

MIC-7300

Compact Fanless System with Intel® Celeron® N3350/

Atom® x7 E3950 Processor

Startup Manual

Packing List

Before installation, please ensure that the following items have been included in your shipment:

- 1 x MIC-7300 barebone system
- 1 x MIC-7300 startup manual (EN+CN) PN: 2001730000
- 1 x MIC-7300 startup manual (TC) PN: 2001730010
- 1 x MIC-7300 driver CD PN: 2061730000
- 1 x 4-pin Phoenix connector PN: 1652003234
- 2 x Mounting bracket PN: 1960070543N001
- 1 x SATA cable PN: 1700013095
- 1 x SATA power cable PN: 1700024372-01
- 1 x 2-port DP9 cable PN: 1701200220

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

Note 1: For the detailed contents of MIC-7300, please refer to the information provided on the enclosed CD-ROM (in PDF format).

Note 2: Acrobat Reader is required to view PDF files. Acrobat Reader can be downloaded from <https://get.adobe.com/reader/> (Acrobat is a trademark of Adobe.)

Caution: Batteries that are incorrectly replaced are at risk of exploding. Replace only with the same or equivalent type, as recommended by the manufacturer. Discard used batteries according to the manufacturer's instruction.

Attention: Danger d'explosion si la batteries est inexactement remplacée. Remplacez seulement avec la même chose ou le type équivalent recommandé par le fabricant. Jettent les batteries utilisées instructions de s selon fabricant des'.

For more information about this or other Advantech products, please visit our website at

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

http://www.advantech.com/products/1aa4d2cd-914a-4357-a3e5-219840c81420/mic-7300/mod_41803999-68ca-4eb9-8b06-74a72665806e

For technical support services, please visit our support website at

<http://support.advantech.com.tw/support/default.aspx>

This manual is for the MIC-7300 Series Rev. A1.

Part No. 2001730000
Printed in China

Edition 1
Oct. 2017

Specifications

Processor

- Intel® Celeron® N3350/Atom® x7-E3950

Memory

- 2 x SODIMM DDR3L (up to 4 GB per socket), without ECC. Maximum capacity is 8 GB.

Graphics

- Low-power Intel® Gen9 graphics chipset with up to 18 EUs supports 3 x independent displays

Serial Ports

- 2 x RS-232/422/485, can be configured in the BIOS

Ethernet

- Interface:** 10/100/1000 Mbps
- Controller:**
LAN1: Intel® i210AT, with Wake-on-LAN support
LAN2: Intel® i210AT, with Wake-on-LAN support

Storage

- 1 x Internal 2.5" HDD bay

Front I/O

- Display:** 1 x VGA and 1 x DVI, with a maximum resolution of 1920 x 1080
- USB:** 6 x USB 2.0 and 2 x USB 3.0
- Serial:** 2 x RS-232/422/485 and 2 x RS-232
- Audio:** 1 x Line-Out/Mic-In

Power Requirements

- Power Type:** ATX/AT
- Power Input Voltage:** 9 ~ 36 V_{DC}
- Minimum Power Input:** 9 V_{DC} (14A) ~ 36 V_{DC} (4A)

This product is designed to be powered by a UL-certified power supply or UL-certified DC source rated 9 ~ 36 V_{DC} with a minimum 14 ~ 4A and 40 °C TMA.

Miscellaneous

- 1 x Power LED** (Orange = system standby/Green = system booting)
- 3 x Function LEDs** (1 x COM1 TX/RX, 1 x COM2 TX/RX, and 1 x HDD status)

Environment

- Operating Temperature:** -10~ 60 °C for N3350 and -20 ~ 60 °C for E3950 with 0.7m/S airflow (with 1 x industrial SSD)
Note: Maximum safe temperature with SSD is 40 °C.
- Relative Humidity:** 95% @ 40 °C (non-condensing)
- Storage Temperature:** -40 ~ 60 °C@95% humidity (non-condensing with SSD)

Specifications (Cont.)

