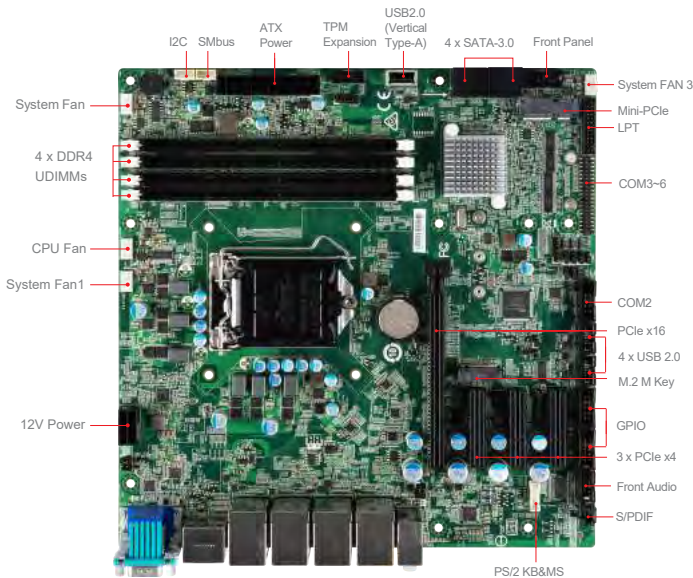


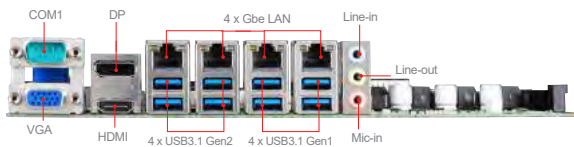
# MS-98L2

Micro-ATX with 8th Gen Intel® Coffee Lake-S Xeon, Core™ i7/i5/i3, Pentium®, Celeron® Processor for Superior I/O & Expansion Capability for High-Performance Solution

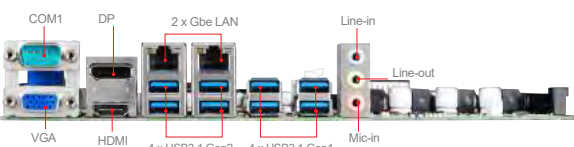
NEW



## SKU1/SKU2



## SKU3



## Features

- Intel® Coffee Lake-S Series CPU to maximize performance
- 4 DDR4 2666MHz UDIMMs slots up to 64 GB memory
- Supports 3 independent displays with multiple video outputs (DP, HDMI & VGA)
- Supports 2/4 Intel® GbE LAN and AMT 12.x
- Supports 4 SATA-3.0 and 6 COM ports for flexible applications
- Supports 1 PCIe x16, 3 PCIe x4 Slots, full-size and half-size mini-PCIe for multiple expansion slots
- M.2 supports high speed PCIe NVMe SSD storage
- 8 USB 3.1 & 5 USB 2.0 ports for more peripherals

## Ordering Information

Part Number	Description
919-98L2-001	MS-98L2 VER 10 Intel Coffee Lake-S LGA1151, Q370, 4*DDR4 UDIMM, 1*PCIe x16, 3*PCIe x4, HDMI, DP, VGA, 4*LAN, 8*USB 3.1, 5*USB 2.0, 6*COM, ATX POWER, RoHS, SINGLE, For Channel

## Packing List

Part Number	Description	Quantity
K1D-1008261-V03	SATA Cable, 500mm	2
E21-98L2020-C22	I/O SHIELDING	1
G71-SEDC194-N56/X03	Driver CD	1

## Optional Item

Part Number	Description
K14-1018004-V03	COM Port Cable, 510mm
K1B-3008012-E06	USB 2.0 Cable, 330mm

## Specifications

		SKU1	SKU2	SKU3
<b>Processor</b>	CPU	8th Gen Intel® Desktop Coffee Lake-S Xeon®/i7/i5/i3/Pentium®/Celeron® Series Processor, Max 95W		
	Frequency	2.1GHz~4.7GHz(Depends on CPU)		
	L2 Cache	2MB~12MB (Depends on CPU)		
	CPU Type	Socket (LGA 1151)		
	Chipset	Intel® C246 Express	Intel® Q370 Express	
<b>Memory</b>	BIOS	AMI UEFI		
	Technology	Dual-channel DDR4 (ECC/ non-ECC) 2666MHz	Dual-channel DDR4 (non-ECC) 2666MHz	
	Max. Capacity	Up to 64GB		
	Socket	4 x 288-pin UDIMMs		
<b>Display</b>	Controller	Intel® HD Graphics		
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM		
	VGA	1		
	HDMI	1		
	DisplayPort	1		
	Multiple Display	3 independent displays		
<b>Ethernet</b>	Display Interface	VGA up to 1920 x 1200 @60Hz HDMI up to 4096 x 2160 @24Hz DP up to 4096 x 2304 @60Hz		
	Controller	1 x Intel® I219-LM GbE LAN PHY 3 x Intel® I210-AT GbE LAN	1 x Intel® I219-LM GbE LAN PHY 1 x Intel® I211-AT GbE LAN	
<b>Audio</b>	Controller	Realtek® ALC887 HD Audio Codec		
<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	Box header (Default) Infineon SLB9665TT2.0 (by BOM option)		
<b>I/O Interface</b>	USB	4 x USB3.1 Gen2 Type-A (4 x Rear) 4 x USB3.1 Gen1 Type-A (4 x Rear) 5 x USB 2.0 (5 x internal with one Vertical Type-A)		
	Serial	6 x COM ports (COM1: rear, COM2-6: internal) COM1: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control COM2: RS-232/422/485, 0V/5V/12V, Auto-flow Control COM3-6: RS-232, 0V/5V/12V	6 x COM ports (COM1: rear, COM2-6: internal) COM1: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control COM2-6: RS-232, 0V/5V/12V	
	Parallel	1		
	PS/2	1 x PS/2 port by Y-cable for keyboard and mouse		
	GPIO	16-bits (8 x GPI; 8 x GPO), 5V		
	PCIe x16	1		
	PCIe x4	3 (Slot2 signal shared with M.2; 2*PCIe x4 NVMe)		
M.2	1 x M Key (PCIe x4 NVMe, SATA 3.0), 2242/2260/2280			
Mini-PCIe	1 x Full-size/Half-size			
<b>Storage</b>	SATA	4 x SATA 3.0		
<b>Power Supply</b>	ATX	ATX-Power 24P, 12V-8P		
<b>Environment</b>	Operating Temperature	-10 ~ 60°C		
	Operating Humidity	10 ~ 90%, non-condensing		
	Storage Temperature	-20 ~ 80°C		
	Storage Humidity	10 ~ 90%, non-condensing		
<b>Form Factor</b>	Dimensions	244 x 244mm (uATX)		
	Weight	0.625 kg	0.6 kg	
<b>Certification</b>	EMC	CE, FCC Class B, BSMI, RCM, VCCI		
<b>Software Platform</b>	OS Support	Windows 10 (64-bit) Linux Kernel 4.x (by request)		