

MS-9A79

Palm-Size Box PC with Intel® Apollo Lake Series SoC Platform for Ultra Low-Power Fanless Solution

NEW



Features

- Ultra low power with fanless design
- Supports operating temperature: -20~70°C (w/ WT SSD/ mSATA)
- Supports Onboard 4GB LPDDR4-2133/2400MHz memory
- Support 2 or 3 independent displays with HDMI, Mini-DP, and LVDS/DVI-I(Optional)
- Supports 16-bit GPIO (8*GPI; 8*GPO), 5V
- Multi GbE LAN and 2 USB 3.0, 2 USB2.0 and 2 COM Ports
- Supports Flexible DC-in 12V input
- Compliance IEC 61373 body mount class A
- 4 openings reserved for antennas

Ordering Information

Part Number	Description
Coming soon	

Packing List

Part Number	Description
Coming soon	

Specifications

		MS-9A79-A1	MS-9A79-A2
Processor	CPU	Intel® Atom™ x5 Processor E3940, QC, 9.5W	Intel® Celeron® Processor N3350, DC, 6W
	Frequency	1.6 GHz up to 1.8 GHz	1.1 GHz up to 2.4 GHz
	L2 Cache	2MB	
	CPU Type	BGA	
	Chipset	Integrated in SoC	
Memory	BIOS	AMI	
	Technology	Dual-channel LPDDR4-2133MHz	Dual-channel LPDDR4-2400MHz
	Max. Capacity	Onboard 4 GB	
Display	Socket	N/A	
	Controller	Intel® HD Graphics	
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM	
	Multiple Display	2 or 3 independent displays	
Display Interface	HDMI up to 3840 x 2160 @30 Hz		
	Mini-DP up to 4096 x 2160 @60 Hz		
Ethernet	LVDS up to 1920 x 1200 @60 Hz (optional by cable)		
	DVI-I up to 1920 x 1200 @60 Hz (optional by MS-99C0)		
	Controller	2 x Intel® I210-IT GbE LAN	2 x Intel® I211-AT GbE LAN
Audio	Controller	Realtek® ALC887-VD2-CG HD Audio Codec	
H/W Monitor	Watchdog Timer	256-level Watchdog Timer	
TPM	Smart Fan	N/A	
Expansion Slot	Controller	Pin Header	
	Mini-PCIe	1 x Full-size (w/ NANO SIM-Holder) 1 x Half-size (Shared w/ mSATA)	
Storage	SATA	1 x 2.5" HDD/SSD Bay	
	mSATA	1 x Half-size (Shared w/ Mini-PCIe)	
	CFast	N/A	
	CompactFlash	N/A	
I/O Interface	RJ-45	2	
	Audio	1 x Line-out 1 x Mic-in	
	USB	2 x USB 3.0 2 x USB 2.0	
	Serial	2 x COM ports COM1: RS-232/422/485, 0V/5V/12V COM2: RS-232/422/485, 0V/5V/12V	
	GPIO	16-bit (8*GPI; 8*GPO), 5V	
	CANbus	N/A	
	HDMI	1	
	LVDS	1 (optional by cable)	
	DVI	1 (DVI-I by BOM option)	
	DisplayPort	1 (Mini-DP)	
	VGA	N/A	
	Antenna	4 openings reserved for antennas	
Power Supply	DC Input	DC-in 12V Jack (5.5mm/2.5mm) / Phoenix pluggable with latch (Support OCP/ OVP Protection)	
	AC Input	N/A	
Environment	Operating Temperature	-10 ~ 45°C (HDD) -20 ~ 70°C (w/ WT SSD/ mSATA)	-10 ~ 45°C (HDD) -10 ~ 60°C (SSD/ mSATA)
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-40 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	
Form Factor	Vibration	Operating, 0.5 Grms, 5-300Hz, 3axes (w/ HDD) Operating, 5 Grms, 5-300Hz, 3axes (w/ SSD/ mSATA)	
	Shock	Operating, 3 G, half sine 11 ms duration (w/ HDD)	
	Dimensions (WxDxH)	155 x 110 x 55 mm	
Certification	Weight	1.1 kg	
	Mounting	Wall mount (STD)/DIN-rail mount(STD)/VESA mount(by BOM option)	
Software Platform	EMC	FCC, CE, RCM, VCCI, BSMI	
	Safety	BSMI	
OS Support	OS Support	Windows 10 (64-bit) Linux Fedora 25 (by request) Linux Ubuntu 16.04 (by request)	