

## 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 Startup Manual

### Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

- 1 x MIO-2262 SBC
- 1 x Startup Manual
- 1 x SATA cable P/N: 1700006291
- 1 x heatsink P/N: 1960055792T001
- Screw and stud pack (2 x screws for Mini PCIe, 4 x M3 studs and screws for heatsink) P/N: 9666226200E

If any of these items is missing or damaged, please contact your distributor or sales representative immediately.

### Optional Accessories

- MIO-2261 heat spreader (99.5 x 70.5 x 15.7 mm)  
P/N: 1960055791T001
- MIO-2262 Evaluation Board  
P/N: MIOE-DB2000-00A1E

**Note 1:** For detailed contents of MIO-2262, please refer to information on the support web site: <http://support.advantech.com.tw/>.

**Note 2:** Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: <http://get.adobe.com/reader/> (Acrobat is a trademark of Adobe)

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

<http://www.advantech.com/eplatform>

For technical support and service, please visit our support website at:

<http://service.advantech.com.tw/support/>

This manual is for the MIO-2262 Series.

Part No. 2006226200  
Printed in China

1st Edition  
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### Specifications

#### General

- CPU:** Intel® Atom™
  - Dual Core N2600 1.6 GHz: MIO-2262N-S6A1E
  - Dual Core N2800 1.86 GHz: MIO-2262N-S8A1E
- System Chipset:** Intel® Atom™ N2600/ N2800 + NM10
- System Memory:** 1 x 204-pin SODIMM socket DDR3 800 MHz (N2600) / 1066 MHz (N2800), up to 4 GB
- L2 Cache:** 1 MB on die
- BIOS:** AMI EFI 16 Mbit Flash ROM
- Watchdog Timer:** 255 level interval timer
- Battery:** Lithium 3 V/210 mAh

**Note:** How to clear CMOS (follow steps below):

- Turn off system power.
- Unplug CR2032 battery cable on BH1.
- Wait for 15 sec or short BH1 pin1-2.
- Connect battery cable on BH1.
- Turn on system power.

- Serial ATA:** One SATA II interface, up to 300 MB/s
- Expansion Interface:**
  - 1 x Full-size Mini PCIe (Supports mSATA)
  - 1 x MIOe
  - 2 x 64pin connectors

#### MIOe Expansion Slot

- Interface:** 3 x USB 2.0, 2 x PCIe x1, LPC, HD Audio line-out, SMBus, DP or HDMI supported on request, 5 Vsb/ 12 Vsb power
- Total peripheral power supply output:** 5 V @ 3 A for CPU board and MIO Extension module in total, 12 V @ 2 A for MIO Extension module

#### 64-pin Expansion Connectors

- 64-pin connector A: 12V DC input, Inverter, VGA, 2 x USB2.0, 1GbE w/ LED
- 64pin connector B: SMBus, I2C, Power button, Reset button, HDD/Power LED, 2 x USB2.0, 8-bit GPIO, HD Audio Line in, Line out, 2 x RS-232

#### Display

- Controller:** Intel® N2600 / N2800, DirectX 9 and OpenGL3.0 support
- Output Interfaces:**
  - VGA: Up to 1920 x 1200 (WUXGA), from MIOe
  - LVDS: Single channel 18/24-bit LVDS, up to 1366 x 768 (WXGA)
  - Dual Independent Display: VGA + LVDS

#### Ethernet Interface

- Speed:** 10/100/1000 Mbps
- Controller:** Intel® ICH8M + Intel® 82583V (GbE1)

## Specifications Cont.

### Mechanical and Environmental

- **Dimensions (L x W):** 100 x 72 mm (3.9 x 2.8 inches)  
Mechanical Drawings are on page 4 - 6.
- **Power Requirement:** Single +12 V ± 10% DC power input
- **Power Consumption (with 1 GB memory):**
  - Idle mode in Windows 7:  
N2600: 0.437 A @ +12 V (5.244 W)  
N2800: 0.505 A @ +12 V (6.06 W)
  - Max in HCT12:  
N2600: 0.671 A @ +12 V (8.052 W)  
N2800: 0.817 A @ +12 V (9.804 W)
- **Operating Temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Weight:** 0.37 kg, reference weight of total package

## Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application. The table below lists the function of each of the jumpers and connectors.

