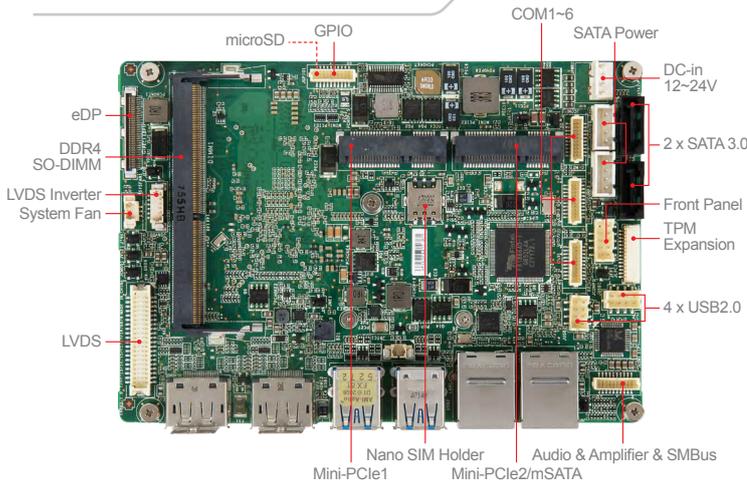
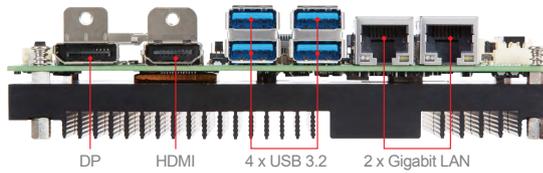


MS-98H3

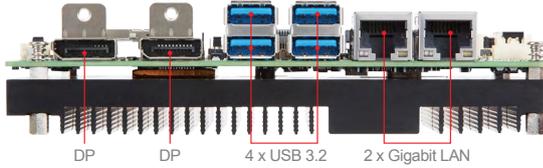
3.5" SBC with Intel® Kaby Lake-U/Skylake-U for Fanless, Ultra Low-Power & High-Performance Solution



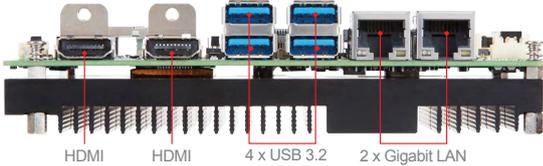
Standard : DP+HDMI



Optional : 2 DP



Optional : 2 HDMI



Features

- Intel® 7th Gen Kaby Lake-U/Skylake-U Series
- DDR4 2133 MHz SODIMM Slot up to 16GB
- Triple independent displays: DP++, HDMI, LVDS, eDP
- 2 GbE LAN with RJ-45
- 1 Mini-PCIe (Full size, with mSATA), 1 Mini-PCIe (Full size, with Nano SIM Holder) Slots
- 2 SATA 3.0, Micro SD for storage
SATA RAID 0/1
- 4 USB 3.2 Gen 1, 4 USB 2.0, 6 COM(1 RS-485), GPIO, Audio
- Wide Voltage DC-IN 12~24V

Packing List

Part Number	Description	Quantity
K1G-3004069-V03	DC Power Cable, 150mm	1
K14-3018001-V03	COM Port Cable, 150mm	1
K1B-3008034-V03	USB Cable, 150mm	1
K1D-1012064-V03	SATA Cable with Power, 200mm	1

Optional Item

Part Number	Description
E31-2100170-K08	Heatspreader

Specifications

Processor	CPU	7th/6th Gen Intel® Embedded Mobile Kaby Lake-U/Skylake-U Core™ i7/i5/i3/Celeron® Processor, DC, 15W	
	Frequency	2.0GHz~3.4GHz (Depends on CPU)	
	L2 Cache	2MB~4MB (Depends on CPU)	
	CPU Type	BGA	
Memory	BIOS	AMI	
	Technology	Single-channel DDR4 2133MHz	
	Max. Capacity	Up to 16GB	
	Socket	1 x 260-pin SO-DIMM	
Display	Controller	Intel® HD Graphics	
	Graphic Memory	Depends on CPU	
	LVDS	Dual Channel 18/24-bit	
	eDP	1 (Share with LVDS Singnal)	
Display	HDMI	1(HDMI1 Co-layer DP1 & HDMI2 Co-layer DP2 by option)	
	DisplayPort	1 (Support DP++, DP1 Co-layer HDMI1 & DP2 Co-layer HDMI2 by option)	
	Multiple Display	3 independent displays	
	Display Interface	LVDS up to 1920 x 1200 @60Hz eDP up to 4096 x 2304 @60Hz HDMI1/HDMI2 HDMI1.4 up to 4096 x 2160 @24Hz DP1/DP2 up to 4096 x 2304 @60Hz	
Ethernet	Controller	1 x Intel® I210-AT GbE LAN 1 x Intel® I219LM GbE-PHY LAN (AMT 11.x supported)	
	Audio	Controller	Realtek® ALC887-VD2-CG HD Audio Codec
Super I/O	Controller	Fintek F81866AD-I	
	Watchdog Timer	256-level Watchdog Timer	
H/W Monitor	Smart Fan	Yes	
	TPM	Controller	Pin header
I/O Interface	USB	4 x USB 2.0 (internal) 4 x USB 3.2 Gen 1 (rear)	
	Serial	COM1	6 x COM ports (internal) COM1: RS-232/422/485, 0V/5V/12V, support auto flow control COM2~6: RS-232, 0V/5V/12V (RS-422/485 Optional)
		GPIO	16-bits (8 x GPI; 8 x GPO), 5V
	Expansion Slot	Mini-PCIe	2 x Full-size (one w/NANO SIM-Holder & one w/mSATA)
Storage	SATA	2 x SATA 3.0	
	mSATA	1 (Shared with Mini-PCIe)	
Power Supply	DC	DC-in 12~24V	
	Operating Temperature	-10 ~ 60°C Note: Thermal test w/ Airflow:0.7m/s	
Environment	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	
	Dimensions	146 x 102mm (3.5")	
Form Factor	Weight	0.59 kg	
	Certification	EMC	FCC, CE, RCM, VCCI, BSMI
Software Platform	OS Support	Windows 7 (32/64-bit) (Skylake-ULT Only)	
		Windows 8.1 (64-bit) (Skylake-ULT Only) Windows 10 IoT Enterprise LTSC/SAC 1809 (64-bit, RS5) Linux Fedora 25 (by request) Linux Ubuntu 16.04 (by request)	

Ordering Information

Part Number	Description
919-98H3-001	MS-98H3 11 Intel Kaby Lake-U i7-7600U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-002	MS-98H3 11 OPT:A Intel Kaby Lake-U i5-7300U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-003	MS-98H3 11 OPT:B Intel Kaby Lake-U i3-7100U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-004	MS-98H3 11 OPT:C Intel Kaby Lake-U 3965U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-005	MS-98H3 11 OPT:D Intel Skylake-U i7-6600U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-006	MS-98H3 11 OPT:E Intel Skylake-U i5-6300U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-007	MS-98H3 11 OPT:F Intel Skylake-U i3-6100U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V
919-98H3-008	MS-98H3 11 OPT:G Intel Skylake-U 3955U,DDR4 SO DIMM+DP+HDMI+LVDS+eDP+2*Mini-PCIe+2*LAN+ 2*SATA3.0+4*USB3.0+2*USB 2.0+6*COM+Micro SD,DC 12V~24V