

# MIC-78 i-Module Series

## Expansion Module for MIC-78 Series



### Features

- Flexible expansion via PCIe/PCI slot
- PCIe speed up to Gen5 high speed
- MIC-78 series compatible
- Optional smart fan for thermal optimization
- Provide additional 12Vdc power source for add-on card
- Maximum 85W for add-on card power consumption
- Support 250W power PCIe GPU and 80W MXM GPU by GPU i-Module
- Expansion for 2.5" and 3.5" HDD/SSD bay
- 2 x 2.5" Swappable HDD/SSD supported

### Introduction

MIC i-Module Series provide flexible expansion function for MIC-78 Series system. MIC i-Module Series support PCIe/PCI I/F add-on card, such as frame grabber, GPU and motion control cards, etc.. Except for the power from PCIe/PCI slot, i-Module reserves additional 12VDC power via the on-board connector for cards that need more power. To better control over the heat generated from add-on cards, optional system fans are supported with intelligent Smart Fan feature for better thermal management. With additional HDD/SSD bays in i-Module, customer can have more rooms for massive data storage. Removable storage bays are also supported.

### Compatible Table

i-Module		1 slot		2 slot		4 slot	
		MIC-78M10	MIC-78M20	MIC-78M20-01	MIC-78M11	MIC-78M40-01	MIC-78M13
MIC-780 series							
MIC-780	W SKU	✓	✓	✓	✓	✓	✓
	H SKU	✓	✓	–	✓	–	✓
MIC-785		✓	✓	✓	✓	✓*	✓

i-Module		Featured	
		MIC-78MG30	
MIC-780 series			
MIC-780	W SKU	✓	
	H SKU	✓	
MIC-785		✓**	

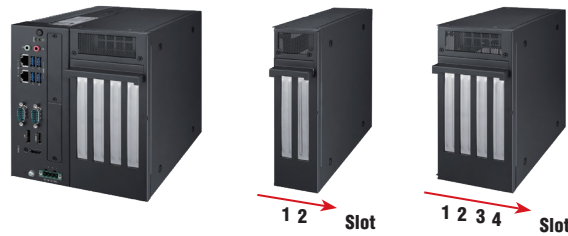
\* When MIC-785 with MIC-78M40-01, not have 2nd slot, PCIe2 signal

\*\* When MIC-785 with MIC-78MG30, not have 6th slot, PCIe2 signal

# MIC-78 i-Module Series

## Selection Table

i-Module slot number starts from the inner side, as the image on the right.



iModule	MIC-78M10	MIC-78M20	MIC-78M20-01	MIC-78M11	MIC-78M40-01	MIC-78M13	MIC-78MG30
Slot 1	PCIe x16	PCIe x16	PCIe x 8	PCIe x16	PCIe x 8	PCIe x16	PCIe x16
Slot 2	-	PCIe x 4	PCIe x 8	PCI	PCIe x 2	PCI	-
Slot 3	-	-	-	-	PCIe x 8	PCI	PCIe x 2
Slot 4	-	-	-	-	PCIe x 4	PCI	PCIe x 4
Slot 5	-	-	-	-	-	-	-
Slot 6	-	-	-	-	-	-	-
SATA Port and PWR (on iModule back plane)	2	2	2	2	2	2	2****
2.5 HDD/SDD Bay	-	-	1*	-	2***	-	2 x Swappable
N.W (KG)	1.14	-	1.31	-	1.71	-	4.63
G.W (KG)	2	-	2.05	-	2.48	-	5.53
i-Module W x H x D (mm)	63 x 195 x 255	-	83 x 195 x 255	-	123 x 195 x 255	-	200 x 195 x 355
MIC-78X + i-Module W x H x D (mm)	113 x 195 x 255	-	133 x 195 x 255	-	173 x 195 x 255	-	200 x 195 x 355
System Fan	-	-	98R1752000E**	-	98R1751300E**	-	Embedded
12VDC Connector (Molex 2x2 connector)	-	-	1	-	1	-	1
12VDC Connector for GPU (PCIe 8in)	-	-	-	-	-	-	2
Add on card Max dimension (with system Fan)	-	-	188 x 111 x 20	-	190 x 111 x 20	-	290 x 124 x 59
Add on card Max dimension length (without system Fan)	222 x 111 x 20	-	222 x 111 x 20	-	222 x 111 x 20	-	-

