ADVANTECH

MIC-75M13
PCIE/PCI Expansion Module for MIC-7 Series Embedded System
Startup Manual

Packing List

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

1. MIC-75M13 Module x1 — P/N: MIC-75M13-00A1E
2. MIC-75M13 Startup Manual x1 — P/N: 20015M1300
3. Warranty Card — P/N: 2190000902
4. SATA Cable x 1 — P/N: 1700014518
5. SATA Power Cable x 1 — P/N: 1700023566-02
6. Card Clamp Pad x 4 — P/N:1990024989T000
7. Wall-Mount BKT (Left) x1 — P/N: 1960070545N001
8. Wall-Mount BKT (Righ) x1 — P/N: 1960070543N001

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

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

Specifications

PCIe Slots
- One PCIe x16 socket

Note 1: PCIEx16 power consumes 35W.

Note 2: MIC-73 series products (ATOM CPU) only supports PCIEx4 or PCIEx1 signal.

32-bit PCI
- Three 32 Bit/33Mhz PCI socket

Note 1: Each PCI socket supports 15W power consumption.

Storage
- Internal SATA connector: 1

Note 1: MIC-75M13 supports 2x2.5' HDD space and one SATA signal is from main system.

Environment
- **Operating Temperature:**
  -20 ~ 60° C with 0.7 m/sec air flow: with 1 x Industrial SSD without PC expansion boards
  0 ~ 45° C with 0.7 m/sec air flow: with 1 x 2.5" HDD without PC expansion boards
- **Storage Temperature:** - 40 ~ 85° C (-40 ~185° F)
- **Relative Humidity:** 95% @ 40° C (non-condensing)

Mechanical
- **Dimensions (H x W x D):** 92 x 90 x 230 mm

Note 1: Please add a fan onto the i-module if add-on card total power consumption is over 45W.

Jumpers and Connectors

Table below lists the functions of each of the connectors.
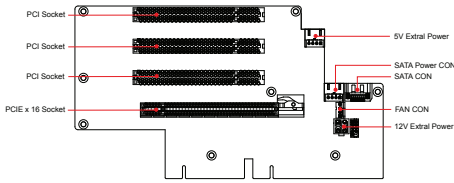
Connectors		
No.	Item	Function
1	SATAPWR1	SATA Power connector
2	SATA1	SATA connector
3	CPUFAN1	4 Pin FAN connector
4	PWR1	4 Pin Power connector (12V)
5	PWR2	4 Pin Power connector (5V)
6	PCI1/2/3	PCI Socket
7	PCIEx16_1	PCIE x16 Socket

Simple Maintenance Process
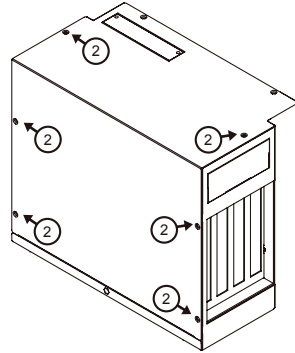
System Installation

MIC-7 series i-module can assemble with all MIC-7 series IPC system.

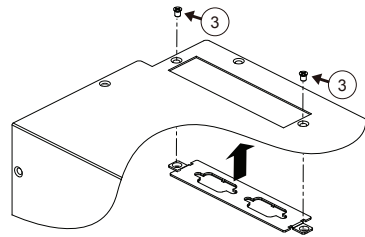1. Undo MIC-7 series system screws and remove the bottom cover.
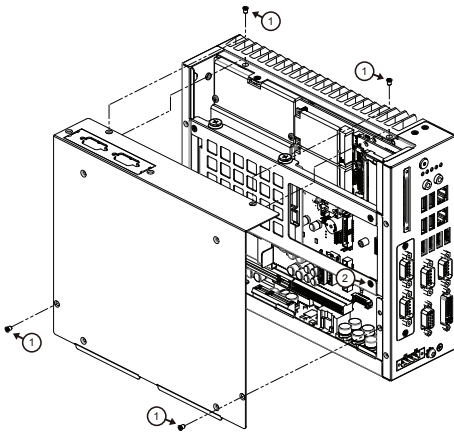
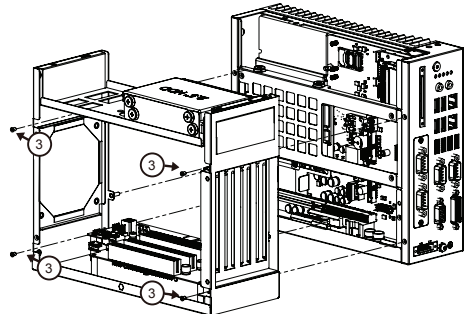## Simple Maintenance Process (Cont.)

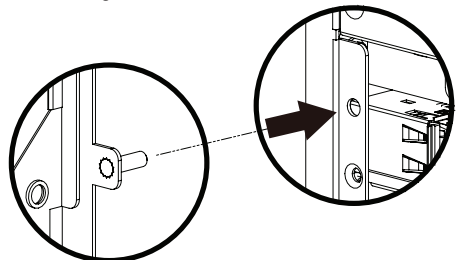2. Undo 6x screws of MIC-75M13.

