

SOM-6761

Intel® Atom™ N270 COM-Micro CPU Module

NEW



Features

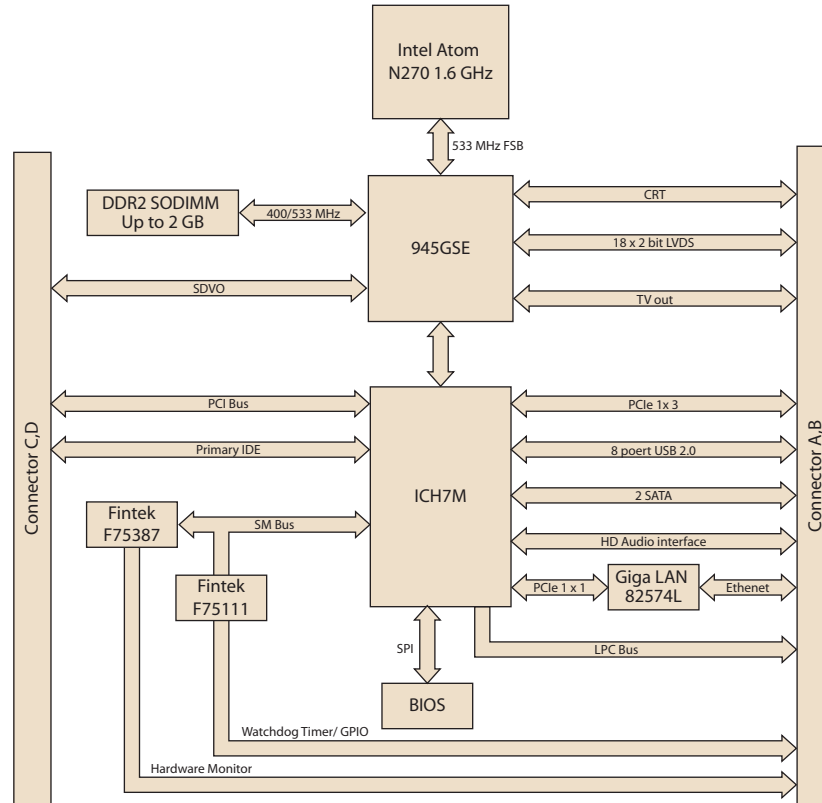
- Embedded Intel® Atom™ N270 1.6 GHz processor with low power consumption
- Intel Atom N270+ 945GSE+ ICH7M
- Intel GMA950, Microsoft DirectX 9.1
- Supports multiple displays: VGA, LVDS, SDVO, TV out
- Intel 10/100/1000 Mbps LAN
- Supports 3 PCIe x 1 or 1 PCIe x 4, 4 PCI devices
- Supports 2 SATA ports, 8 USB2.0 ports



Specifications

| | | |
|------------------|--------------------------------------|---|
| Form Factor | COM-Micro, Module Pin-out Type II | |
| 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 supports up to 224 MB |
| | Graphics Engine | Intel GMA950, Microsoft DirectX 9.1 |
| | LCD | 36-bit LVDS |
| | VGA | up to 2048 x 1536 |
| | TV Out | Supports NTSC/PAL, S-Video and Composite Output interfaces |
| | SDVO | 1 SDVO Port |
| | Dual Display | CRT + LCD, TV out + LCD, TV out + CRT (Note: SDVO function is supported by customized BIOS) |
| 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 | | LPC, SMBUS, 3 PCIe x 1 or 1 PCIe x 4, 4 PCI master |
| I/O | PATA | 1 x EIDE (UDMA 100) |
| | SATA | 2 x SATA, data transfer rates up to 150 MB/s |
| | USB | 8 x 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") |

Board 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 | 512K L2 | 945GSE | 36-bit | Yes | 1 | Yes | 1 | Yes | See Note 1 | 4 | 8 | 2 | 1 | 1 | Yes | Yes | Passive | 0 ~ 60° C |
| SOM-6761Z-S6A1E | ATOM N270 1.6 GHz | 512K L2 | 945GSE | 36-bit | Yes | 1 | Yes | 1 | Yes | See Note 1 | 4 | 8 | 2 | 1 | 1 | Yes | Yes | Passive | -20 ~ 80° C |

Note 1: Supports 1 PCIe x4 or 3 PCIe x1. Preserve 1 PCIe x4 circuit if no need to use PCIe Giga LAN (BOM option, either one, default PCIe x1 for Giga LAN and 3 PCIe x1)

Development Board

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

Packing List

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