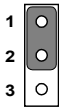
Physical Characteristics

- **Dimensions (W x H x D):**
73 x 192 x 230 mm (2.87 x 7.55 x 9.05 in)
- **Weight:** 2.9 kg (6.39 lb)

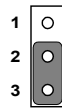
Jumpers and Connectors

The board comprises multiple jumpers that allow the system to be configured according to specific applications. The function of every jumper and connector is listed in the table below.

Connectors	
Label	Function
DVI1	DVI connector
VGA1	VGA connector
COM 12	RS-232/422/485
COM 34	RS-232
USB12	USB 3.0
USB345678	USB 2.0
LAN 1	Intel i210AT
LAN 2	Intel i210AT
Audio	Audio jack (Line-Out, Mic-In)
LED 1234	COM 1/2 TX/RX LED
LED 5	HDD status
DC 9-36V	Power connector
DIO	8-bit DI/O
ON/OFF	Power on/off control



AT Module



ATX Module

PSOEN1: System AT/ATX Module Selection

Function	Jumper Setting
1-2	AT module
2-3	ATX module

Software Installation

Relevant drivers for MIC-7300 are provided on the software installation CD. Please locate the driver folder and follow the onscreen instructions for driver installation.

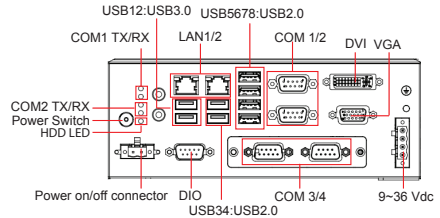
The computer is supplied with a battery-powered real-time clock circuit. Batteries that are incorrectly replaced or installed are at risk of exploding. Replace only with same or equivalent type as recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Declaration of Conformity

This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

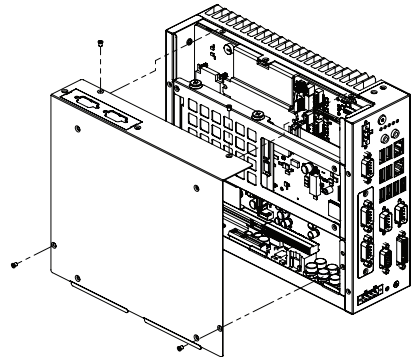
System I/O



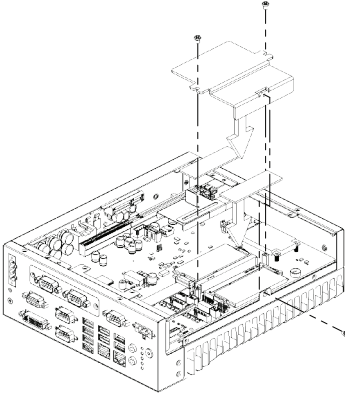
Initial Installation

Memory Installation

MIC-7300 supports DDR3L SODIMM (non-ECC) memory modules. Please contact your distributor or sales representative for a list of compatible memory modules.



Initial Installation (Cont.)

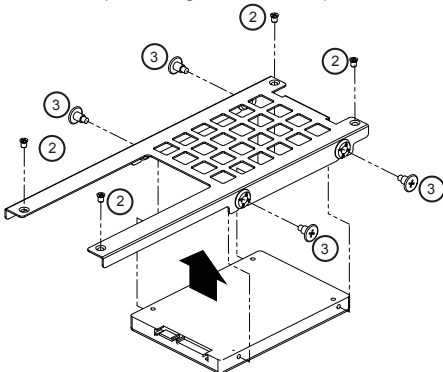


1. Undo the four affixing screws and remove the rear cover.
2. Undo the four affixing screws and remove the HDD tray.
3. Undo the three affixing screws and remove the memory cover.
4. Affix the thermal pad (P/N: 1990019498N000) to the memory module and reassemble the system.

Note: The thermal pad and memory cover must be in direct contact and securely fitted.