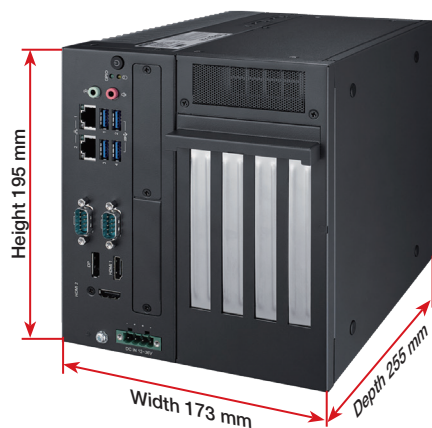
\* Need to order 98R1752010E (2.5" 15mm HDD/SDD kit for 2 slots i-Module)

\*\* Suggest to add optional system fan if power consumption of add-on card is more than 45W for better thermal management

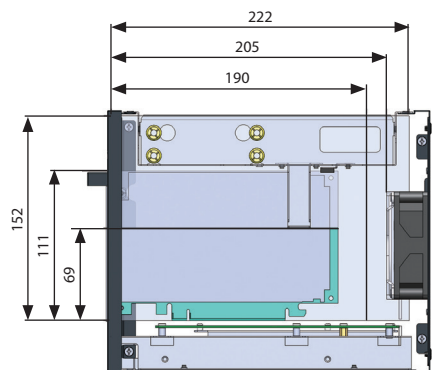
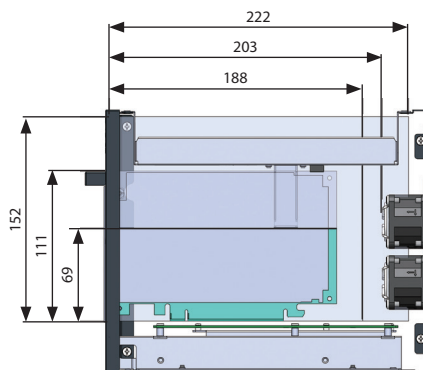
\*\*\* support 2 \* 15mm 2.5" HDD/SSD

\*\*\*\* link to swappable bay directly, each bay support one 15mm 2.5" HDD/SSD

## Dimension Guide



### i-Module Add-on card Dimension Guide



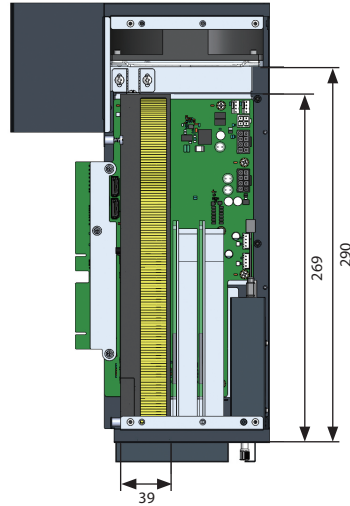
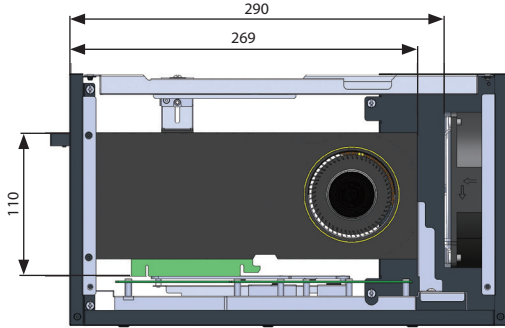
Example: MIC-780 + MIC-78M40

2-slot i-Module

4-slot i-Module

# MIC-78 i-Module Series

## MIC-78MG30 GPU Dimension Guide



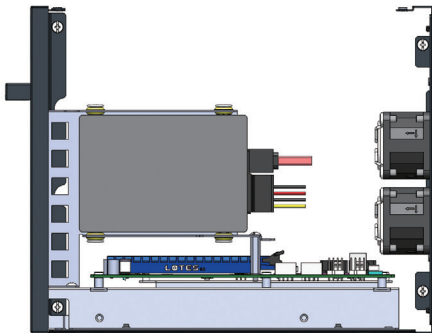
## HDD/SSD Support Table

MIC-780 series		SATA port on BP	MIC-780, 785	
System SATA port count (on MB)			2	
2.5 HDD/SSD Bay in MIC			1 or 2*	
Storage type in MIC-78			SSD/HDD (7mm)	SSD/HDD (9mm/15mm)
Total 2.5" HDD/SSD, MIC-780 series + i-Module	MIC-78M10	2	2	1
	MIC-78M11	2	3**	2**
	MIC-78M20	2	3**	2**
	MIC-78M20-01	2	3**	2**
	MIC-78M13	2	4	3
	MIC-78M40-01	2	4	3
	MIC-78MG30	2	4	3

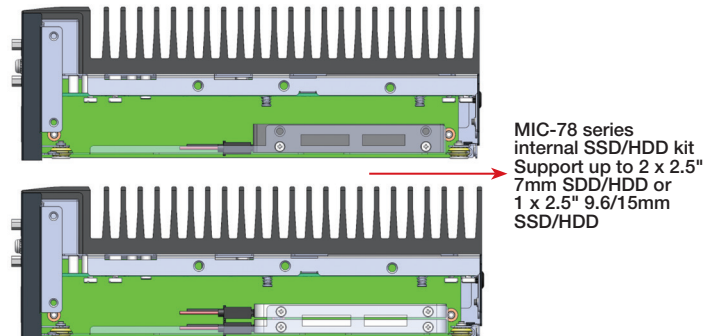
\* if SSD/HDD thick is 7mm, then could install 2 \* SSD/HDD on Bay, if SSD/HDD thick is 9/15mm, then only support 1 \* SSD/HDD

\*\* Need to order 98R1752010E

## 2.5" HDD/SSD kit for 2-slot i-Module



## MIC-78 series internal SSD/HDD kit



Ordering information: 98R1752010E

Supportable i-Module: MIC-78M20, MIC-78M20-01, MIC-78M11

Limitation: Slot 2 will be occupied

Support up to one 15mm 2.5" HDD/SSD

# MIC-78 i-Module Series

## 2.5" HDD/SSD Thickness Guide

**Internal HDD/SSD**  
Supportable i-Module:  
MIC-78M40-01  
Support up to 2 x 2.5"  
15mm HDD/SSD



MIC-78M40-01



**Swappable HDD/SSD**  
Supportable i-Module:  
MIC-78MG30  
Support up to 2 x 2.5"  
15mm HDD/SSD

MIC-78MG30

## Optional i-Modules\*

Part Number	Description
MIC-78M10-00A1	1 slot expansion iModule (PClex16 slots)
MIC-78M11-00A1	2 slot expansion iModule (PClex16, PCI slots)
MIC-78M20-00A1	2 slot expansion iModule (PClex16, PClex4 slots)
MIC-78M20-01A1	2 slot expansion iModule (2x PClex8 slots)
MIC-78M13-00A1	4 slot expansion module (PClex16, 3x PCI slots)
MIC-78M40-01A1	4 slot expansion module (4 x PCIe slots)
MIC-78MG30-00A1	4 slot expansion module (3 x PCIe slots, GPU 250 watt)

\*Please refer to MIC-78MG30 datasheet for more product information.

## Optional Accessories

Part Number	Description	Mark
98R1751300E	8cm fan for 4slot iModules	
98R1752000E	2 x 4cm fan for 2slot iModules	
98R1752010E	2.5" HDD/SSD kit for 2slot iModule	
1700024858-01	4-pin 12VDC power cable (15cm, for PoE card)	
<b>For MIC-78MG30</b>		
96PSD-A480W24-MS	DIN RAIL PSU 100-240V 480W 24V (Peak power 720W, 3 Sec.)	480W PSU
1700031170-01	DC-DC power cord, A cable TEM*4/TEM*4 UL2464 18AWG 150cm	DC-DC cable connect from PSU DC to MIC
1700029720-01	PSU power cord (USA), AC Conn., 3-pin, 10A, 125V, UL/CSA, 1.83M	AC cable (USA)
1700030520-01	PSU power cord (CN), AC Conn., 3-pin, 10A, 250V, CCC, 1.5M	AC cable (CN)
1700034561-01	M cable Type E 3P/TEMx3 80CM (EU)	AC cable (EU)
1700022074-11	4-pin 12VDC power cable (40cm)	Power cable for PoE card