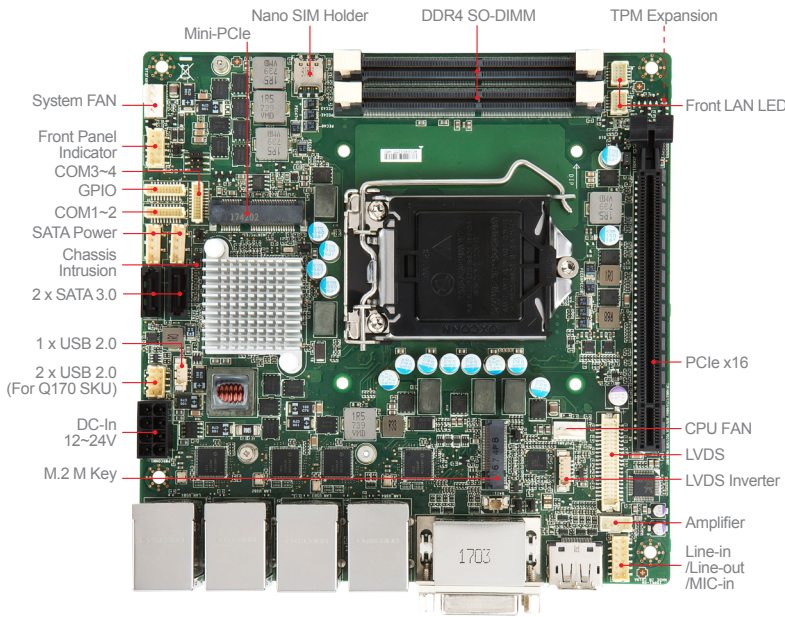


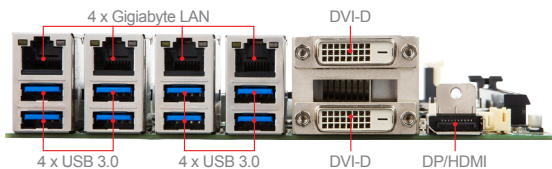
MS-98K1

Mini-ITX with 7th/6th Gen Intel® Kaby Lake/Skylake Processor with Multi-LAN, Expansion Capability & Wide Voltage with High-Performance Solution

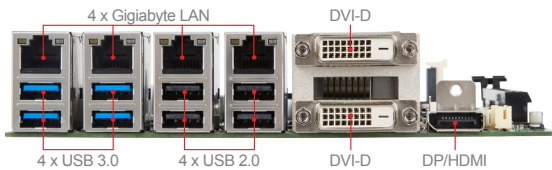
NEW



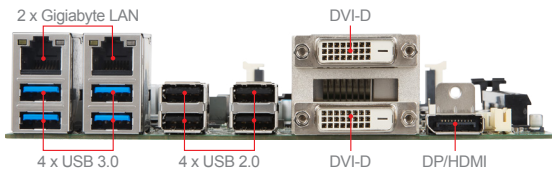
SKU1



SKU2



SKU3



Features

- 3 or 2 independent displays with multiple video outputs (2 DVI-D, DP/HDMI, LVDS)
- Supports maximum 4 Intel® GbE LAN
- Supports DDR4-2400 SO-DIMM memory up to 32GB
- Supports 2 SATA 3.0 ports, M.2 M Key 2242/2280 for storage
- Supports PCIe x16, Mini-PCle slot with SIM Holder
- Supports maximum 8 USB 3.0 ports, 4 COM ports & 16Bit GPIO
- Supports wide voltage DC-in 12~24V

Ordering Information

Part Number	Description
Coming soon	

Packing List

Part Number	Description
Coming soon	

Specifications

		Q170	H110
Processor	CPU	7th Gen Intel® Desktop Kaby Lake-S i7-7700/i7-7700T/i5-7500/i5-7500T/i3-7101E/i3-7101TE	
		6th Gen Intel® Desktop Skylake-S i7-6700/i7-6700TE/i5-6500/i5-6500TE/i3-6100/ i3-6100TE/G4400/G4400TE/G3900/G3900TE	
	Frequency	2.3GHz~4.0GHz (Depends on CPU)	
	L2 Cache	2M ~ 8M (Depends on CPU)	
	CPU Type	Socket (LGA 1151)	
Chipset		Intel® Q170 Express	Intel® H110 Express
	BIOS	AMI	
Memory	Technology	Dual-channel DDR4 (non-ECC) 2133MHz/2400MHz	
	Max. Capacity	Up to 32 GB	
	Socket	2 x 260-pin SO-DIMMs	
Display	Controller	Intel® HD Graphics	
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM	
	LVDS	1 x Dual channel 18/24-bit	
	eDP	N/A	
	VGA	N/A	
	DVI	2 (DVI-D)	
	HDMI	1 (Co-lay with DP by Optional)	
Multiple Display	DisplayPort	1	
		3 independent displays	2 independent displays
Display Interface		LVDS up to 1920 x 1200 @60Hz DVI-D up to 1920 x 1200 @60Hz HDMI up to 4096 x 2160 @24Hz DP up to 4096 x 2160 @60Hz	
		4 x Intel® I210-AT GbE LAN (Front LAN LED Supported)	4 x Intel® I211-AT GbE LAN (Front LAN LED Supported)
Ethernet	Controller	2 x Intel® I211-AT GbE LAN	2 x Intel® I211-AT GbE LAN
		Realtek® ALC887 HD Audio Codec	
Audio	Controller	Fintek F81866D	
Super I/O	Controller	Fintek F81866D	
H/W Monitor	Watchdog Timer	256-level Watchdog Timer	
	Smart Fan	Yes	
TPM	Controller	Pin header	
		1 (Maximum 75W Supported)	
Expansion Slot	PCIe x16	1 (Maximum 75W Supported)	
	PCIe x4	N/A	
	PCIe x1	N/A	
	PCI	N/A	
M.2		1 x M Key (PCIe x4, SATA3.0), 2242/2280	1 x M Key (SATA3.0), 2242/2280
		1 x Full-size	
Storage	SATA	2 x SATA 3.0	
	IDE	N/A	
	eSATA	N/A	
	CFast	N/A	
	mSATA	N/A	
	CompactFlash	N/A	
I/O Interfaces	USB	8 x USB3.0 (rear) 3 x USB2.0 (internal)	4 x USB3.0 (rear) 5 x USB2.0 (4 x rear; 1 x internal)
	Serial	4 x COM ports (Internal) COM1~4: RS-232/422/485, 0V/5V/12V	4 x COM ports (Internal) COM1:RS-232/422/485, 0V/5V/12V COM2~4: RS-232, 0V/5V/12V
	Parallel	N/A	
	PS/2	N/A	
Power Supply	GPIO	16-bits (8 x GPI; 8 x GPO), 5V	
	DC Input	DC-in 12 ~24V	
AC Input		N/A	
		N/A	
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	170 x 170mm (Mini-ITX)	
	Weight	0.42 kg	0.39 kg
Certification	EMC	FCC, CE, RCM, VCCI, BSMI	
		FCC, CE, RCM, VCCI, BSMI	
Software Platform		Windows 10 (64-bit) Windows 7 (32/64-bit) (Skylake-S Series only) Windows 8.1 (64-bit) (Skylake-S Series only) Linux Fedora 23 (by request) Linux Ubuntu 16.04 (by request)	
	OS Support		