

MIO-2261 Intel® Atom™ N2600/ N2800 Pico-ITX SBC, DDR3, 18/24-bit LVDS, VGA, 1 GbE, Half-size Mini PCIe, 4 USB, 2 COM, SMBus, I²C, mSATA & MIOe Startup Manual

Packing List

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

- 1 MIO-2261 SBC
- 1 Startup Manual
- 1 Utility CD (including user manual and drivers)
- 1 SATA cable p/n: 1700006291
- 1 Audio cable p/n: 1700019156
- 1 COM cable p/n: 1701200220
- 1 SATA Power cable p/n: 1700019656
- 1 USB cable p/n: 1700002172
- 1 AT power cable p/n: 1700019705
- 1 Heatsink p/n: 1960055792T001
11. Screw and stud pack (1 screw for Mini PCIe, 4 M3 studs and screws for heatsink) p/n: 9666226000E

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

Note 1: For detailed contents of MIO-2261, please refer to information on the enclosed CD-ROM (in PDF format).

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-2261 Series Rev. A1

Part No. 2006226100
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1st Edition
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Specifications

General

- CPU:** Intel® Atom™ Dual Core 1.6 GHz (N2600) / 1.86 GHz (N2800)
- 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 (Must follow steps below):

- Turn off system power.
- Unplug CR2032 battery cable on BH1.
- Waiting for 15sec 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
- USB:** Four USB 2.0 compliant ports
- Audio:** High definition audio (HD), line-in, line-out
- GPIO:** 8-bit general purpose input/output
- Expansion Interface:** Half size Mini PCIe, MIOe

MIOe Expansion Slot

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

VGA/LVDS Interface

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

Ethernet Interface

- Support single 10/100/1000 Mbps Ethernet interface
- Controller:** Intel® 82583V (GbE1)

Specifications Cont.

Mechanical and Environmental

- **Dimensions:** 100 x 72 mm (3.9" x 2.8")
Mechanical Drawings are on page 4 - 6.
- **Power Requirement:** Single 12 V DC power input
- **Power Consumption (with 1 GB memory):**
 - Typical in XP mode:
N2600: 0.35 A @ 12 V (4.2 W)
N2800: 0.46 A @ 12 V (5.52 W)
 - Max in HCT:
N2600: 0.76 A @ 12 V (9.12 W)
N2800: 0.80 A @ 12 V (9.6 W)
- **Operating Temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Weight:** 0.42 kg (0.93 lb) (reference total weight)

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

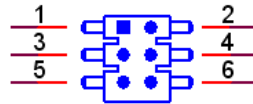
Label	Function
CN1	12V Power Input
CN2	DC JACK (support by request)
CN3	DDR3 SO-DIMM
CN4	GPIO
CN5	VGA
CN6	mSATA
CN7	SATA
CN8	Mini PCIe
CN9	External USB
CN10	Internal USB
CN11	COM1/ COM2
CN12	SMBus (or I ² C, support by request)
CN13	Front Panel
CN14	Gigabit Ethernet
CN15	HD Audio
CN16	MIOe
CN17	Inverter Power Output
CN18	24 bits LVDS Panel
BH1	Battery

Jumpers and Connectors

Jumper Settings

J1	LCD Power / Auto Power On
Part Number	1653003260
Footprint	HD_3x2P_79
Description	PIN HEADER 3*2P 180D(M) 2.0 mm SMD 21N22050
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-2261 Connector Locations

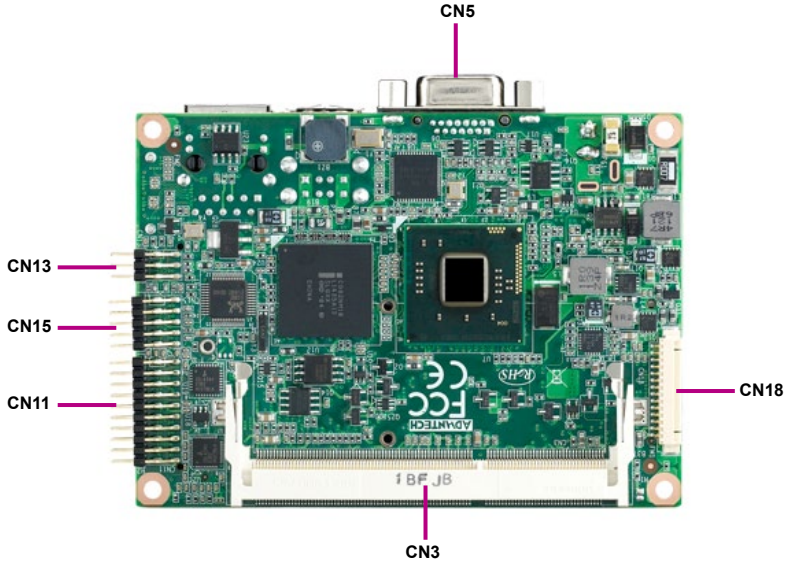


Figure 1: MIO-2261 Connect Location (Top Side)

