

MIC-7700

Compact Fanless System with 6th/7th Gen Intel® Core™ i CPU Socket (LGA 1151)

NEW



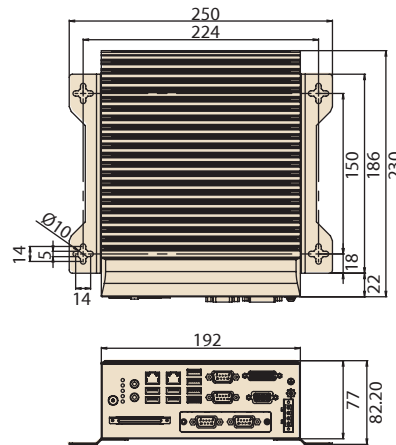
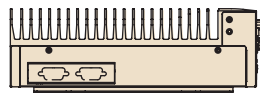
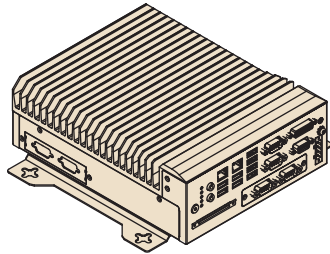
Features

- Intel® 6th/7th Gen Core™ i CPU socket-type (LGA1151) with Intel® Q170/H110 chipset
- Wide operating temperature (-10 ~ 50 °C)
- VGA and DVI output
- 2 x GigaLAN and 8 x USB 3.0
- 2 x RS-232/422/485 and 4 x RS232 serial ports
- 1 x 2.5" HDD/SSD, 1 x CFast, and 1 x mSATA
- 9 ~ 36 V_{DC} input power range
- Supports 2 x LAN, isolation COMs, and 32-bit GPIO modules
- Supports Advantech i-Modules
- Supports Advantech SUSIAccess and embedded software APIs

Specifications

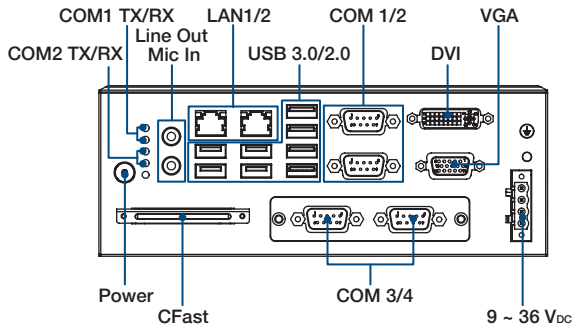
6 th /7 th Generation Processor* (TDP 35W)	CPU	i7-6700TE	i5-6500TE	i3-6100TE	G4400TE
	Core Number	4	4	2	2
	Base Frequency	2.4 GHz	2.3 GHz	2.7 GHz	2.9 GHz
	Max Turbo Frequency	3.4 GHz	3.3 GHz		
	L3 Cache	8 MB	6 MB	4 MB	3 MB
	Temperature	-10 ~ 50 °C (w/ industrial SSD, 0.7 m/s air flow)			
	Chipset	Q170/H110			
6 th /7 th Generation Processor* (TDP 65W)	BIOS	AMI 128Mb SPI Flash			
	CPU	i5-7500	i3-7101E	i5-6500	i3-6100
	Core Number	4	2	4	2
	Base Frequency	3.4 GHz	3.9 GHz	3.2 GHz	3.7 GHz
	Max Turbo Frequency	4.0GHz		3.6GHz	
	L3 Cache	6 MB	3 MB	6 MB	4 MB
	Temperature	-10 ~ 40 °C (w/ industrial SSD, 0.7 m/s air flow)			
Memory	Chipset	Q170/H110			
	BIOS	AMI 128Mb SPI Flash			
	Technology	Dual-channel DDR4 2133/2400 MHz (without ECC)			
Display	Socket	2 x 260-pin DDR4 SODIMM (up to 16 GB per socket)			
	Maximum Capacity	32GB			
	Chipset	7 th Gen. CPU: Intel HD Graphics 630, supports DirectX 12 6 th Gen. CPU: Intel HD Graphics 530/510, supports DirectX 12			
Ethernet	VGA	1 x DB15, up to 2048 x 1152 maximum resolution			
	DVI	1 x DVI, up to 1920 x 1080 maximum resolution @ 30MHz (with optional expansion cable for second DVI connector, or 1 x HDMI connector)			
	Multiple Display	MIC-7700Q: 3 x independent displays (third display output via optional cable) MIC-7700H: 2 x independent displays			
Storage	Controller	MIC-7700Q LAN1: Intel® I219LM, LAN2: Intel® i210IT MIC-7700H LAN1: Intel® I219V, LAN2: Intel® i210IT			
	Interface	2 x RJ45			
	HDD	1 x 2.5" HDD/SSD			
I/O	CFast	1			
	mSATA	1			
	RAID	0/1/5/10 (MIC-7700Q only)			
Expansion	SATA Conn.	MIC-7700Q: 3 x SATA signal, 3 x SATA power MIC-7700H: 1 x SATA signal, 1x SATA power			
	USB	MIC-7700Q: 8 x USB 3.0 and 1 x internal USB 2.0 MIC-7700H: 4 x USB 3.0 and 4 x USB 2.0			
	Serial Port	2 x DB9, 2 x RS-232/422/485 support auto flow control; 4 x RS-232 (with expansion cable)			
LED and Switch	Audio	2 (1 x line out and 1 x mic in)			
	Module	Supports Advantech i-Modules			
	Mini PCIe	MIC-7700Q: 1 x mini PCIe (via USIM), 1 x mini PCIe/mSATA MIC-7700H: 1 x mini PCIe (via USIM), 1 x mSATA			
Power	LED	2 x TX, 2 x RX, and 1 x Storage			
	Button	1 x Power on/off switch			
	Type	ATX/AT			
Watchdog Timer	Input Voltage	9 ~ 36 V _{DC}			
	Power consumption	Typical: 32.062W Maximum: 116.002W			
	Output Interval	System reset Programmable 1 ~ 255 sec/min			
Environment	Temperature	65W CPU w/ industrial SSD -10 ~ 40 °C with 0.7 m/s air flow	35W CPU w/ industrial SSD -10 ~ 50 °C with 0.7 m/s air flow	Non-operating -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			
Mechanical	Shock	With SSD: 20G, IEC-68-2-27, half-sine wave, 11 ms duration			
	Dimensions (W x H x D)	77 x 192 x 230 mm (3.07" x 7.55" x 9.05")			
	Weight	2.8 kg (6.17 lbs)			
Certifications	Installation	Desktop/wall mount			
	EMC	CE/FCC Class A, CCC, BSMI			
	Safety	UL, CCC, BSMI			
OS Support	7 th Gen. CPU: Windows 10, Windows 10 IoT 6 th Gen. CPU: Windows 10, Windows 10 IoT, Windows 8 .1 (64 bit), Windows 7			MIC-7700Q: Windows Server 2016 Linux OS	

