

MIC-7900

Compact Fanless System with Intel® Xeon® SoC Processor



Features

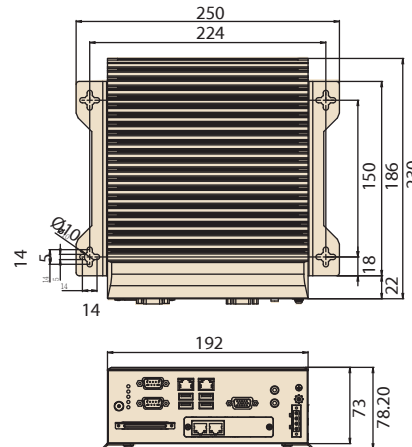
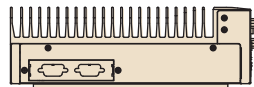
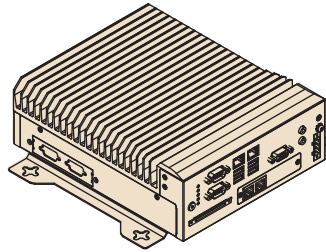
- Intel® Xeon® D-1539/D-1559 SoC processor
- Wide operating temperature (-20 ~ 50 °C)
- 9 ~ 36 V_{DC} input power range
- 2 x RS-232/422/485 and 2 x RS232 serial ports (with expansion cable)
- 1 x 2.5" HDD/SSD, 1 x CFast, 1 x M.2
- 4 x GigaLAN and 4 x USB 3.0
- Supports Advantech i-Modules, SUSIAccess, and embedded software APIs
- Supports Windows Server 2016, Linux OS, and VMware



Specifications

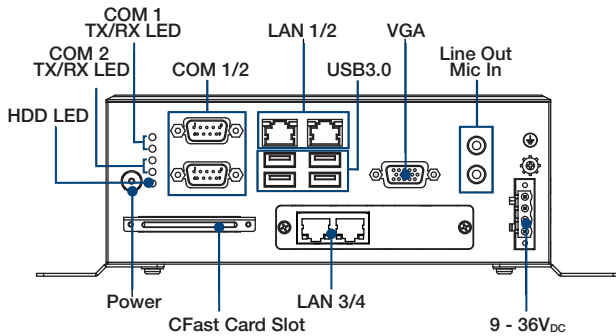
System Chipset	CPU	D-1539	D-1559	
	Maximum Speed	1.6GHz	1.5GHz	
	Max Turbo Frequency	2.2GHZ	2.1GHz	
	L3 Cache	12M	18M	
	Core Number	8	12	
	BIOS	AMI® SPI 64 Mb		
Memory	Technology	Dual-channel DDR4 2133/2400 MHz (supports ECC)		
	Socket	2 x 260-pin SODIMM (up to 16 GB per socket)		
	Maximum Capacity	32 GB		
Display	Chipset	ASPEED 1400 with 256MB VGA memory provides basic 2D VGA functoin		
	VGA	1 x DP15, up to 1920 x 1200 maximum resolution		
Ethernet	Controller	LAN1: Intel® i210IT (supports wake-on-LAN)		
		LAN2: Intel® i210IT (supports wake-on-LAN)		
		LAN3: Intel® i210IT		
		LAN4: Intel® i210IT		
	Interface	4 x RJ45		
Storage	HDD	1 x 2.5" HDD/SSD (with MIC-75S20 i-Module, total storage room up to 5 x 2.5" HDD/SSD)		
	CFast	1		
	M.2	1 (Support PCIe signals; support M.2 22110; support M.2 2280 via optional bracket)		
I/O	USB	4 x USB 3.0 and 1 x internal USB 2.0		
	Serial Port	2 x DB9, RS232/422/485 with automatic flow control and 2 x RS-232 (with optional cable expansion)		
	Audio	2 (1 x line out and 1 x mic in)		
Security	TPM	Supports TPM 2.0 (Infineon SLB9665XQ2.0)		
Expansion	Module	Supports Advantech i-Modules		
	Mini PCIe	1 x mini PCIe (does not support m-SATA)		
LED and Switch	LED	2 x TX, 2 x RX, and 1 x Storage		
	Button	1 x Power on/off switch		
Power	Type	ATX/AT		
	Input Voltage	9 ~ 36 V _{DC}		
	Power consumption	Typical: 21.469W Maximum: 44.952W		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Environment	Temperature	Operating (with industrial SSD)	Operating (with HDD)	Non-operating
		-20 ~ 50 °C with 0.7 m/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 MIC-75S20/5xSSD: 1 Grms @ 5 ~ 500Hz, random, 1 hr/axis		
Shock	With 2.5" HDD: 1 Grms @ 5 ~ 500 Hz, random, 1 hr/axis			
Mechanical	Dimensions (W x H x D)	73 x 192 x 230 mm (2.91" x 7.55" x 9.05")		
	Weight	2.9 kg (6.39 lbs)		
	Installation	Desktop/wall mount		
Certifications	EMC	CE/FCC Class B, CCC, BSMI		
	Safety	UL, CCC, BSMI		

Dimensions

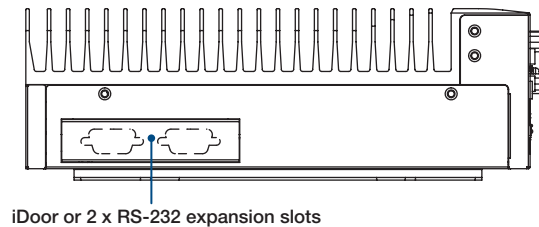


Unit: mm

Front View



Side View



Ordering Information

Part Number	CPU	VGA	2.5" HDD/SSD	CFast	M.2	USB 3.0	GbE	COM	PCIe
MIC-7900-S5A1E	D-1559	1	1	1	1	4	4	4, up to 6 via cable	i-Module (optional)
MIC-7900-S6A1E	D-1539	1	1	1	1	4	4	4, up to 6 via cable	i-Module (optional)

Packing List

Part Number	Description	Quantity
MIC-7900	Fanless system with Intel® Xeon® SoC processor	1
1652003234	4-pin Phoenix power connector	1
1700013095	SATA cable	1
1700024372-01	SATA power cable	1
1701200220	Dual DB9 port cable (for COM5/COM6 expansion)	1
1960070543T001	Mounting bracket	2
2061790000	CD-ROM	1
2001790000	MIC-7900 startup manual (ENG+CN)	1
2001790010	MIC-7900 startup manual (TC)	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
1700018704	Power Cord UK BSI 2P 10A 250V 180cm 18AWG
AIIS-DIO32-00A1E	DIO module, 32-CH, 9-pin USB interface
98R1750020E	MIC-7000 series DIN rail accessory

Note:

* Suggest to use for MIC-7900 with i-Module added.

** Suggest to use for MIC-7900 without i-Module added.

- MIC-7900 supports Advantech iDoor modules (both MOS and PCM series). Visit the Advantech website for more information.
- The PCM series module requires a bracket (P/N: 196006584N001) that must be ordered separately.

Optional i-Modules*

Part Number	Description
MIC-75M40	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	2-slot expansion module (2xPCIe slots)
MIC-75M11	2-slot expansion module (1 x PCIe and 1 x PCI slots)
MIC-75M10	1-slot expansion module (1xPCIe16)
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
2070014719	WES7P MIC-7900 x64 V5.8.0 10MUI image