

MIC-770

Compact Fanless System with 8th/9th Gen Intel® Core™ i CPU Socket (LGA 1151)



Features

- Intel® 8th/9th Gen Core™ i CPU socket-type (LGA1151) with Intel® Q370/H310 chipset
- Wide operating temperature (-10 ~ 50 °C)
- VGA and HDMI output
- 2 x GigaLAN, 2 x USB 3.1 and 6 x USB 3.0
- 2 x RS-232/422/485 and 4 x RS232 serial ports (Optional)
- 1 x 2.5" HDD/SSD, and 1 x mSATA
- 9 ~ 36 V_{DC} input power range
- IP40 dust proof for deployment in harsh environment
- Supports FlexIO and iDoor technology, flexible configure additional HDMI, DVI, Comport, DIO, Remote switch IO
- Supports Advantech i-Modules
- Supports Advantech SUSI API and embedded software APIs
- Supports Intel® vPro™/AMT and TPM technologies
- Microsoft Azure PnP Certified



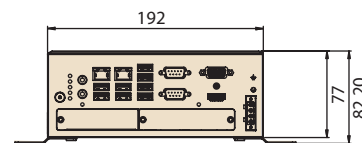
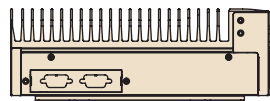
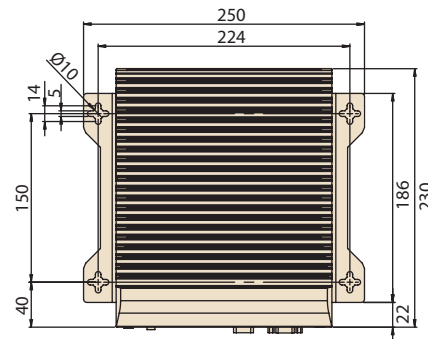
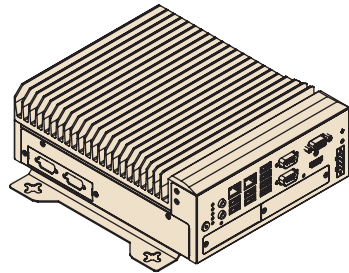
Specifications

