltage	+12 V, and +5 VSB for ATX, +12 V for AT
	Power Consumption (Typical)	Typical: (1 GB DDRII 533) +12 V @ 0.62 A
	Power Consumption (Max, test in HCT)	Max: (1 GB DDRII 533) +12 V @ 0.9 A
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Mechanical	Dimensions	95 x 95 mm (3.74" x 3.74")

All product specifications are subject to change without notice

Last updated : 13-Jun-2012

Block Diagram



Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	SDVO	TV out	Giga LAN	HD Audio	PCIe	PCI	USB 2.0	SATA	LPC	SMBus	ATX Power	AT Power	Thermal Solution	Operating Temp.
SOM-6761FG-S6A1E	Atom N270 1.6 GHz	512 KB	945GSE	36-bit	Yes	1	Yes	1	Yes	3*	4	8	2	1	1	Yes	Yes	Passive	0 ~ 60° C
SOM-6761Z-S6A1E	Atom N270 1.6 GHz	512 KB	945GSE	36-bit	Yes	1	Yes	1	Yes	3*	4	8	2	1	1	Yes	Yes	Passive	-20 ~ 80° C
SOM-6761Z2-S6A1E	Atom N270 1.6 GHz	512 KB	945GSE	36-bit	Yes	1	Yes	1	Yes	3*	4	8	2	1	1	Yes	Yes	Passive	-40 ~ 85° C

*: Optional support 1 PCIe x4 when removing Giga LAN function. BOM adjustment is needed.
Note: Passive = fanless; Active = with fan

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

Packing List

Part No.	Description	Quantity
-	SOM-6761 CPU Module	1
-	Utility CD	1
1960028640N101	Heatspreader	1

Embedded OS

OS	Part No.	Description
WinCE	2070007811	CE 6.0 Pro Intel (852/855/915/945) 2COM V1.2 ENG
Win XPE	2070007912	XPE WES2009 Intel-Uniprocess V4.0 MUI24
QNX		V6.4.1