Dimensions

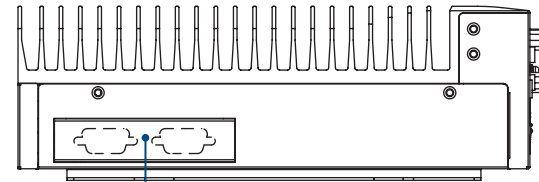


Unit: mm

Front View



Side View



iDoor or 2 x RS-232 expansion slots

Ordering Information

Part Number	VGA	DVI	2.5" HDD/SSD	CFast	mSATA	USB 3.0	USB 2.0	GbE	COM	PCIe	Power
MIC-7700Q-00A1	1	1	1	1	1	8	0	2	4, up to 6 via cable	i-Module (optional)	9 ~ 36V _{DC}
MIC-7700H-00A1	1	1	1	1	1	4	4	2	4, up to 6 via cable	i-Module (optional)*	9 ~ 36V _{DC}

*MIC-7700H does not support MIC-75M40 or MIC-75M20-01

Packing List

Part Number	Description	Quantity
MIC-7700	MIC-7700 bare system	1
2061770010	Driver CD	1
2001770030	Startup manual EMC/NTC for MIC-7700 1st Ed	1
1652003234	4-pin Phoenix power connector	1
1960070543T001	Mounting bracket	2
1700013095	SATA cable	1
1700024372-01	SATA power cable	1
1701200220	Dual DB9 port cable (for COM5/COM6 expansion)	1
2170000093-01	CPU thermal grease	1
1990019498N000	RAM thermal pad	2

Optional Accessories

Part Number	Description
96PSA-A220W24P4-1*	Adaptor A/D, 100-240V, 220W, 24V
96PSA-A150W19P4-1**	Adaptor A/D, 100-240V, 150W, 19V
1702002600	Power cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M, 180 D
1700022940-01	Power cord PSE, 3-pin, 7A, 125V, 3 m, DAC-ST01
1702002605	Power cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D
AIS-DIO32-00A1E	DIO module, 32-CH, 9-pin USB interface
PCA-TPM-00B1E	TPM 2.0 module
98R1750000E	Secondary DVI accessory kit
98R1750010E	HDMI cable/Remote switch accessory kit
98R1750030E	HDMI accessory kit
98R1750040E	Remote switch accessory kit
9891790040E	Dual LAN module accessory kit

Note:

* Suggest to use for MIC-7700 with i-Module added.

** Suggest to use for MIC-7700 without i-Module added.

- MIC-7700 supports Advantech iDoor modules (both MOS and PCM series), excluding the PoE model.
- The PCM series module requires a bracket (P/N: 1960065854N001) that must be ordered separately.

Optional i-Modules**

Part Number	Description
MIC-75M40 (MIC-7700Q only)	4-slot expansion module (4 x PCIe slots)
MIC-75M13	4-slot expansion module (1 x PCIe and 3 x PCI slots)
MIC-75M20	2-slot expansion module (2 x PCIe slots)
MIC-75M20-01 (MIC-7700Q only)	2-slot expansion module (2 x PCIe slots)
MIC-75M11	2-slot expansion module (1 x PCIe and 1 x PCI slots)
MIC-75M10	1-slot expansion module (1 x PCIe)
MIC-75S20	2-slot expansion and storage module (2 x PCIe and 2 removable 2.5" storage bay)
MIC-75G20	GPU card expansion i-Module (2 x PCIe, 2 x removable 2.5" storage bay)

**Additional i-module details provided on the following page.

Embedded OS

Part Number	Description
2070015330	img WES7P MIC-7700H 64b 1701 10 MUI
2070015331	img WES7P MIC-7700Q 64b 1701 10 MUI
20706WX6ES0012	img W10 16EL MIC-7700Q 64b 1709 ENU (Entry)
20706WX6ES0013	img W10 16EL MIC-7700H 64b 1709 ENU (Entry)