8 th /9 th Generation Processor (TDP 35W)	CPU	I7-9700TE	I5-9500TE	I3-9100TE	I7-8700T	I5-8500T
	Core/Thread number	8/8	6/6	4/4	6/12	6/6
8 th /9 th Generation Processor (TDP 65W)	Base Frequency	1.8GHz	2.2GHz	2.2GHz	2.4GHz	2.1GHz
	Max Turbo Frequency	3.8GHz	3.6GHz	3.2GHz	4.0GHz	3.5GHz
Memory	L3 Cache	12MB	9MB	6MB	12MB	9MB
	Temperature	-10 ~ 50 °C (w/ industrial wide-temp SSD, 0.7m/s air flow)				
Display	Chipset	Q370/H310				
	BIOS	AMI 256Mb SPI Flash				
Ethernet	CPU	I7-9700E	I5-9500E	I3-9100E	I7-8700	I5-8500
	Core/Thread number	8/8	6/6	4/4	6/12	6/6
Storage	Base Frequency	2.6GHz	3.0GHz	3.1GHz	3.2GHz	3.0GHz
	Max Turbo Frequency	4.4GHz	4.2GHz	3.7GHz	4.6GHz	4.1GHz
I/O	L3 Cache	12MB	8MB	6MB	12MB	9MB
	Temperature	-10 ~ 40 °C (w/ industrial wide-temp SSD, 0.7m/s air flow)				
Expansion	Chipset	Q370/H310				
	BIOS	AMI 256Mb SPI Flash				
LED and Switch	Technology	Dual-channel DDR4 2400/2666 MHz (without ECC)				
	Socket	2 x 260-pin DDR4 SODIMM (up to 32GB per socket)				
Power	Maximum Capacity	64GB				
	Chipset	Q370: Intel® HD Graphics 630, supports DirectX 12				
Watchdog Timer	VGA	H310: Intel® HD Graphics 610, supports DirectX 12				
	HDMI	1 x DB15, up to 1920 x 1200 maximum resolution				
Environment	Multiple Display	1 x HDMI, up to 4096 x 2160@30Hz				
	Controller	Q370: 3 x independent displays (with Flex I/O for 2nd HDMI, 1 x DVI or 1 x DP)				
Mechanical	Interface	H310: 2 x independent displays				
	Q370 LAN1: Intel® I219LM, LAN2: Intel® i210IT					
Certifications	H310 LAN1: Intel® I219V, LAN2: Intel® i210IT					
	2 x RJ45					
OS Support	HDD	1 x 2.5" HDD/SSD (up to 2 x 2.5" SSD by optional kit; 2 x 3.5" HDD by i-Module)				
	mSATA	1				
All product specifications are subject to change without notice.	RAID	0/1/5/10 (Q370 SKU only)				
	SATA Conn.	Q370: 3 x SATA signal, 3 x SATA power				
Last updated: 19-Jul-2022	USB	H310: 2 x SATA signal, 2 x SATA power				
	Serial Port	Q370: 2 x USB3.1, 6 x USB3.0 and 1 x internal USB 2.0				
Rev031723	Audio	H310: 4 x USB 3.0 and 4 x USB 2.0				
	Module	2 x DB9, 2 x RS-232/422/485 support auto flow control; 4 x RS-232 (Optional)				
	Mini PCIe	2 (1 x line out and 1 x mic in)				
	LED	Supports Advantech i-Modules				
	Button	Q370: 1 x mini PCIe (via USIM), 1 x mini PCIe/mSATA				
	Remote Switch	H310: 1 x mini PCIe (via USIM), 1 x mSATA				
	Type	2 (1 x Storage and 1 x Power), 4 for COM1 TX/RX and COM2 TX/RX				
	Input Voltage	1 x Power on/off switch				
	Power consumption	Yes, 2pin terminal block (Optional)				
	Typical: 32.1W					
	Maximum: 116W					
	System reset					
	Programmable 1 ~ 255 sec/min					
	Temperature	65W CPU w/ industrial wide-temp SSD		35W CPU w/ industrial wide-temp SSD		Non-operating
	Humidity	-10 ~ 40 °C with 0.7 m/s air flow		-10 ~ 50 °C with 0.7 m/s air flow		-40 ~ 85 °C
	Vibration	95% @ 40 °C (non-condensing)				
	Shock	With SSD: 3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis				2G
	Dimensions (W x H x D)	With 2.5" HDD: 1 Grms @ 5 ~ 500 Hz, random, 1 hr/axis				
	Weight	With SSD: 20G, IEC-68-2-27, half-sine wave, 11 ms duration				50G 11 ms
	Installation	77 x 192 x 230 mm (3.07" x 7.55" x 9.05")				
	EMC	2.8 kg (6.17 lbs)				
	Safety	Desktop/wall mount				
	OS Support	CE/FCC Class A, CCC, BSMI				
		CB/UL, CCC, BSMI				
		Windows 10, Windows 10 IoT, Linux OS				

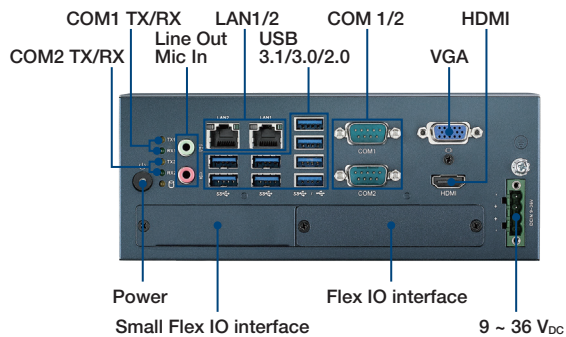
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Dimensions

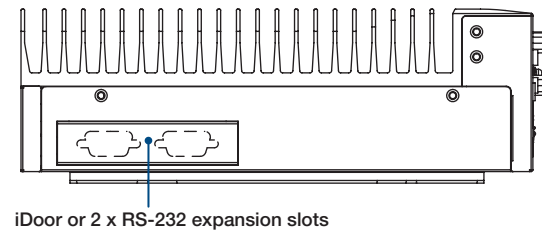
Unit: mm



Front View



Side View



Ordering Information

Part Number	VGA	HDMI	2.5" HDD/SSD	mSATA	USB 3.1	USB 3.0	USB 2.0	GbE	COM	PCIe	Power
MIC-770Q-00A2	1	1	1	1	2	6	0	2	2, up to 6 (Optional)	i-Module (optional)	9 ~ 36V _{DC}
MIC-770H-00A2	1	1	1	1	0	4	4	2	2, up to 6 (Optional)	i-Module (optional)*	9 ~ 36V _{DC}

*MIC-770H does not support MIC-75M40, MIC-75M20-01 and MIC-75G30