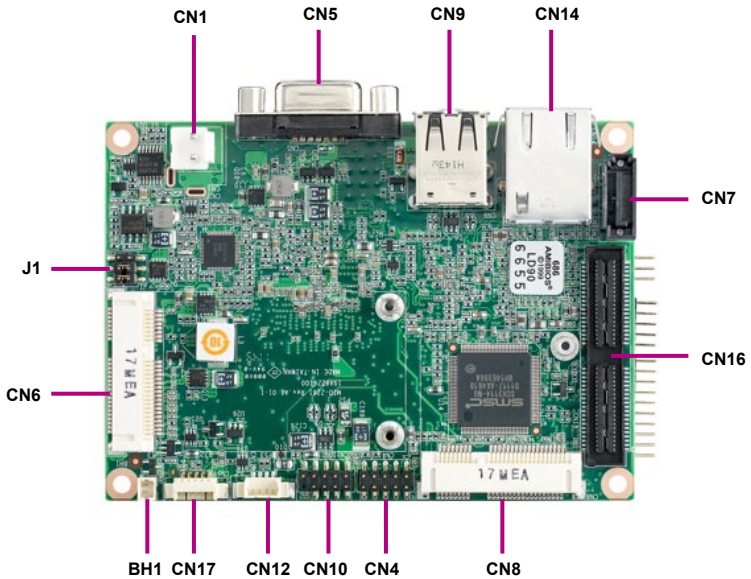


Figure 2: MIO-2261 Connect Location (Bottom Side)

MIO-2261 Mechanical Drawing

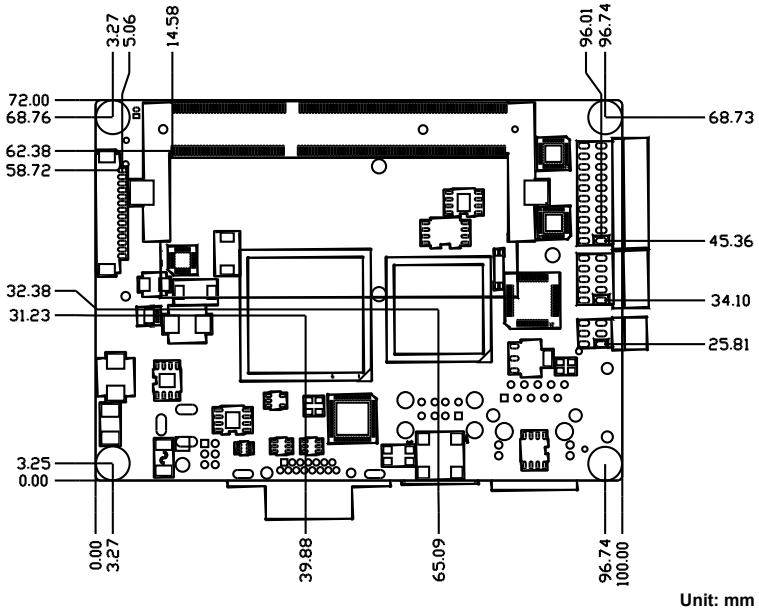


Figure 3: MIO-2261 Mechanical Drawing (Top Side)