3. Remove i-door cover by MIC-7500 bottom cover and assemble and secure cover on i-module's bottom cover.

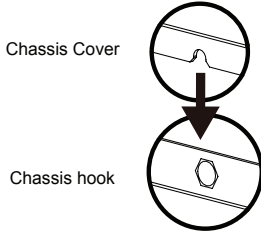4. Assemble MIC-75M13 and MIC-7 series device and secure 4x screws.

Note: MIC-75M13 has 2 bolts and they must be aligned into the holes on the device.

5. Replace the cover and secure with screws.

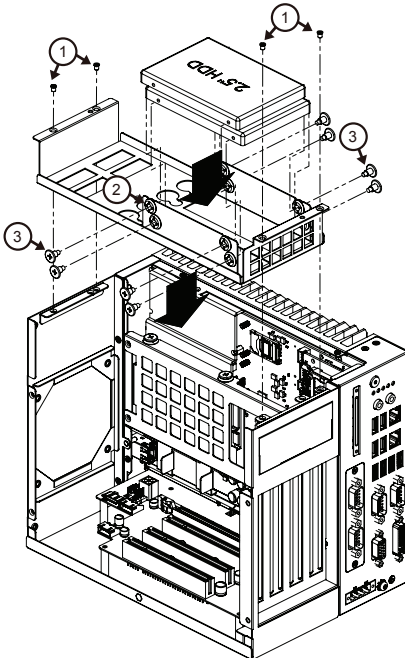**Note:** Chassis cover has a notch designed in and it must mate with a hook on the chassis.

Chassis Cover

Chassis hook

HDD Installation

MIC-75M13 supports 2 x 2.5' HDD spaces. You can move the systems' HDD to the i-module HDD space to make it more easy to maintain the system.

Note: MIC-75M13 only supports one SATA HDD connector, 2nd SATA must extend from the system.

1. Undo the HDD bracket.
2. Assemble 4x HDD shock rubber pads (P/N:1990008871S000) for One HDD.
3. Secure the 4 x HDD screws (P/N:1930002235)
4. Assemble SATA/SATA Power cable. (Please refer MB internal I/O connector specificaton at next page)
5. Replace the HDD bracket and chassis cover screws.

FAN Installation (Optional)

MIC-75M13 supports two 4x4CM fan spaces. If you want to install high perfornamce expansion cards, (For example: graphics or a PoE card) or total power consumption is over 45W, please install a fan for thermal issues. A fan is an optional module. If your system needs a fan module, please contact your distributor or sales representative.
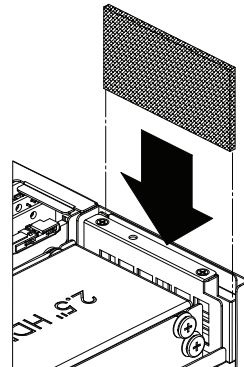
Fan Module P/N: 98R1752000E.
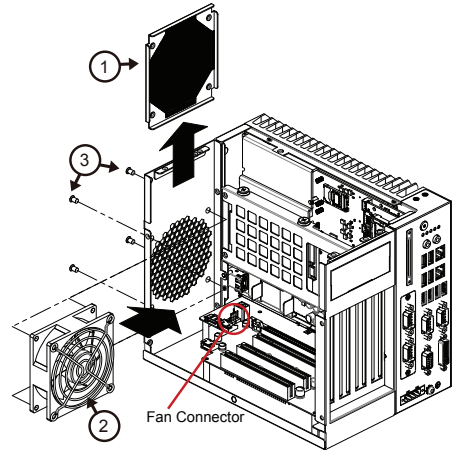
Fan Connector

1. Undo the fan cover
2. Secure the fan protection nets with 4 screws.
3. Assemble and secure the fan in chassis with 4 screws.
4. Plug the fan power cable into the connector on the backplane board.
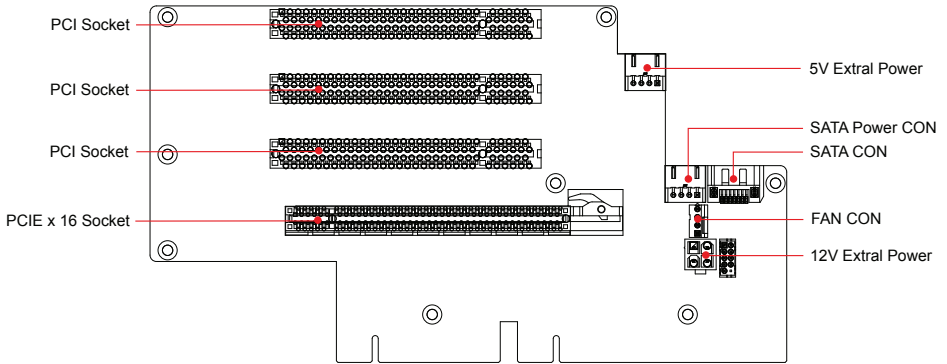
FAN Filter Installation

If your system has a fan installed, we recommend you to replace the system fan filter at regular intervals to ensure the stability of the system cooling.

1. Undo system cover and remove old fan filter.
2. Change new fan filter and replace system cover with screws.

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IO Connectors

PCI Socket

PCI Socket

PCI Socket

PCIE x 16 Socket

5V Extral Power

SATA Power CON
SATA CON

FAN CON

12V Extral Power

System Dimensions

230
235.20

163

163

192
197.20