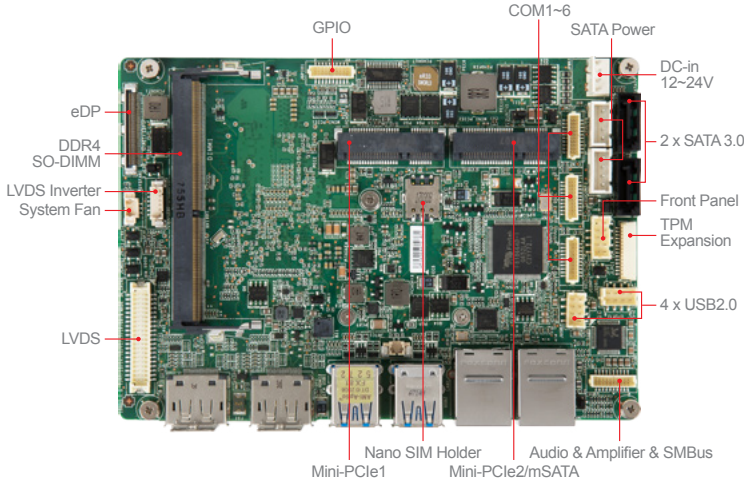


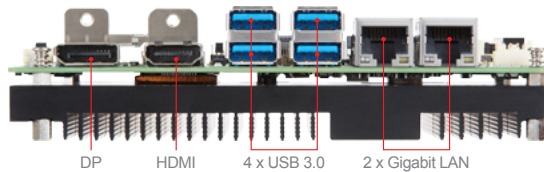
# MS-98H3

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

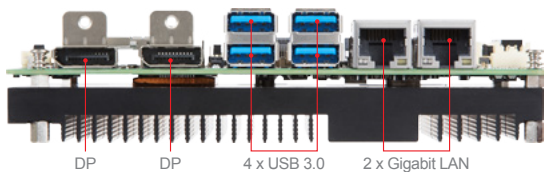
Vertrieb durch  
Distribution by **HY-LINE®**  
COMPUTER COMPONENTS  
Inselkammerstr. 10  
D-82008 Unterhaching  
Tel.: +49 89 614 503 40  
www.hy-line.de



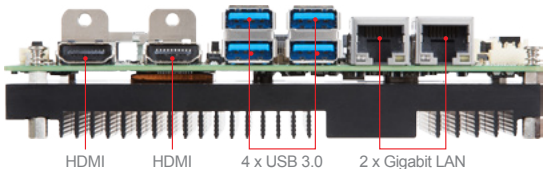
## Standard : DP+HDMI



## Optional : 2 DP



## Optional : 2 HDMI



## Features

- Intel® Kaby Lake-U/Skylake-U Series SoC
- Supports DDR4 2133 MHz SO-DIMM memory up to 16GB
- 3 independent displays with HDMI, DP, eDP, and LVDS outputs
- 4 USB 3.0, 4 USB 2.0, and 6 COM ports
- Dual Mini-PCIe, 2 SATA3.0, mSATA, NANO SIM-Holder, and Dual GbE LAN
- Supports DC-in 12~24V

## 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 OPTA 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 OPTB 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 OPTC 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 OPTD 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 OPTE 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 OPTF 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 OPTG 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

## Specifications

<b>Processor</b>	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	
	Chipset	N/A	
<b>Memory</b>	BIOS	AMI	
	Technology	Single-channel DDR4 2133MHz	
	Max. Capacity	Up to 16GB	
	Socket	1 x 260-pin SO-DIMMs	
<b>Display</b>	Controller	Intel® HD Graphics	
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM	
	LVDS	Dual Channel 18/24-bit	
	eDP	1 (Share with LVDS Singnal)	
	HDMI	1 (HDMI1 Co-lay DP1 by Optional, HDMI2 Co-lay DP2 by Optional)	
	DisplayPort	1 (DP1 Co-lay HDMI1 by Optional, DP2 Co-lay HDMI2 by Optional)	
	Multiple Display	3 independent displays	
	Display Interface	LVDS up to 1920 x 1200 @ 60 Hz, eDP up to 3840 x 2160 @ 60 Hz, HDMI1/HDMI2 HDMI1.4 up to 3840 x 2160 @ 24 Hz DP1/DP2 up to 3840 x 2160@60hz	
	<b>Ethernet</b>	Controller	1 x Intel® I210-AT GbE LAN 1 x Intel® I219LM GbE-PHY LAN (AMT 11.x supported)
		Audio	Controller
<b>Super I/O</b>	Controller	Fintek F81866AD-I	
<b>H/W Monitor</b>	Watchdog Timer	256-level Watchdog Timer	
	Smart Fan	Yes	
<b>TPM</b>	Controller	Pin header	
<b>I/O Interface</b>	USB	4 x USB 3.0 (4 x Rear) 4 x USB 2.0 (4 x Internal)	
	Serial	6 x COM (Internal) COM1: RS-232/422/485, 0V/5V/12V, support auto flow control COM2~6: RS-232, 0V/5V/12V (RS-422/485 by Optional)	
	GPIO	16-bits (8 x GPI; 8 x GPO)	
	M.2	N/A	
<b>Expansion Slot</b>	Mini-PCIe	2 x Full-size (Mini-PCIe1 Slot w/ NANO SIM-Holder) (Mini-PCIe2 Slot w/ mSATA)	
	SATA	2 x SATA 3.0	
<b>Storage</b>	mSATA	1 (Shared with Mini-PCIe2)	
	Power Supply	DC	DC-in 12~24V
<b>Environment</b>	ATX	N/A	
	Operating Temperature	-10 ~ 60°C Note: Thermal Test w/ Airflow:0.7m/s	
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	
<b>Form Factor</b>	Storage Humidity	10 ~ 90%, non-condensing	
	Dimensions	146mm x 102mm (3.5")	
<b>Certification</b>	Weight	0.59 kg	
	EMC	FCC, CE, RCM, VCCI, BSMI	
<b>Software Platform</b>	OS Support	Windows 7 (32/64bit) (Sky Lake-ULT Only) Windows 8.1 (64bit) (Sky Lake-ULT Only) Windows 10 (64bit) Fedora 25 Ubuntu 16.04	

## Packing List

Part Number	Description	Quantity
G71-SEDC173-N56 / G71-SEDC173-X03	Driver CD	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-1012064-V03	SATA Cable with Power, 200mm	1