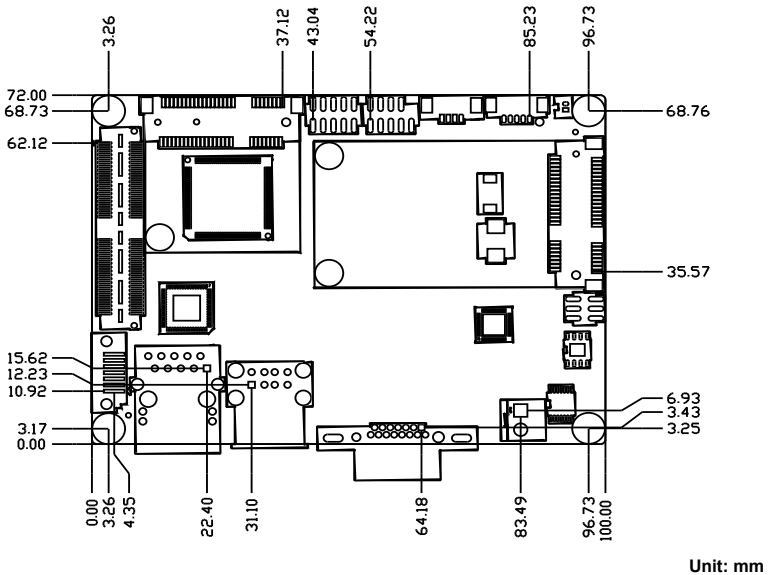
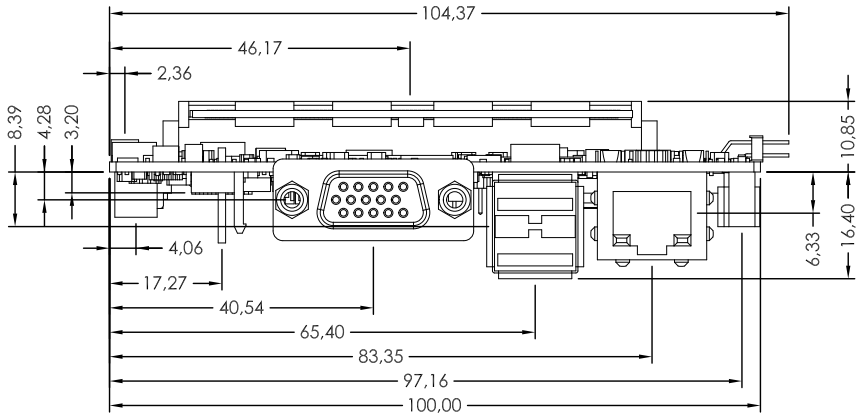
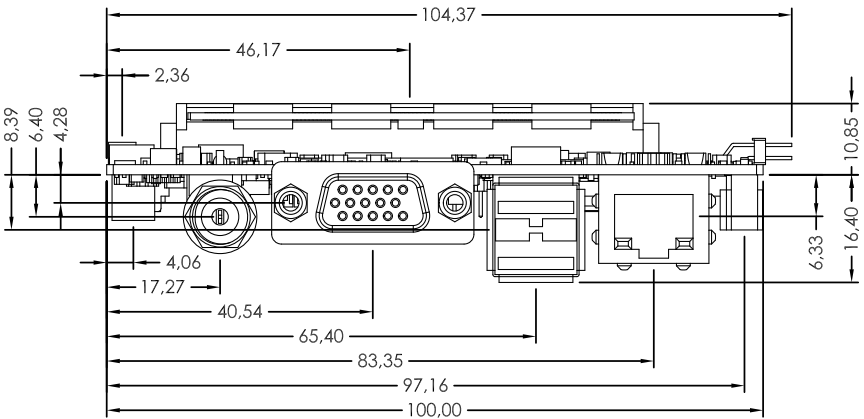


Figure 4: MIO-2261 Mechanical Drawing (Bottom Side)



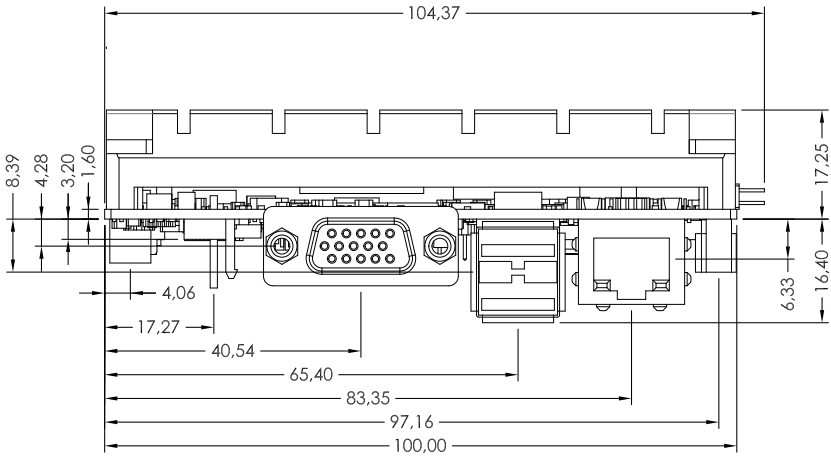
Unit: mm

Figure 5: MIO-2261 Mechanical Drawing (Side View)



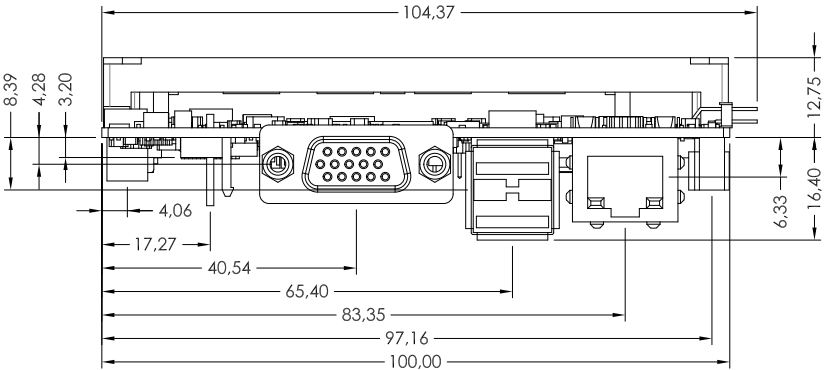
Unit: mm

Figure 6: MIO-2261 Mechanical Drawing (Side View with Optional DC/Jack)



Unit: mm

Figure 7: MIO-2261 Mechanical Drawing (Side view with Heatsink)



Unit: mm

Figure 8: MIO-2261 Mechanical Drawing (Side View with Optional Heatspreader)