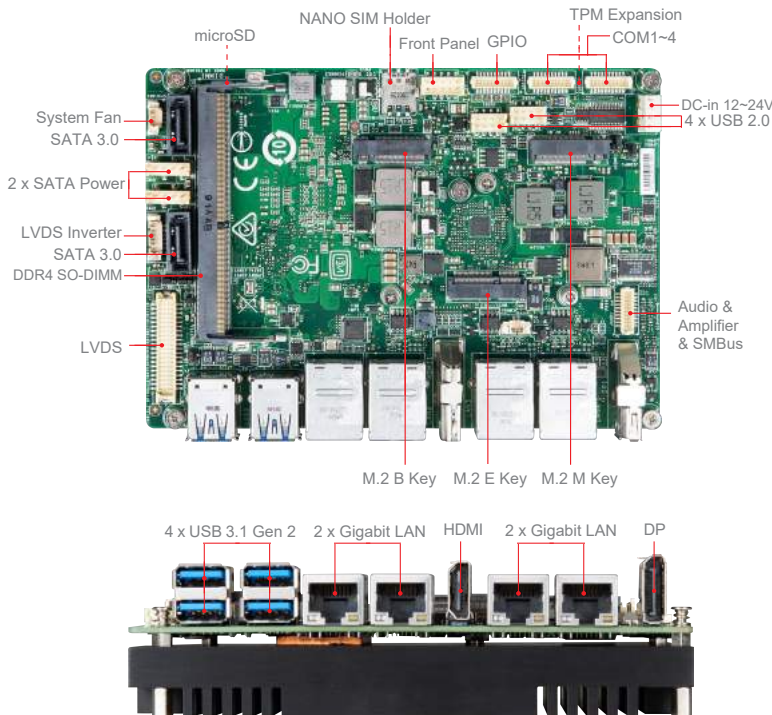


MS-98L3

3.5" SBC with Intel® Whiskey Lake-U for Fanless, Low-Power & High-Performance Solution

NEW



Features

- Intel® Whiskey Lake-U Series SoC up to TDP-15W
- Supports DDR4 2400 MHz SO-DIMM memory up to 16GB
- Supports 3 or 2 independent displays: HDMI, DP & LVDS
- Supports maximum 4 Intel® GbE LAN with AMT 12.x
- Supports 2 SATA 3.0, 1 micro SD, 1 M.2 M key 2242 & RAID 0/1/5 (RAID 5 configured with M.2 M Key) for storage
- Supports maximum 4 USB 3.1 Gen2 & 4 USB 2.0
- Supports 4 COM ports (all with RS-232/422/485), 16-bit DIO, SMBus & Amplifier-6W for flexible applications
- Supports 1 M.2 E key 2230 with CNVi & 1 M.2 B key 2242/3042 with SIM holder
- Supports wide voltage DC-in 12~24V with OCP & OVP

Specifications

Processor	CPU	8th Gen Intel® IOTG Mobile Whiskey Lake-U Core™ i7-8665UE/i5-8365UE, QC, 15W / Celeron® 4305UE, DC, 15W
	Frequency	1.8GHz~4.6GHz (Depends on CPU)
	L2 Cache	4MB~8MB (Depends on CPU)
	CPU Type	BGA
Memory	BIOS	AMI
	Technology	Single-channel DDR4 2400MHz
	Max. Capacity	Up to 16 GB
Display	Socket	1 x 260-pin SO-DIMM
	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	LVDS	Dual Channel 18/24-bit
	HDMI	1
	Display Port	1 (Support DP++)
	Multiple Display	3 independent displays
Ethernet	Display Interface	LVDS up to 1920 x 1200 @60 Hz HDMI up to 4096 x 2160 @24Hz DP up to 4096 x 2160 @60Hz
	Controller	1 x Intel® I219LM GbE-PHY LAN (AMT 12.0 supported by i7/i5 SKUs) 3 x Intel® I210-AT GbE LAN
Audio	Controller	Realtek® ALC887-VD2-CG HD Audio Codec
Super I/O	Controller	Fintek F81866AD-I
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Pin header (Default)
I/O Interface	USB	4 x USB 3.1 Gen2 (4 x rear) 4 x USB 2.0 (4 x internal)
	Serial	4 x COM ports (internal) COM1~4: RS-232/422/485, 0V/5V/12V, support auto flow control
	GPIO	16-bits (8 x GPI; 8 x GPO), 5V
Expansion Slot	M.2	1 x M.2 M key (SATA), 2242 1 x M.2 B key (PCIe x1, USB 3.1, USB 2.0 w/ NANO SIM-Holder), 2242/3042 1 x M.2 E Key (PCIe x1, USB 2.0, CNVi), 2230
	SATA	2 x SATA 3.0
Power Supply	DC	DC-in 12~24V (OCP & OVP Supported)
	ATX	N/A
Environment	Operating Temperature	-10 ~ 60°C
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
	Storage Humidity	10 ~ 90%, non-condensing
Form Factor	Dimensions	146 x 102mm (3.5")
	Weight	0.64 kg
Certification	EMC	FCC, CE, RCM, VCCI, BSMI
Software Platform	OS Support	Windows 10 (64-bit) Linux Fedora 29 (by request) Linux Ubuntu 18.04 (by request)

Ordering Information

Model	Description
Art. N° 160397 MS-98L3-i5-8365UE	Board, 3.5", i5-8365UE, DP, HDMI, 3M.2
Art. N° 156336 MS-98L3-i7-8665UE	Board, 3.5", i7-8665UE, DP, HDMI, 2M.2