Storage Installation

1. Undo the four affixing screws and remove the rear cover.
2. Undo the four affixing screws and remove the HDD tray.
3. Insert the HDD into the HDD tray and secure in place using the four HDD screws (P/N:1930002235).
4. Connect the SATA and power cables.
5. Replace the HDD tray and secure in place using the four screws provided. Then replace the rear cover and secure in place using the four screws provided.



Initial Installation (Cont.)

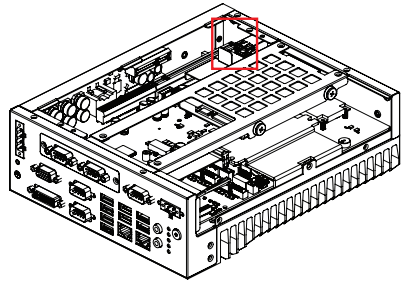
Mini PCIe Installation

MIC-7300 features one full-size mini PCIe slot. (This slot also supports mSATA.)

1. Undo the affixing screws and remove the rear cover.
2. Install a mini PCIe module in the mini PCIe slot and secure in place with screws.
3. Replace the rear cover.

Internal USB 2.0 Installation

1. Undo the affixing screws and remove the rear cover.
2. Loosen the bracket screws and adjust the size of the bracket in accordance with the size of the USB dongle.
3. Secure the bracket in place by tightening the bracket screws. Then replace the rear cover and secure in place with screws.

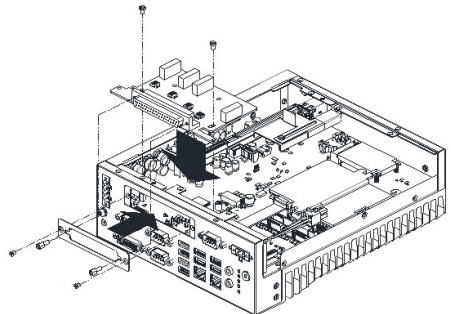


Expansion Module Installation (Optional)

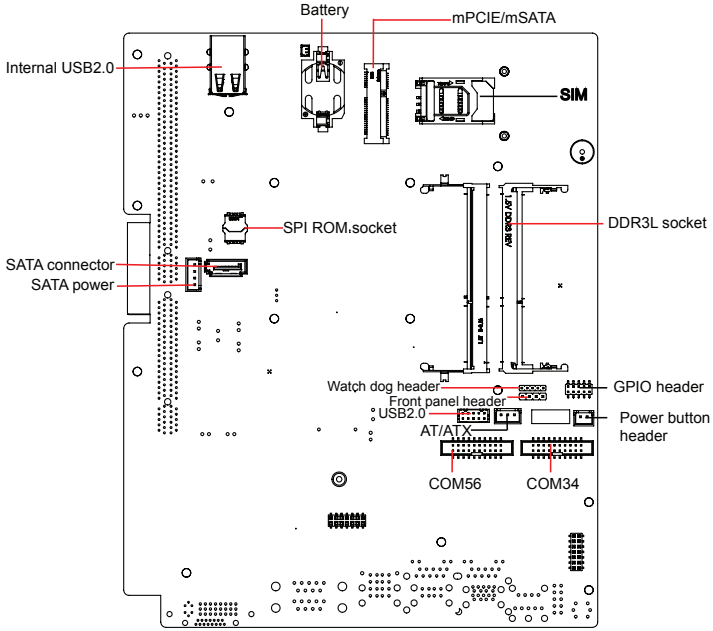
MIC-7300 can be equipped with the following optional expansion modules to fulfill specific usage requirements:

- 32-bit GPIO modules (P/N: AIIS-DIO32-00A1E)
- Isolated COM modules (P/N: 98R2C48510E)

1. Undo the four affixing screws and remove the rear cover.
2. Remove the HDD tray and expansion module cover. Then remove the COM cable.
3. Insert expansion modules into the slots on the motherboard. (Note: 32-bit GPIO modules must be connected by cable.)
4. Replace and secure the module cover. Replace and secure the rear cover.



I/O Connectors



System Dimensions

UNIT : mm

