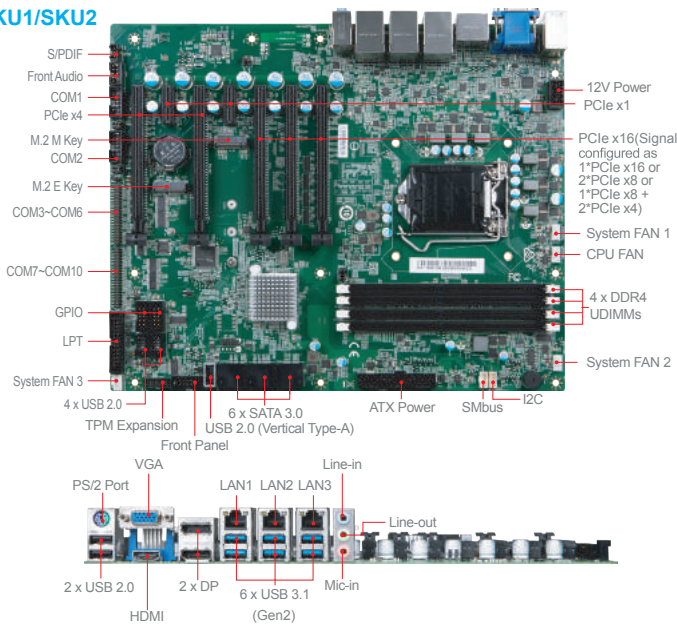


MS-98K9

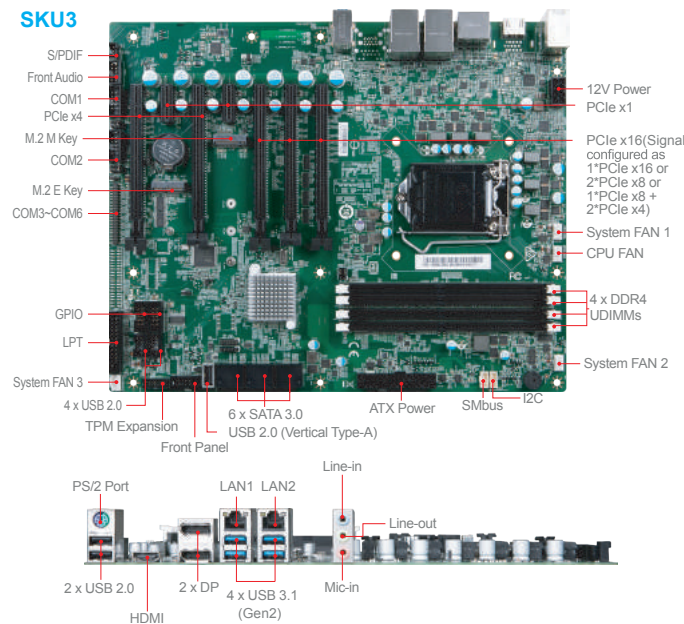
ATX with 8th Gen Intel® Coffee Lake-S Xeon®, Core™ i7/i5/i3, Pentium®, Celeron® Processor & Intel® C246/Q370 for High-Performance Solution

NEW

SKU1/SKU2



SKU3



Features

- Intel® Coffee Lake-S Series CPU to maximize performance
- 4 DDR4 2666MHz UDIMMs slots up to 64GB memory
- Supports dual DP, VGA, HDMI, 3 Intel® GbE LAN and AMT 12.x
- Supports 6 SATA 3.0, 6 USB 3.1(Gen2), 7 USB 2.0 and 10 COM ports for flexible applications
- Supports 3 PCIe x16 (Signal configured as 1 PCIe x16 or 2 PCIe x8 or 1 PCIe x8 + 2 PCIe x4), 2 PCIe x4 (PCIe x16 Slot Type) and 2 PCIe x1 Slots

Ordering Information

Part Number	Description
919-98K9-001	MS-98K9/609-98K9-010/809-98K9-005 VER10 Intel Coffee Lake-S C246, 4*DDR4 Long DIMM, 3*PCIex16, 2*PCIex4, 2*PCIex1, HDMI, 2*DP, VGA, TPM2.0, 3*LAN, 6*USB3.1, 7*USB2.0, 6*SATA3.0, 2*M.2, 10*COM, ATX POWER, RoHS, SINGLE, For Channel
919-98K9-002	MS-98K9/609-98K9-020/809-98K9-006 VER10 OPT-A Intel Coffee Lake-S Q370, 4*DDR4 Long DIMM, 3*PCIe x16, 2*PCIe x4, 2*PCIe x1, HDMI, 2*DP, VGA, TPM2.0, 3*LAN, 6*USB3.1, 7*USB2.0, 6*SATA3.0, 2*M.2, 10*COM, ATX POWER, RoHS, SINGLE, For Channel
919-98K9-003	MS-98K9/609-98K9-030/809-98K9-007 VER10 OPT-B Intel Coffee Lake-S Q370, 4*DDR4 Long DIMM, 3*PCIe x16, 2*PCIe x4, 2*PCIe x1, HDMI, 2*DP, 2*LAN, 4*USB3.1, 7*USB2.0, 6*SATA3.0, 2*M.2, 6*COM, ATX POWER, RoHS, SINGLE, For Channel