### Jumpers

Label	Function
J1	LCD Power / Auto Power on

### Connectors

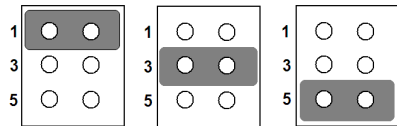
Label	Function
CN3	DDR3 SO-DIMM
CN6	mSATA / Mini PCIE
CN7	SATA
CN16	MIOe
CN18	24-bits LVDS panel
CN30	64-pin Connector B
CN31	64-pin Connector A
BH1	Battery

## Jumpers and Connectors

### Jumper Settings

J1	LCD Power / Auto Power On
Setting	Function
(1-2)	+5 V
(3-4)*	+3.3 V
(5-6)*	Auto Power On

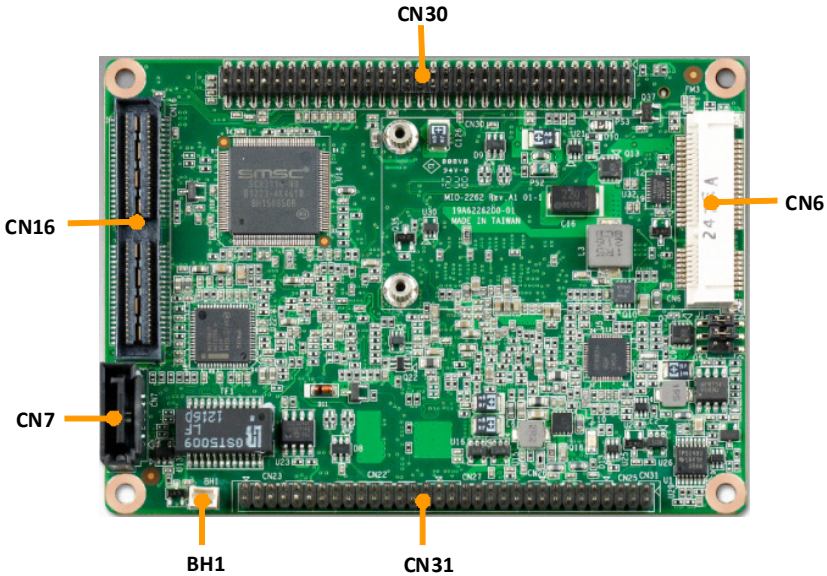
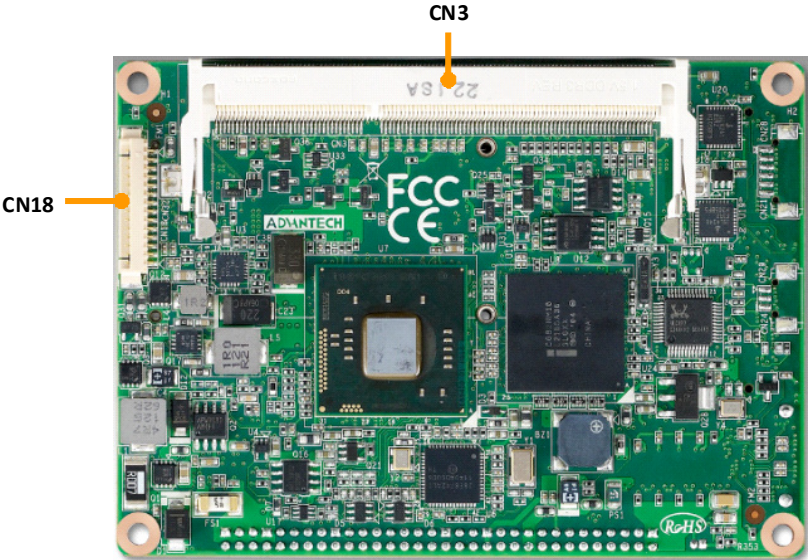
\* default



