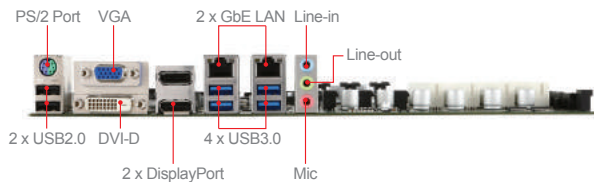
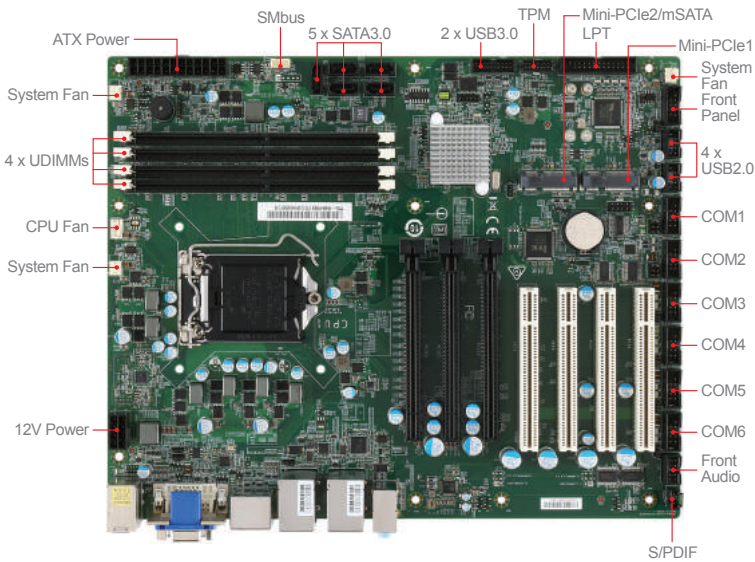


MS-98H9

ATX with 7th/6th Gen Intel® Core™ Xeon/i7/i5/ i3 Pentium®/Celeron® Processor & Intel® C236/Q170/H110 for High-Performance Solution



Features

- Intel® Kaby Lake-S/Skylake-S Series CPU to maximize performance
- 4 DDR4 2133MHz UDIMMs slots up to 64GB memory
- Supports DisplayPort, DVI-D, dual Intel® GbE LAN and AMT 11.0
- 5 SATA 3.0, 1 mSATA, 6 COM, 6 USB 3.0, 6 USB 2.0
- 1 PCIe x 16, dual PCIe x 4 and 4 PCI Slots

Ordering Information

Part Number	Description
919-98H9-001	LGA1151, C236,4*DDR4, 1*DVI-D+1*VGA+2*DisplayPort 1.2a+6*USB3.0+6*USB2.0+5*SATA3.0+1*mSATA+6*COM+2*GbE LAN+ATX POWER
919-98H9-002	OPT: A LGA1151, Q170, 4*DDR4, 1*DVI-D+1*VGA+2*DisplayPort 1.2a+6*USB3.0+6*USB2.0+5*SATA3.0+1*mSATA+6*COM+2*GbE LAN+ATX POWER
919-98H9-003	OPT: B LGA1151, H110,2*DDR4, 1*DVI-D+1*VGA+2*DisplayPort 1.2a+4*USB3.0+4*USB2.0+4*SATA3.0+6*COM+2*GbE LAN+ATX POWER

Packing List

Part Number	Description	Quantity
K1B-3008012-E06	USB 2.0 Cable, 330mm	1
K14-1018004-V03	COM Port Cable, 510mm	1
K39-3002004-E06	PS/2 Y-Cable, 190mm	1
K18-1025011-V03	LPT Cable, 300mm	1
K1D-1008261-V03	SATA Cable, 500mm	2
E21-98H9010-C22	I/O SHIELDING	1
G71-SEDC148-N56/X03	DRIVER DVD	1

Specifications

	C236 SKU	Q170 SKU	H110 SKU	
Processor	CPU	7th/6th Gen Intel® Desktop Kaby Lake/Skylake Xeon/i7/i5/i3/Pentium®/Celeron® Series Processor, Max 95W	7th/6th Gen Intel® Desktop Kaby Lake/Skylake i7/i5/i3/Pentium®/Celeron® Series Processor, Max 95W	
	Frequency	2.6 GHz~4.5 GHz (Depends on CPU)		
	L2 Cache	2MB~8MB (Depends on CPU)		
	CPU Type	Socket (LGA 1151)		
Memory	Chipset	Intel® C236 Express	Intel® Q170 Express	Intel® H110 Express
	BIOS	AMI UEFI		
	Technology	Dual-channel DDR4 (ECC) 2133MHz		
Display	Max. Capacity	Up to 64GB		Up to 32GB
	Socket	4 x 288-pin UDIMMs		2 x 288-pin UDIMMs
	Controller	Intel® HD Graphics		
Ethernet	Graphic Memory	Shared system memory up to 1.7 GB SDRAM		
	VGA	1 (Non Hot Plug)		
	DVI	1 (DVI-D)		
	DisplayPort	2		
	Multiple Display	3 independent displays		
Audio	Display Interface	VGA up to 1920 x 1080 @60Hz DVI-D up to 1920 x 1200 @60Hz DP up to 4096 x 2304 @60Hz		
	Controller	1 x Intel® I219-LM GbE LAN PHY (Support Intel® AMT 11) 1 x Intel® I210-AT GbE LAN		
Super I/O	Controller	Realtek® ALC887 HD Audio Codec		
H/W Monitor	Controller	Fintek F81866AD-I		
TPM	Watchdog Timer	256-level Watchdog Timer		
	Smart Fan	Yes		
I/O Interface	Controller	Box header		
	USB	6 x USB3.0 (4 x rear, 2 x internal) 6 x USB2.0 (2 x rear, 4 x internal)	4 x USB3.0 (4 x rear) 4 x USB2.0 (2 x rear, 2 x internal)	
	Serial	6 x COM ports (internal) COM1~2: RS-232/422/485, 0V/5V/12V COM3~6: RS-232, 0V/5V/12V		
	Parallel	1		
	PS/2	1 x PS/2 port by Y-cable for keyboard and mouse		
	GPIO	8-bits (4 x GPI; 4 x GPO), 5V		
	Expansion Slot	PCIe x16	1	
PCIe x4		2		1
PCI		4		
M.2		N/A		
Mini-PCIe		2 x Full-size (one w/ mSATA)		N/A
Storage	SATA	5 x SATA 3.0 (Support RAID 0/1/5/10)		4 x SATA 3.0
	mSATA	1		N/A
Power Supply	DC	N/A		
	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	FCC, CE, RCM, VCCI, BSMI (Class B)		
Software Platform	OS Support	Windows 10 (64-bit) Windows 7 (32/64-bit) (Intel® Skylake-S Series CPU Only) Windows 8.1 (64-bit) (Intel® Skylake-S Series CPU Only) Linux Fedora 23 (by request) Linux Ubuntu 16.04 (by request)		