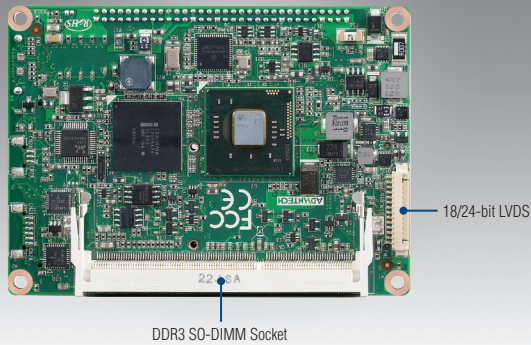


# MIO-2262

**Intel® Atom™ N2600/ N2800 Pico-ITX SBC, DDR3, 18/24-bit LVDS, VGA, 1 GbE, Full-size Mini PCIe, 4 USB, 2 COM, SMBus, I<sup>2</sup>C, mSATA & MIOe**

**NEW**



## Features

- Embedded Intel® Atom™ Dual-Core processor N2600/ N2800 + Intel NM10, 1 x DDR3 memory support up to 4 GB
- DirectX 9, Dual Independent display: 18/24-bit LVDS + VGA
- Flexible design using integrated multiple I/O: MIOe to approach vertical applications & keep domain knowhow
- Intel GbE support, Rich I/O interface with 2 COM, 1 SATA, 4 USB 2.0, GPIO, SMBus, I<sup>2</sup>C, and MIOe expansion interface
- Supports SUSIAccess and Embedded Software APIs

