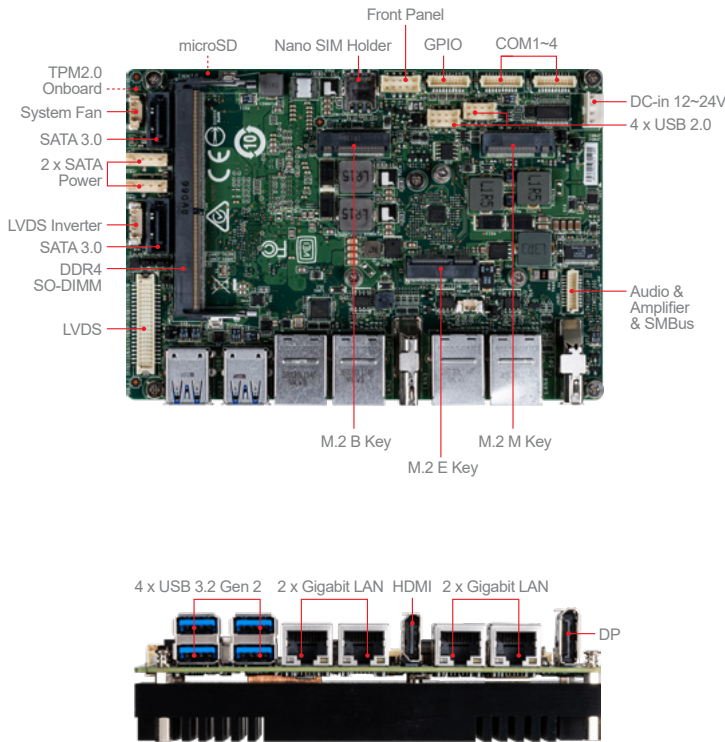


MS-98L3

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

NEW



Features

- Intel® 8th Gen Whiskey Lake-U Series
- DDR4 2400 MHz SODIMM Slot up to 32GB
- Triple independent displays: DP++ , HDMI, LVDS
- 4 GbE LAN for RJ-45
- 1 M.2 B key (with NANO SIM-holder), 1 M.2 E key (with CNVi)
- M.2 M key, 2 SATA 3.0, Micro SD for storage
SATA RAID 0/1 (Supported by i7/i5 SKUs)
- 4 USB 3.2 Gen 2, 4 USB 2.0, 4 COM (4 RS-485), GPIO, Audio
- Onboard TPM 2.0
- Wide Voltage DC-IN 12~24V (OCP & OVP)

Ordering Information

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

Packing List

| Part Number | Description | Quantity |
|-------------------------------------|------------------------------|----------|
| G71-SEDC205-X03/ G71-SEDC205-N56 | Driver DVD | 1 |
| K1G-3004069-V03 | DC Power Cable, 150mm | 1 |
| K14-3018001-V03 | COM Port Cable, 150mm | 1 |
| K1B-3008034-V03 | USB Cable, 150mm | 1 |
| K1D-3012023-V03 | SATA Cable with Power, 230mm | 1 |

Optional Item

| Part Number | Description |
|-----------------|--------------|
| E31-0806460-K08 | Heatspreader |

Specifications

| | | |
|--------------------------|--|--|
| System Processor | CPU | 8th Gen Intel® IOTG Mobile Whiskey Lake-U Core™ i7-8665UE/i5-8365UE, QC, 15W & i3-8145UE/Celeron® 4305UE, DC, 15W |
| | Frequency | 1.8GHz~4.6GHz (Depends on CPU) |
| | L2 Cache | 4MB~8MB (Depends on CPU) |
| | CPU Type | BGA |
| | Chipset | N/A |
| | BIOS | AMI |
| Memory | Technology | Single-channel DDR4 2400MHz |
| | Max. Capacity | Up to 32GB |
| | Socket | 1 x 260-pin SO-DIMM |
| Display | Controller | Intel® HD Graphics |
| | Graphic Memory | Depends on CPU |
| | LVDS | Dual Channel 18/24-bit |
| | HDMI | 1 |
| | DisplayPort | 1 (Support DP++) |
| | Multiple Display | 3 independent displays |
| Display Interface | LVDS up to 1920 x 1200 @60 Hz HDMI up to 4096 x 2160 @24Hz DP up to 4096 x 2160 @60Hz | |
| | 1 x Intel® I219LM GbE-PHY LAN (AMT 12.0 supported by i7/i5 SKUs) 3 x Intel® I210-AT GbE LAN | |
| Ethernet | 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 | Infineon SLB9670TT2.0 |
| I/O Interfaces | USB | 4 x USB 2.0 (Internal) 4 x USB 3.2 Gen 2 (rear) |
| | Serial | 4 x COM ports (Internal) COM1~4: RS-232/422/485, 0V/5V/12V, support auto flow control |
| | Parallel | N/A |
| | PS/2 | N/A |
| | GPIO | 16-bits (8 x GPI; 8 x GPO), 5V |
| | PCIe x16 | N/A |
| Expansion Slot | PCIe x4 | N/A |
| | M.2 | 1 x M.2 M key (SATA), 2242 1 x M.2 B key (PCIe x1, USB 3.2 Gen 2, USB 2.0 w/NANO SIM-Holder), 2242/3042 1 x M.2 E key (PCIe x1, USB 2.0, w/CNVi), 2230 |
| | Mini-PCIe | N/A |
| Storage | SATA | 2 x SATA 3.0 (RAID 0/1 supported by i7/i5 SKUs) |
| Power Supply | DC Input | DC-in 12~24V (OCP & OVP) |
| | AC Input | 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 (W x D x H) | 146 x 102mm (3.5") |
| | Weight | 0.64 kg |
| Certification | EMC | FCC, CE, RCM, VCCI, BSMI |
| Software Platform | OS Support | |
| | Windows 10 IoT Enterprise LTSC/SAC 1809 (64-bit, RS5) Linux Fedora 29 (by request) Linux Ubuntu 18.04 (by request) | |

Industrial Computer
COM Express Board
Qseven Board
Pico-ITX Board
3.5" Board
EPIC Board
PICMG Board
Mini-ITX Board
Micro-ATX Board
ATX Board
Compact-Size Power Option Board
Compact-Size LVDS/DVI
Compact-Size DC/DC
Full-Size Mini-PCIe
Intel® SDV