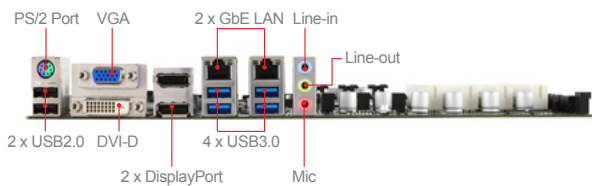
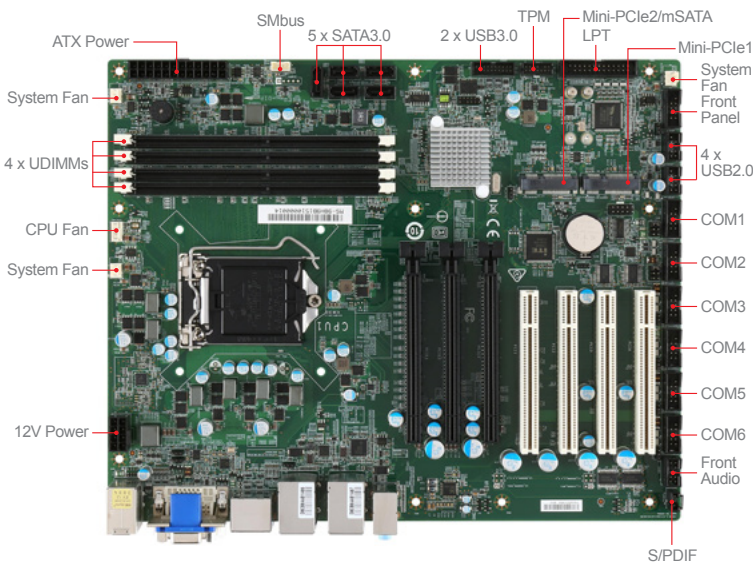


MS-98H9

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 64 GB 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)	
	Chipset	Intel® C236 Express	Intel® Q170 Express
Memory	BIOS	AMI UEFI	
	Technology	Dual-channel DDR4 (ECC) 2133MHz	Dual-channel DDR4 (non-ECC) 2133MHz
	Max. Capacity	Up to 64 GB	Up to 32 GB
Display	Socket	4 x 288-pin UDIMMs	2 x 288-pin UDIMMs
	Controller	Intel® HD Graphics	
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM	
	VGA	1 (Non PnP)	
	DVI	1 (DVI-D)	
	DisplayPort	2	
	Multiple Display	3 independent displays	
Ethernet	Display Interface	VGA up to 1920 x 1080 DVI-D up to 1920 x 1200 DP up to 4096 x 2304	
	Controller	1 x Intel® I219-LM GbE LAN PHY (Support Intel® AMT 11) 1 x Intel® I210-AT GbE LAN	
Audio	Controller	Realtek® ALC887 HD Audio Codec	
Super I/O	Controller	Fintek F81866AD-I	
H/W Monitor	Watchdog Timer	256-level Watchdog Timer	
	Smart Fan	Yes	
TPM	Controller	Box header	
I/O Interface	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 (COM1~6: 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	305mm 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)	

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