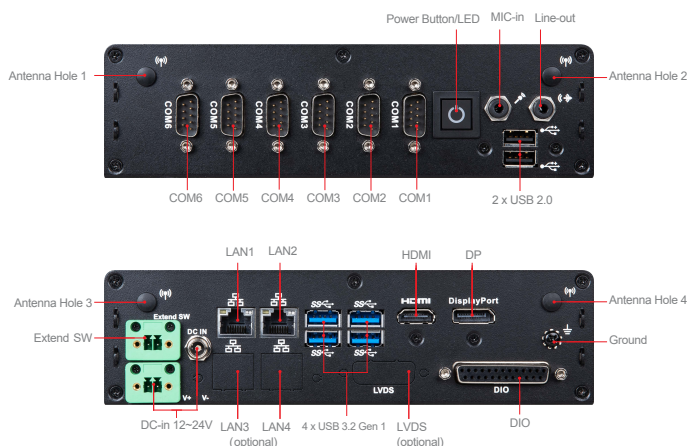


MS-9A69 V2.0

Compact-Size Box PC with Intel® Kaby Lake-U or Apollo Lake Series Processor for Ultra Low-Power Fanless Solution

NEW



Features

- Intel® Apollo Lake/Apollo Lake-I Series SoC
- DDR3L 1866/1600 MHz SODIMM Slot up to 8GB
- Triple independent displays: DP++, HDMI, LVDS (by option)
- 2 GbE LAN with RJ-45, 2 GbE LAN by Mini-PCIe expansion card with RJ-45 (by option)
- Mini-PCIe (Full size, with mSATA), Mini-PCIe (Full size, with Nano SIM Holder) Slots
- SATA 3.0 storage (2.5" SSD/HDD), micro SD for storage
- 4 USB 3.2 Gen 1, 2 USB 2.0, 6 COM (2 RS-485), GPIO, Audio
- 4 opening reserved for antennas
- Anti-Vibration & Shockproof Design to Compliance IEC 61373
- Wide Voltage DC-IN 12~24V
- Ultra-Compact with fanless design

- Intel® 7th Gen Kaby Lake-U Series
- DDR4 2133 MHz SODIMM Slot up to 16GB
- Triple independent displays: DP++, HDMI, LVDS/DVI-I (by option)
- 2 GbE LAN with RJ-45, 2 GbE LAN by Mini-PCIe expansion card with RJ-45 (by option)
- Mini-PCIe (Full size, with mSATA), Mini-PCIe (Full size, with Nano SIM Holder) Slots
- 2 SATA 3.0 storage (2.5" SSD/HDD), micro SD for storage
- SATA RAID 0/1
- 4 USB 3.2 Gen 1, 4 USB 2.0, 6 COM (2 RS-485), GPIO, Audio
- 4 opening reserved for antennas
- Anti-Vibration & Shockproof Design to Compliance IEC 61373
- Wide Voltage DC-IN 12~24V
- Ultra-Compact with fanless design

Ordering Information

Part Number	Description
Please check MSI IPC website at http://ipc.msi.com for details.	

Packing

Part N	Description
Please check MSI IPC website http://ipc.msi.com for details.	

Specifications

		MS-9A69-A1	MS-9A69-U2	MS-9A69-U3	
System Processor	CPU	Intel® Celeron® Processor J3455, QC, 10W	Intel® Kaby Lake-U Core™ i3-7100U Processor, DC, 15W	Intel® Kaby Lake-U Core™ i5-7300U Processor, DC, 15W	
	Frequency	1.5 GHz, up to 2.3 GHz	2.4 GHz	2.6 GHz, up to 3.5 GHz	
	L2 Cache	2MB	3MB		
	CPU Type	BGA			
	Chipset	Integrated in SoC Process			
Memory	Technology	Single-channel DDR3L 1866/1600 MHz	Single-channel DDR4 2133 MHz		
	Max. Capacity	Up to 8GB	Up to 16GB		
	Socket	1 x 204-pin SO-DIMM	1 x 260-pin SO-DIMM		
Graphic	Controller	Intel® HD Graphics			
	Graphic Memory	Depends on CPU			
	Multiple Display	3 independent displays			
	Display Interface	HDMI up to 3840 x 2160 @30Hz DP up to 4096 x 2160 @60Hz LVDS up to 1920 x 1200 @60Hz (optional by cable)	HDMI 1.4 up to 4096 x 2160 @24Hz DP up to 3840 x 2160 @60Hz (Support DP++) LVDS up to 1920 x 1200 @60Hz (optional by cable)		
Ethernet	Controller	2 x Intel® I211-AT GbE LAN	1 x Intel® I210-AT GbE LAN 1 x Intel® I219-LM GbE LAN PHY		
Audio	Controller	Realtek® ALC887-VD2-CG HD Audio Codec			
H/W Monitor	Watchdog Timer	256-level Watchdog Timer			
TPM	Controller	N/A			
	M.2	N/A			
Expansion Slot	Mini-PCIe	2 x Full-size (Mini-PCIe1 Slot w/ NANO SIM-Holder) (Mini-PCIe2 Slot w/ mSATA)			
	SATA	1 x 2.5" HDD/SSD Bay			
Storage	mSATA	1 x Full-size			
	RJ-45	4 (LAN1/2 Standard, LAN3/4 by Option)			
	PoE	N/A			
	Audio	1 x Line-out, 1 x Mic-in			
	USB	2 x USB 2.0 4 x USB 3.2 Gen 1			
	I/O Interface	Serial	6 x COM ports COM1&2: RS-232/422/485, 0V/5V/12V COM3~6: RS-232, 0V/5V/12V		
		GPIO	16-bit (8*GPIO, 8*GPO), 5V		
		CANbus	N/A		
		HDMI	1		
	LVDS	1 (optional)			
DisplayPort	1				
Antenna	4 openings reserved for antennas				
Power Supply	DC Input	DC-in 12V~24V			
	AC Input	N/A			
	IP Rating	N/A			
Environment	Operating Temperature	-10 ~ 45°C (HDD) -10 ~ 55°C (w/ WT SSD/mSATA)			
	Operating Humidity	10 ~ 90%, non-condensing			
	Storage Temperature	-20 ~ 80°C			
	Storage Humidity	10 ~ 90%, non-condensing			
	Vibration	IEC61373 Category 1, Class B			
Physical Characteristics	Shock	IEC61373 Category 1, Class B			
	Dimensions (WxDxH)	200 x 150 x 55mm			
	Weight	1.39 kg			
Certification	Mounting	Wall mount (STD)/DIN-rail mount(STD)/VESA mount(by BOM option)			
	EMC	CE, FCC, VCCI, RCM, BSMI			
Software Platform	Safety	BSMI			
	OS Support	Windows 10 IoT Enterprise LTSC/SAC 1809 (64-bit, RS5) Windows 10 IoT Core (32/64-bit) (by request) Linux Kernel 4.19 (64-bit) (by request)	Windows 10 IoT Enterprise LTSC/SAC 1809 (64-bit, RS5) Linux Ubuntu 18.04 LTS (by request) Linux Kernel 4.14 (64-bit) (by request)		

Optional Item

Part Number	Description
Please check MSI IPC website at http://ipc.msi.com for details.	