### Software APIs:



### Utilities:

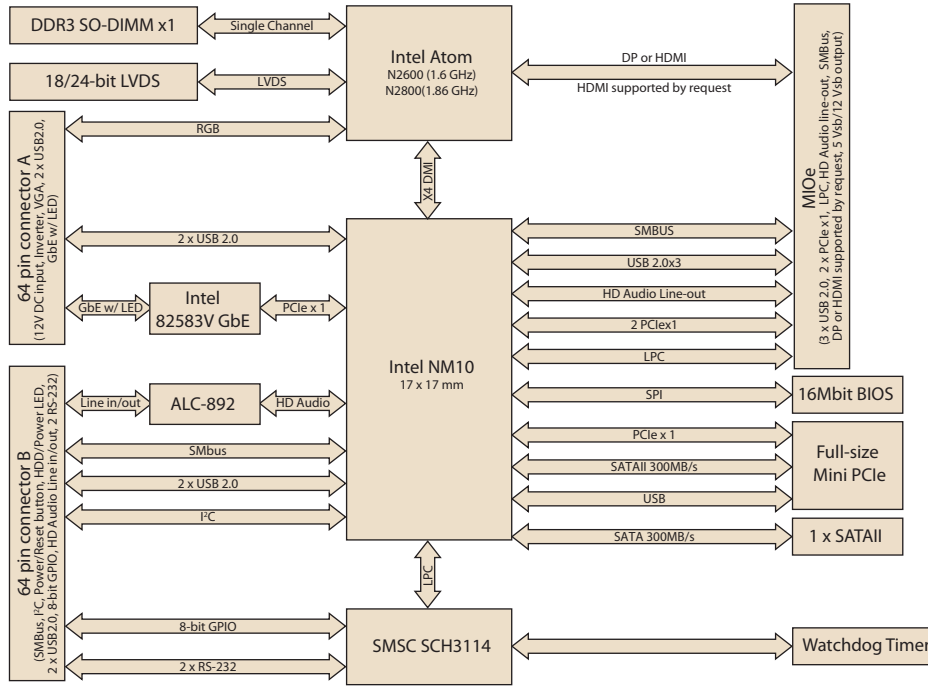


## Specifications

|                          |                                      |  |
|--------------------------|--------------------------------------|--|
| Processor System         | CPU                                  | Intel Atom Dual-Core N2600 1.6 GHz/ N2800 1.86 GHz   |
|                          | Frequency                            | Dual Core 1.6 GHz/ 1.86 GHz  |
|                          | L2 Cache                             | 1 MB   |
|                          | System Chipset                       | Intel Atom N2600/ N2800 + Intel NM10   |
|                          | BIOS                                 | AMI EFI 16 Mbit  |
| Memory                   | Technology                           | DDR3 800 MHz (N2600), DDR3 1066 MHz (N2800)  |
|                          | Max. Capacity                        | 4 GB   |
|                          | Socket                               | 1 x 204-pin SODIMM   |
| Display                  | Chipset                              | Integrated Intel GMA 3600 Series   |
|                          | Graphic Engine                       | DirectX 9 and OpenGL3.0 support<br>HW Accelerated Decode: MPEG2, H.264, VC-1   |
|                          | LVDS                                 | 18/24-bit LVDS1: up to 1366 x 768  |
|                          | VGA                                  | Up to 1920 x 1200  |
|                          | Dual Display                         | VGA+LVDS   |
| Ethernet                 | Speed                                | 10/100/1000Mbps  |
|                          | Controller                           | Intel 82583V   |
| Audio                    | Chipset                              | Realtek ALC892, High Definition Audio (HD), Line-in, Line out  |
| WatchDog Timer           |                                      | Output System reset, Programmable counter from 1 ~ 255 minutes/ seconds  |
| Storage                  | mSATA*                               | 1 (Supports mSATA or USB interface module or full size miniPCIe, selected by BIOS, default is mSATA)                 |
|                          | SATA                                 | 1, up to 3Gb/s (300MB/s)   |
| Expansion                | Mini PCI Express                     | 1 x Full-size  |
|                          | MIOe                                 | SMBus, 3 x USB2.0, LPC, 2 x PCIe x1, line out, DisplayPort/HDMI*, +5 Vsb/+12 Vsb power, Power On, Reset              |
|                          | 64-pin connector A                   | 12V DC input, Inverter, VGA, 2 x USB2.0, 1GbE w/ LED   |
|                          | 64-pin connector B                   | SMBus, I <sup>2</sup> C, Power/Reset button, HDD/Power LED, 2 x USB2.0, 8-bit GPIO, HD Audio Line in/out, 2 x RS-232 |
| Power                    | Power Type                           | Single 12V DC power input  |
|                          | Power Supply Voltage                 | Supports single 12V input, ± 10%   |
|                          | Total peripheral power supply output | 5V @ 3A for CPU board and MIOe module totally, 12V @ 2A for MIOe module  |
|                          | Power Consumption (Typical)          | N2600: 0.43 A @ 12 V (5.24 W)<br>N2800: 0.51 A @ 12 V (6.12 W)   |
|                          | Power Consumption (Max, test in HCT) | N2600: 0.67 A @ 12 V (8.05 W)<br>N2800: 0.82 A @ 12 V (9.8 W)  |
|                          | Power Management                     | ACPI   |
| Environment              | Battery                              | 3 V / 210 mAH  |
|                          | Operation                            | 0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)  |
|                          | Non-Operation                        | -40° C ~ 85° C and 60° C @ 95% RH non-condensing   |
| Physical Characteristics | Dimensions (L x W)                   | 100 x 72 mm (3.9" x 2.8")  |
|                          | Weight                               | 0.37 kg (0.82 lb), weight of total package   |
|                          | Total Height                         | Top Side: 15.7 mm (including heatsink); Bottom Side: 8.4 mm; PCB: 1.6 mm   |

\* The specification is supported by request

## Block Diagram



## Ordering Information

| Part No.          | CPU                    | L2 Cache | Memory     | LVDS      | VGA | GbE | HD Audio | USB2.0 | RS-232 | SATAII | Mini PCIe* | MIOe | Thermal Solution | Operational Temp. |
|-------------------|------------------------|----------|------------|-----------|-----|-----|----------|--------|--------|--------|------------|------|------------------|-------------------|
| MIO-2262N-S6A1E   | Intel Atom N2600 1.6G  | 1MB      | SO-DIMM    | 18/24-bit | Yes | 1   | Yes      | 4      | 2      | 1      | Full-size  | Yes  | Passive          | 0 – 60° C         |
| MIO-2262N-S8A1E   | Intel Atom N2800 1.86G | 1MB      | SO-DIMM    | 18/24-bit | Yes | 1   | Yes      | 4      | 2      | 1      | Full-size  | Yes  | Passive          | 0 – 60° C         |
| MIO-2262Z-2GS6A1E | Intel Atom N2600 1.6G  | 1MB      | 2GB bundle | 18/24-bit | Yes | 1   | Yes      | 4      | 2      | 1      | Full-size  | Yes  | Passive          | -20 – 80° C       |
| MIO-2262Z-2GS8A1E | Intel Atom N2800 1.86G | 1MB      | 2GB bundle | 18/24-bit | Yes | 1   | Yes      | 4      | 2      | 1      | Full-size  | Yes  | Passive          | -40 – 85° C       |

\* Full-size Mini PCIe supports mSATA  
 Note: Passive = fanless; Active = with fan

## Packing List

| Part No.       | Description   | Quantity |
|----------------|---|----------|
|                | MIO-2262 SBC  | 1        |
|                | Startup Manual  | 1        |
| 1700006291     | M Cable SATA 7P/SATA 7P 30cm C=R 180/90   | 1        |
| 9666226200E    | Screw and stud pack (2 screw for Mini PCIe, 4 M3 studs and screws for heatsink) | 1        |
| 1960055792T001 | Heatsink (99.5 x 70.5 x 15.7 mm)  | 1        |

## Optional Accessories

| Part No.          | Description                                   |
|-------------------|---|
| 1960055791T001    | MIO-2261 Heat spreader (99.5 x 70.5 x 15.7mm) |
| MIOE-DB2000-00A1E | MIO-2262 Evaluation Board                     |

## Embedded OS/API

| Embedded OS/API             | Part Number | Description   |
|-----------------------------|-------------|---|
| WinCE 7.0                   | 2070012214  | WEC7 V1.0 ENG                                       |
| Windows Embedded Standard   |             | WES 2009 (graphic driver support by case)           |
| Windows Embedded Standard 7 | 2070011558  | WES7E MIO-2261 V5.1.4 EN/DE/JP/TC                   |
|                             | 2070011559  | WES7P MIO-2261 V5.1.3 EN/TC/SC/RU/FR/DE/ES/IT/JP/KR |
| VxWorks                     |             | 6.9.2   |
| Linux                       |             | Ubuntu 12.04 (graphic driver support by case)       |
| Software API                |             | SUSI V3.0   |

## Bottom side view

