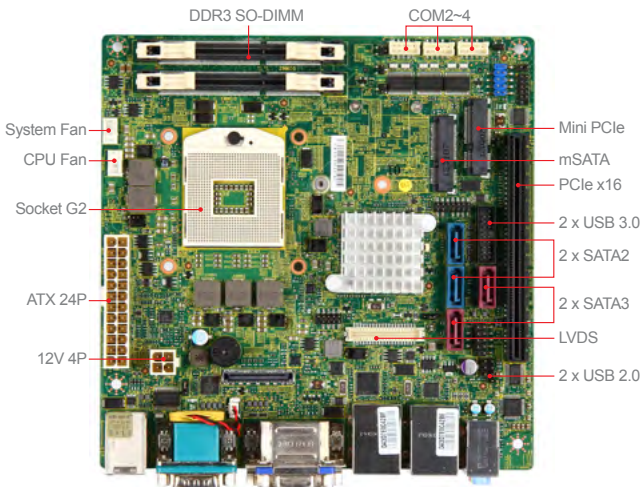


MS-9899

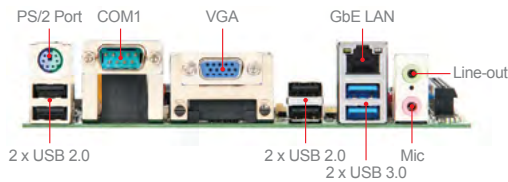
Mini-ITX with 3rd Gen Intel® Core™ & Celeron® Processor and Intel® HM76/QM77 for Multi-Displays



MS-9899 with QM77



MS-9899 with HM76



Features

- Supports Intel® Ivy Bridge and Sandy Bridge Mobile series CPU
- Supports standard and low-voltage DDR3 SO-DIMM memory up to 16GB
- 4 types of display interface: VGA, HDMI, DVI and LVDS
- Supports SATA 3.0, mSATA, and CFAST slots

Ordering Information

Part Number	Description
919-9899-001	MS-9899 QM77, SNB/IVB Mbl, 2x DDR3 SO-DIMM, VGA/DVI-D/HDMI, 4x SATA, 2x GbE LAN, 10x USB, 4x COM ATX Power (ROHS)
919-9899-002	MS-9899 HM76, SNB/IVB Mbl, 2x DDR3 SO-DIMM, VGA, 4x SATA, 1x GbE LAN, 10x USB, 4x COM ATX Power (ROHS)
919-9899-003	MS-9899 QM77, SNB/IVB Mb, 2x DDR3 SO-DIMM, VGA/DVI-D/HDMI, 4x SATA, 2x GbE LAN, 10x USB, 4x COM, No CFAST, ATX Power (ROHS)

Packing List

Part Number	Description
E32-0800383-A21	FANSINK, 60*60*25mm
K1D-1008132-V03	SATA CABLE, 500mm
E21-9899010-C22	I/O shield for QM77
E21-9899020-C22	I/O shield for HM76
E93-0000039-H06	RETENTION BACKPLATE
K14-1018003-V03	COM PORT CABLE, 300mm
K39-3002004-E06	PS2 Y CABLE, 190mm

Specifications

Processor	CPU	3rd Intel® Core™ i7/i5/i3 Mobile Processor
	Frequency	Depends on CPU
	L2 Cache	Depends on CPU
	CPU Type	Socket G2 (rPGA 989)
	Chipset	Intel® QM77/HM76 Express
Memory	BIOS	AMI
	Technology	Dual-channel DDR3/DDR3L 1066/1333/1600MHz
	Max. Capacity	Up to 16GB
	Socket	2 x 204-pin SO-DIMMs
Display	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	LVDS	Dual channel 24-bit
	VGA	1
	DVI	1 (DVI-D; only for QM77)
	HDMI	1 (only for QM77)
	Multiple Display	2 Independent displays
	Display Interface	LVDS up to 1920 x 1200 @60 Hz DVI-D up to 2560 x 1600 @60 Hz VGA up to 2560 x 1600 @60 Hz HDMI up to 2560 x 1600 @60 Hz
Ethernet	Controller	1 x Intel® 82579LM GbE LAN PHY iAMT 8.0 (QM77 only) 1 x Intel® 82583V GbE LAN
	Audio	Controller: Realtek® ALC887 HD Audio Codec
Super I/O	Controller	Fintek F81866D
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 (2 x rear; 2 x internal) 6 x USB 2.0 (4 x rear; 2 x internal)
	Serial	4 x COM ports (COM1: rear, COM2~4: internal) COM1: RS-232/422/485, 0V/5V/12V COM2~4: RS-232, 0V/5V/12V (no power selection jumper for HM76)
	PS/2	1
	GPIO	8-bits (4 x GPI; 4 x GPO), 5V
Expansion Slot	PCIe x16	1
	M.2	N/A
	Mini-PCIe	1 x Full-size
Storage	SATA	2 x SATA 3.0 2 x SATA 2.0
	CFAST	1 (QM77 only)
	mSATA	1
Power Supply	DC	N/A
	ATX	ATX-Power 24P, 12V-4P
Environment	Operating Temperature	0 ~ 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	0.37 kg
Certification	EMC	FCC, CE, RCM, VCCI, BSMI
Software Platform	OS Support	Windows XP (32/64-bit) Windows 7 (32/64-bit) Windows 8 (32/64-bit)

Optional Items

Part Number	Description
K1B-3008012-E06	USB 2.0 Cable, 330mm

MMI Panel PC
Embedded System Board
Embedded Board
Semi-rugged Terminal System
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