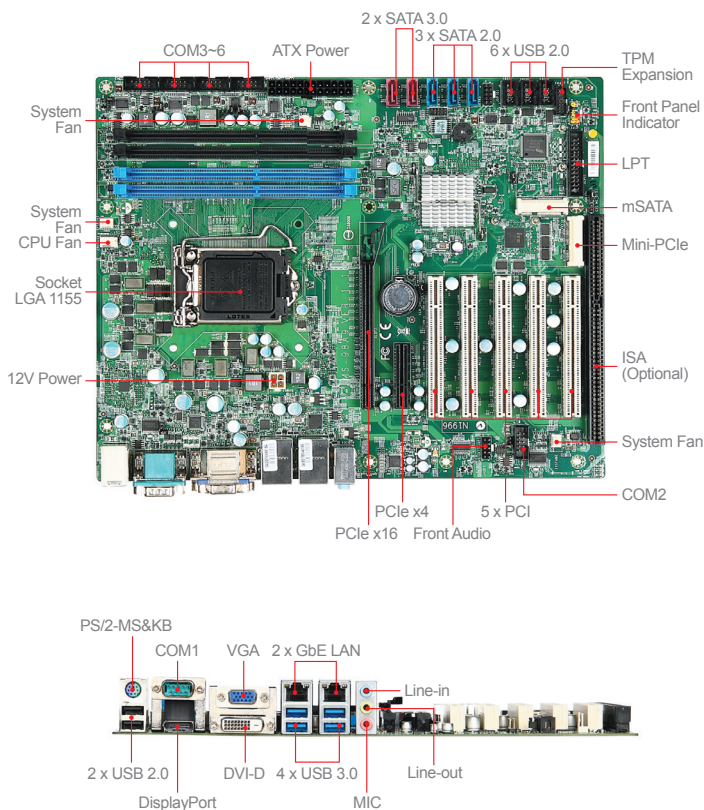


MS-98A9

Intel® Embedded Ivy Bridge with Q77 High-performance ATX Solution



Features

- Intel® Ivy Bridge and Sandy Bridge Series CPU to maximize performance
- Support 4 DDR3 1600MHz UDIMM up to 32GB
- Support DisplayPort, DVI-D, VGA, and dual Intel® GbE LAN
- 2 SATA 3.0, 3 SATA 2.0, mSATA, AMT 8.0, 6 COM, 4 USB 3.0, and 8 USB 2.0
- Support ATX power

Ordering Information

Part Number	Description
919-98A9-001	MS-98A9 VER 1.1 INTEL IVY BRIDGE+Q77, 4*DDR3, 1*VGA+1*DVI,1*DP, 10*USB 2.0, 4*USB 3.0, 2*GBE LAN, 1*Mini-PCle, 1*mSATA, 3*SATA2, 2*SATA3, with ISA
919-98A9-002	MS-98A9 VER 1.1 INTEL IVY BRIDGE+Q77, 4*DDR3, 1*VGA+1*DVI,1*DP, 10*USB 2.0, 4*USB 3.0, 2*GBE LAN, 1*Mini-PCle, 1*mSATA, 3*SATA2, 2*SATA3, without ISA

Packing List

Part Number	Description	Quantity
K14-1018004-V03	Internal COM Port Cable with Bracket, 510mm	2
K18-1025011-V03	Internal LPT Cable with Bracket, 300mm	1
K1B-3008012-E06	Internal USB2.0, 330mm	1
K39-3002004-E06	External PS/2 Y-Cable, 190mm	1
K1D-1080054-E06	SATA Cable, 625mm	2
E21-98A9010-C22	I/O Shielding	1
G71-SEDC078-J24	Driver DVD	1

Specifications

Processor	CPU	Intel® Core™ i7/i5/i3/Pentium/Celeron Processor
	Frequency	Depends on CPU
	L2 Cache	Depends on CPU
	CPU Type	Socket (LGA 1155)
	Chipset	Intel® Q77 Express
Memory	BIOS	AMI
	Technology	Dual-channel DDR3 1333/1600MHz
	Max. Capacity	Up to 32GB
	Socket	4 x 240-pin DIMMs
Display	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	VGA	1
	DVI	1 (DVI-D)
	DisplayPort	1
	Multiple Display	2 independent displays (SNB CPU only) 3 independent displays (IVB CPU only)
	Display Interface	VGA up to 1920 x 1080 DVI-D up to 1920 x 1200 DP up to 2560 x 1600 HDMI up to 1920 x 1200
Ethernet	Controller	1 x Intel® 82579LM GbE LAN PHY 1 x Intel® 82583V GbE LAN
Audio	Controller	Realtek® ALC887 HD Audio Codec
Super I/O	Controller	Fintek F81866
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Pin header
I/O Interface	USB	4 x USB 3.0 (rear) 8 x USB 2.0 (2 x rear; 6 x internal)
	Serial	6 x COM ports (COM1: rear, COM2-6: internal) COM1&2: RS-232/422/485, 0V/5V/12V COM3-6: RS-232, 0V/5V/12V
	Parallel	1
	PS/2	1
Expansion Slot	GPIO	8-bits (4 x GPI; 4 x GPO), 5V
	PCIe x16	1
	PCIe x4	1
	PCI	5
Storage	Mini-PCle	1 x Full-size
	SATA	2 x SATA 3.0; 3 x SATA 2.0 (support RAID 0, 1, 5, 10)
Power Supply	mSATA	1
	DC	N/A
Environment	ATX	ATX-Power 24P, 12V-4P
	Operating Temperature	0 ~ 60°C
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
Form Factor	Storage Humidity	10 ~ 90%, non-condensing
	Dimensions	305mm x 244mm (ATX)
	Weight	0.75 kg
Certification	EMC	FCC Class A, CE, C-Tick, VCCI, BSMI

*1 x ISA (optional)