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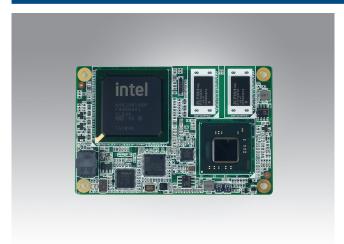






# SOM-7562

#### Intel® Atom™ Processor N450 **COM-Ultra Module**



#### **Features**

- Embedded Intel® Atom™ Processor N450 1.66 GHz + ICH8M
- Intel Gen 3.5 DX9, MPEG2 Decodes in HW, supports 18-bit LVDS, VGA
- Supports 512MB on-board memory and 1GB/2GB on-board Flash
- Supports 5 PCle x1, LPC, 3 SATAII, 8 USB 2.0, GbE
- Supports embedded software APIs and Utilities

Software APIs:

























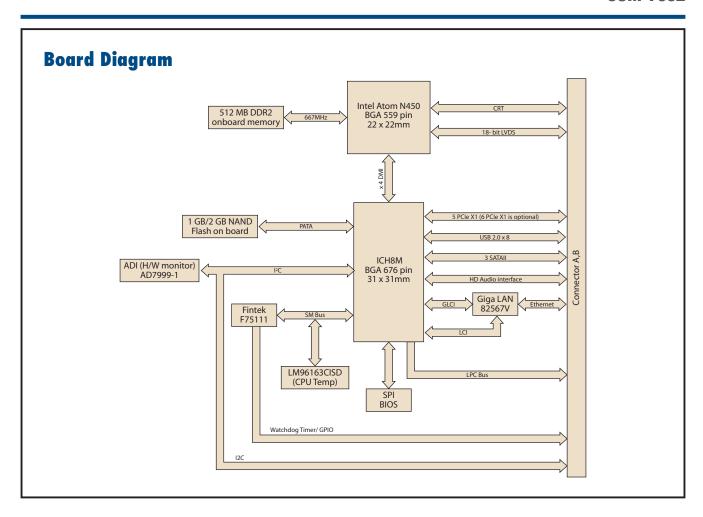






## **Specifications**

| Form Factor       |                       | COM-Ultra Module, Type I Pin-out   |
|-------------------|-----------------------|--|
|                   | CPU                   | Intel Atom Processor N450 1.66 GHz   |
| Processor System  | L2 Cache              | 512 KB   |
| 1 10063301 System | System Chipset        | ICH8M  |
|                   | BIOS                  | AMI 16 Mbit Flash BIOS   |
|                   | Technology            | DDR2 667 MHz memory only   |
| Memory            | Max. Capacity         | Onboard 512 MB   |
|                   | Socket                | -  |
| Flash             | Capacity              | 1 GB/ 2 GB Flash onboard   |
|                   | Chipset               | Embedded Gen3.5+ GFX Core  |
|                   | Graphics Engine       | Intel Gen 3.5 DX9, MPEG2 Decode in HW  |
|                   | LVDS                  | 18-bit single channel LVDS   |
| Dieplay           | VGA                   | Supports max. 1400 x 1050 @ 60 Hz  |
| Display           | DVI                   | -  |
|                   | TV Out                |  |
|                   | SDV0                  | -  |
|                   | Dual Display          | CRT + LVDS   |
| Ethernet          | Chipset               | Intel 82567V Gigabit Ethernet  |
| EUIGIIIGU         | Speed                 | 10/100/1000 Mbps   |
| WatchDog Timer    |                       | 256 level timer interval, from 0 to 255 sec or min setup by software, jumperless selection, generates system |
|                   |                       | reset  |
| Expansion         |                       | LPC, 5 PCIe x1 (1 PCIe x4 or 1 PCIe x2 option)   |
|                   | PATA                  | -  |
|                   | SATA                  | 3 x SATAII (300 MB/s)  |
| 1/0               | USB                   | 8 x USB 2.0  |
|                   | Audio                 | High definition audio interface  |
|                   | GPI0                  | 8-bit GPIO   |
|                   | Power Type            | ATX, AT  |
|                   | Power Supply Voltage  | 12 V (5 VSB needs for ATX power mode), wide range voltage support by project base                            |
| Power             | Power Consumption     | +12 V @ 0.6 A  |
|                   | (Typical)             | 112 7 0 0.071  |
|                   | Power Consumption     | +12 V @ 0.7 A  |
|                   | (Max, test in HCT)    |  |
| Environment       | Operating Temperature | 0 ~ 60° C (32 ~ 140° F)  |
|                   | Operating Humidity    | 0% ~ 90% relative humidity, non-condensing   |
| Mechanical        | Dimensions            | 84 x 55 mm (3.3" x 2.17")  |



## **Ordering Information**

| Part No.         | CPU                |        |       | Onboard<br>Memory |      | LVDS   | VGA | Giga<br>LAN | HD<br>Audio | PCIe<br>x 4 | PCIe<br>x 1 | USB<br>2.0 | SATA<br>II | LPC | SMBUS | Wide<br>range<br>Power | ATX<br>Power | AT<br>Power | Thermal<br>Solution | Operating Temp. |
|------------------|--------------------|--------|-------|-------------------|------|--------|-----|-------------|-------------|-------------|-------------|------------|------------|-----|-------|------------------------|--------------|-------------|---------------------|-----------------|
| SOM-7562F1-S6A1E | Intel Atom<br>N450 | 512 KB | ICH8M | 512 MB            | 1 GB | 18-bit | Yes | 1           | Yes         | optional    | 5           | 8          | 3          | 1   | 1     | +5V~+14V               | Yes          | Yes         | Passive             | 0 ~ 60 °C       |
| SOM-7562F2-S6A1E | Intel Atom<br>N450 | 512 KB | ICH8M | 512 MB            |      | 18-bit | Yes | 1           | Yes         | optional    | 5           | 8          | 3          | 1   | 1     | +5V~+14V               | Yes          | Yes         | Passive             | 0 ~ 60 °C       |

#### **Development Board**

| Part No.          | Description                                       |  |  |  |  |
|-------------------|---|--|--|--|--|
| SOM-DB5700G-U0A2E | Development Board for COM-Ultra Modules with GLAN |  |  |  |  |

### **Optional Accessories**

| Part No.       | Description                   |
|----------------|-------------------------------|
| 1960050950N001 | Semi-Heatsink 84 x 55 x 34 mm |

### **Packing List**

| Part No.       | Description         | Quantity |
|----------------|---------------------|----------|
| -              | SOM-7562 CPU Module | 1        |
| -              | Utility CD          | 1        |
| 1960047108N001 | Heatspreader        | 1        |

#### **Embedded OS**

| 0\$          | Part No.   | Description                     |  |  |  |  |  |
|--------------|------------|---------------------------------|--|--|--|--|--|
| Win XPE 2008 | 2070009031 | XPE WES2009 Lu- Pier V4.0 MUI24 |  |  |  |  |  |