**Caution!** The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.



# MIO-2262 Connector Locations



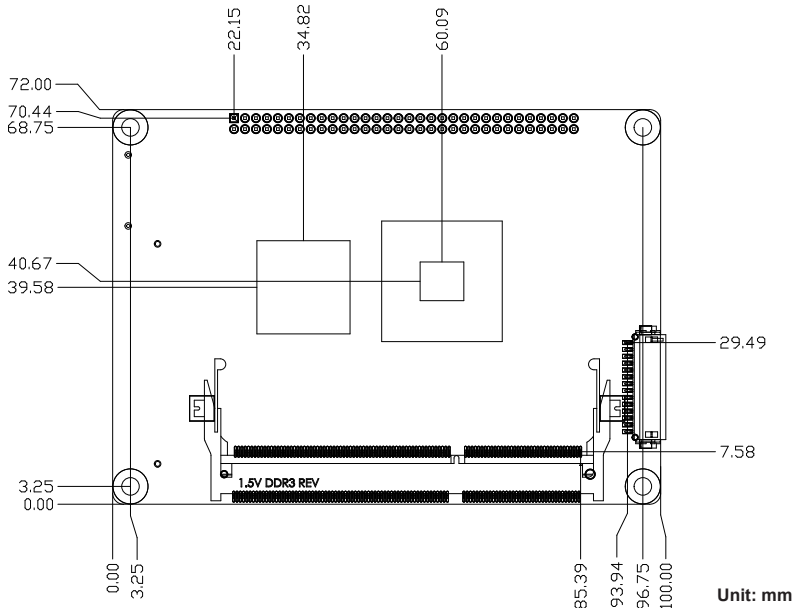


Figure 3: MIO-2260 Mechanical Drawing (Top Side)

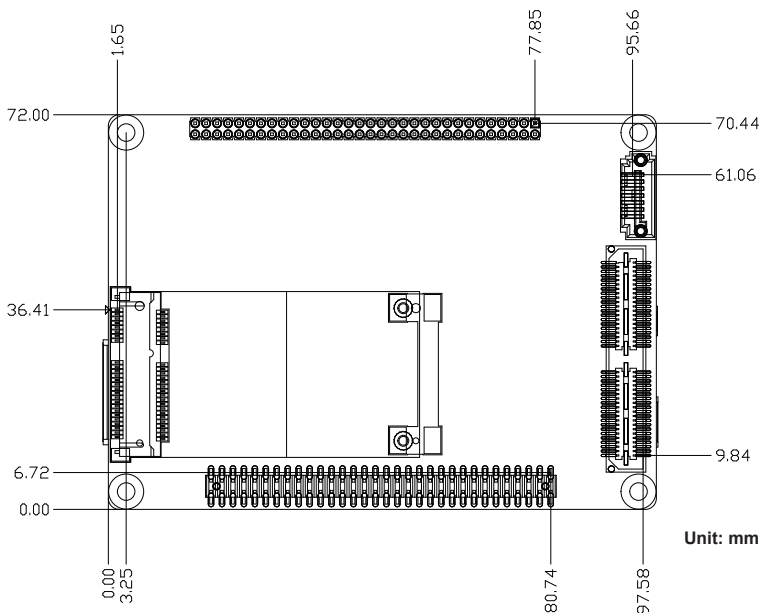
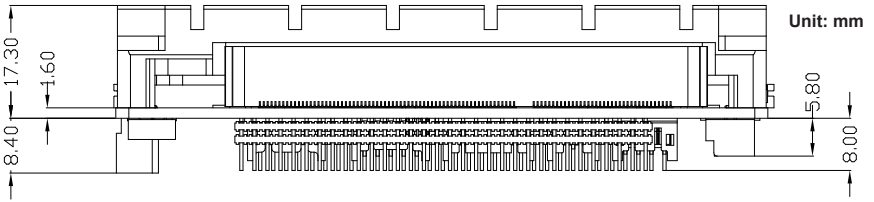
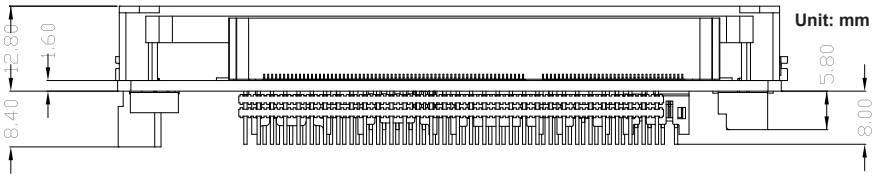


Figure 4: MIO-2260 Mechanical Drawing (Bottom Side)



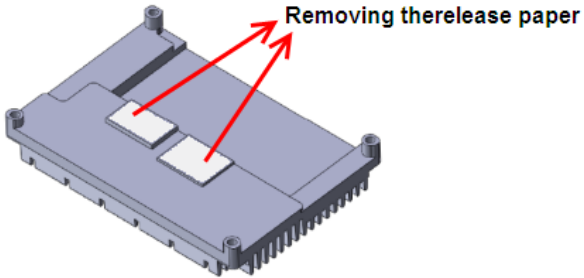
*Figure 5 MIO-2262 Mechanical Drawing (Side view with Heatsink)*



*Figure 6: MIO-2262 Mechanical Drawing (Side View with Optional Heatspreader)*

## Quick Installation Guide

1. A heatsink / cooler is in the white box, please take it out and remove the release paper from the thermal pads.



2. There are also four screws inside the white box, please install the DRAM in the SO-DIMM socket first, then screw the heatsink into place as per illustration below:

