

MIC-7500

Intel 6th Generation Core i Processor Compact Fanless System

Preliminary



Features

- Support Intel 6th Generation Core i7/i5/i3 BGA type CPU with Intel QM170 PCH
- Support I-Module expansion module
- Support VGA & DVI
- Support 1 x 2.5" HDD/1 x CFast slot/1x mSATA
- Support 2 Giga LAN and 8x USB 3.0
- Support 2 x RS-232/422/485 Serial & 4 x RS232 (Expansion by cable)
- Support Isolation COM module & 32bit GPIO module
- Supports wide power range of 9 ~ 36V DC input
- Support wide range operating Temperature of -20 ~ 60° C
- Supports SUSIAccess and Embedded Software APIs

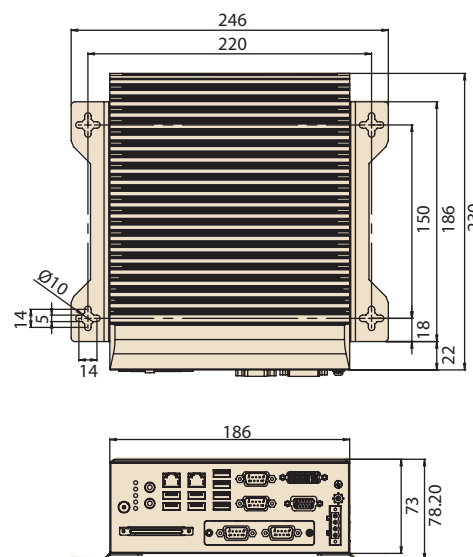
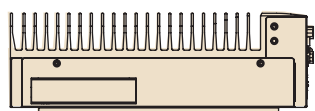
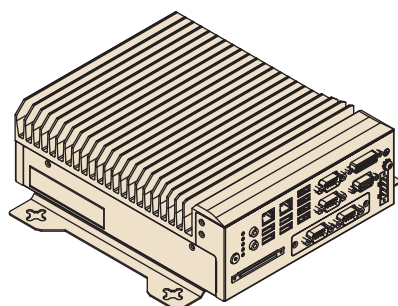


Specifications



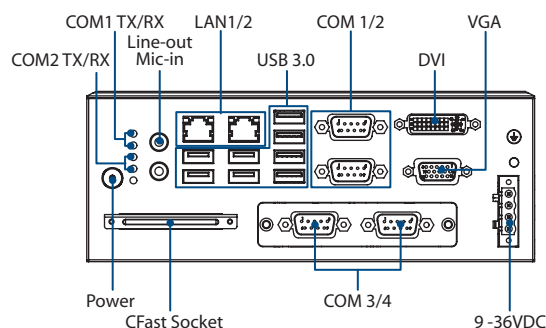
System Chipset	CPU	i7-6822EQ	Intel i5-6442EQ	Intel i3-6110EQ
	Max Speed	2.0 GHz	1.9GHz	1.9 GHz
	L3 Cache	8MB	6MB	3MB
	Chipset	QM170		
	BIOS	AMI SPI 64 Mb		
Memory	Technology	Dual Channel DDR4-2133MHz		
	Socket	2x 260 pin DDR4 SO-DIMM socket, up to 16GB per socket Note: One DDR4 SO-DIMM least size is 4GB		
	Maximum Capacity	Build-in 4GB memory, update to 32GB		
Display	Chipset	Intel HD Graphic 530, support DirectX12		
	VGA	1 x DB15, max resolution up to 2048 x 1536		
	DVI	1 x DVI, max resolution up to 1920 x 1200 @ 30Mhz (2nd DVI connector expaned by cable, option)		
	Display Option	Support third independent display		
Ethernet	Controller	LAN1: Intel i219LM; LAN2: Intel i210, support Wake-on-LAN		
	Interface	2 x RJ-45		
Storage	HDD	Support 1 x 2.5" HDD		
	CFast	Support 1 x CFast slot		
	SSD	1 x internal mSATA (Mini-PCIE interface)		
I/O	USB	8 x USB 3.0 + 1 x Internal USB2.0		
	Serial Port	2 x DB9, RS232/422/485 with automatic flow control, 4 x RS-232 (Expaned by Cable, Option)		
	Audio	2 (1 x Line-Out, 1 x Mic-in)		
Expansion Slot	Expansion module	Support I-Module (MIC-75M13/MIC-75M40/MIC-75M20/MIC-75S20/MIC-75M11)		
	Mini-PCle	2x Mini-PCIE supported PCIE Gen2 signal, 1 supported U-SIM socket, 1 supported m-SATA		
LED & Button	LED	TX 1&2; RX 1&2; Storage x 1		
	Button	Power on/off Switch x 1		
Power	Power Type	ATX/AT		
	Power Input Voltage	9 ~ 36V _{DC}		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1~255 sec/min		
Environment	Temperature	Operating (With Industrial SSD)	Operating (with HDD)	Non-Operating
		-20 ~ 60° C with 0.7m/S air flow	0 ~ 40° C	-40 ~ 85° C
	Humidity	95% @ 40° C (non-condensing)		
	Vibration	With SSD: 3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis With 2.5" HDD: 1 Grms @ 5 ~ 500 Hz, random, 1 hr/axis		2G
	Shock	With SSD: 20G, IEC-68-2-27, half-sine wave, 11 ms duration		50G 11ms
Mechanical Features	Dimension (W x H x D)	74 x 192 x 230 mm		
	Weight	2.9kg (6.39 lbs)		
	Install	Desktop/Wall-mounting		
Certifications	EMC	CE/FCC Class A, CCC, BSMI		
	Safety	UL, CCC, BSMI		

Dimensions

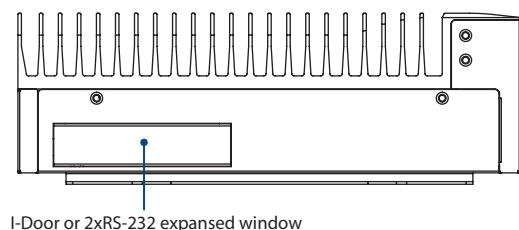


Unit: mm

Front View



Left View



Ordering Information

Part Number	CPU	VGA	DVI	2.5" HDD	CFast	USB3.0	GbE	COM	PCIe/PCI Exp	Power
MIC-7500-U0A1E	i7-6822EQ	1	1	1	1	8	2	4	i-Module (optional)	DC9 ~ 36V
MIC-7500-S9A1E	i5-6442EQ	1	1	1	1	8	2	4	i-Module (optional)	DC9 ~ 36V

Packing List

Part No.	Description
-	MIC-7500
2061750000	CD-ROM for MIC-7500 V1.0
2001750000	MIC-7500 Startup manual
1652003234	1 x 4pin Phoenix Power Connector
1960070543N001	2 x Mounting Bracket
1700019445	1 x SATA Cable
1700024372-01	1 x SATA Power Cable
1701200220	1 x 2xDP9 Ports cable

Optional Accessory

Part No.	Description
96PSA-A220W24P4-1	ADP A/D 100-240V 220W 24V
96PSA-A150W19V1	ADP A/D 100-240V 150W 19V
96PSA-A120W24T2	ADP A/D 100-240V 120W 24V
1702002600	Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D
1700022940-01	Power cord PSE 7A 125V 3P 3m DAC-ST01
1702002605	Power cord 2P FRANCE 10A/16A 220V 1.83M 90D
i-Door module	Support i-Door except PoE
	Please refer Advantech Website below or search "iDoor Module Mini PCIe Expansion Kit".
	http://www.advantech.com/products/idoor-technology-mini-pcie-expansion-kit/sub_efdb96af-a8f7-4cde-9592-dbf5c9794d16

Optional i-Module

Feature	Model name and specification
4-slot Expansion Module	MIC-75M40 (4x PCIe slots) MIC-75M13 (1x PCIe + 3x PCI slots)
2-slot Expansion Module	MIC-75M20 (2x PCIe slots) MIC-75M11 (1x PCIe + 1x PCI slots)
2-slot Expansion and Storage Module	MIC-75S20 (2x PCIe slots + 2x 2.5" hot-swap HDDs)

*optional i-Module details as next page

Embedded OS

Part Number	Description
TBD	img WES7P MIC-7500 x64 V.5.6.6 10MUI ;SAP

i-Module for MIC-7 Series

Compatible with MIC-7 Series System Fan-Less System

4 Slot Expansion Module

MIC-75M40

- 1x PCIe8
- 3x PCIe4
- 1x SATA (2x 2.5" HDD bay)
- Support 1x 8cm FAN (Optional)
- Dimension (W x H x G): 90 x 192 x 230 mm

Note:

- 1: If your Expansion card power performance is total over 45W, please add a fan for thermal issue.
- 2: MIC-75M40 does not support MIC-7300 series system.



MIC-75M13

- 1x PCIe16
- 3x PCI
- 1x SATA (2x 2.5" HDD bay)
- Support 1x 8cm FAN (Optional)
- Dimension (W x H x G): 90 x 192 x 230 mm

Note:

- 1: If your Expansion card power performance is total over 45W, please add a fan for thermal issue.
- 2: For MIC-7300 series products (ATOM CPU), only support 1 xPCIEx4 signal.



2 Slot Expansion Module

MIC-75M20

- 1x PCIe16
- 1x PCIe4
- 45 x 192 x 230 mm
- Support 2x 4cm FAN (Optional)
- Dimension (W x H x G): 45 x 192 x 230 mm

Note:

- 1: If your Expansion card power performance is total over 45W, please add a fan for thermal issue.
- 2: MIC-75M20 does not support MIC-7300 series system.



MIC-75M11

- 1x PCIe16
- 1x PCI
- 45 x 192 x 230 mm
- Support 2x 4cm FAN (Optional)
- Dimension (W x H x G): 45 x 192 x 230 mm

Note:

- 1: If your Expansion card power performance is total over 45W, please add a fan for thermal issue.
- 2: For MIC-7300 series products (ATOM CPU), only support 1 xPCIEx4 signal.



MIC-75S20

- 1x PCIe16
- 1x PCIe4
- 2x Hot Swappable HDD tray
- Support 1x 8cm FAN (Optional)
- Dimension (W x H x G): 90 x 192 x 230 mm

Note:

- 1: Please install SSD for Wide-range Temperature.
If system has without SSD ,Please add Fan module.
- 2: MIC-75S20 does not supports any high performance expansion card, for example: Graphic card or PoE card.
- 3: MIC-75S20 does not support MIC-73 series system.



Optional Accessory

Part No.	Description
98R1751300E	8cm FAN Accessory for 4x slot i-module
98R1752000E	2x 4cm FAN Accessory for 2x slot i-module

Order Information

Part No.	Description
MIC-75M13-00A1E	MIC-75M13
MIC-75M40-00A1E	MIC-75M40
MIC-75M11-00A1E	MIC-75M11
MIC-75M20-00A1E	MIC-75M20
MIC-75S20-00A1E	MIC-75S20