Specifications

	CPU	SKU1	SKU2	SKU3	
Processor		8th Gen Intel® Desktop Coffee Lake-S Series, Max 95W Xeon E-2176G/ E-2124G, Core i7-8700/i7-8700T Core i3-8100 Core i3-8100/i3-8100T Pentium G5400 Pentium G5400/5400T Celeron G4900 Celeron G4900/G4900T			
	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		
BIOS	AMI UEFI				
Memory	Technology	Dual-channel DDR4 (ECC/non-ECC) 2666MHz	Dual-channel DDR4 (non-ECC) 2666MHz		
	Max. Capacity	Up to 64GB			
Display	Socket	4 x 288-pin UDIMMs			
	Controller	Intel® HD Graphics			
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM			
	VGA	1	N/A		
	HDMI	1			
Display Interface	DisplayPort	2			
	Multiple Display	3 independent displays			
	Display Interface	VGA up to 1920 x 1200 @60Hz HDMI up to 4096 x 2160 @24Hz DP up to 4096 x 2304 @60Hz	HDMI up to 4096 x 2160 @24Hz DP up to 4096 x 2304 @60Hz		
Ethernet	Controller	1 x Intel® I219-LM GbE LAN PHY 2 x Intel® I210-AT GbE LAN	1 x Intel® I219-LM GbE LAN PHY 1 x Intel® I210-AT GbE LAN		
		Audio	Controller	Realtek® ALC887-VD2-CG Audio Codec	
Super I/O	Controller	Fintek F8186AD-I			
H/W Monitor	Watchdog Timer	256-level Watchdog Timer			
	Smart Fan	Yes			
TPM	Controller	Infineon SLB 9665TT2.0	Box header (Default) Infineon SLB9665TT2.0 (by BOM option)		
		USB	6 x USB 3.1 Gen2 (6 x rear) 7 x USB 2.0 (2 x rear, 5 x internal with one Vertical Type-A)	4 x USB 3.1 Gen2 (4 x rear) 7 x USB 2.0 (2 x rear, 5 x internal with one Vertical Type-A)	
I/O Interfaces	Serial		10 x COM ports (internal) COM1~2: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control COM3~10: RS-232, 0V/5V/12V	6 x COM ports (Internal) COM1~2: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control COM3~6: RS-232, 0V/5V/12V	
		Parallel	Yes		
		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	3 (Signal configured as 1 PCIe x16 or 2 PCIe x8 or 1 PCIe x8 + 2 PCIe x4)		
Expansion Slot	PCIe x4	2 (PCIe x16 Slot Type; 1*PCIe x4 NVMe)			
	PCIe x1	2			
	M.2	1 x M Key (PCIe x4 NVMe, SATA 3.0), 2242/2260/2280			
Storage	SATA	6 x SATA 3.0 (Support RAID 0/1/5/10, SATA Port 6 share with M.2 M Key)			
Power Supply	ATX	ATX-Power 24P, 12V-8P			
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	305 x 244mm (ATX)			
	Weight	0.70 kg			
Certification	EMC	CE, FCC Class B, BSMI, RCM, VCCI			
Software Platform	OS Support	Windows 10 (64-bit) Linux Kernel 4.x (by request)			

Packing List

Part Number	Description	Quantity
K1B-3008012-E06	INT USB2.0, 330mm	1
K14-1018004-V03	INT COM PORT CABLE, 510mm	1
K1D-1008261-V03	INT SATA CABLE, 500mm	2
E21-98K9010-C22	I/O Shielding	1
G71-SEDC192-N56	Driver CD	1

Semi-rugged Terminal
POS System
HMI Panel PC
Embedded System
Embedded Board
COM Express Board
Oseven Board
Pico-ITX Board
3.5" Board
EPIC Board
PICMG 1.0 Board
Mini-ITX Board
Micro-ATX Board
ATX Board
Mini-PCle Module