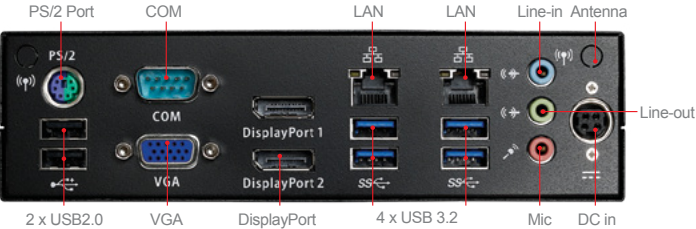


MS-9A78

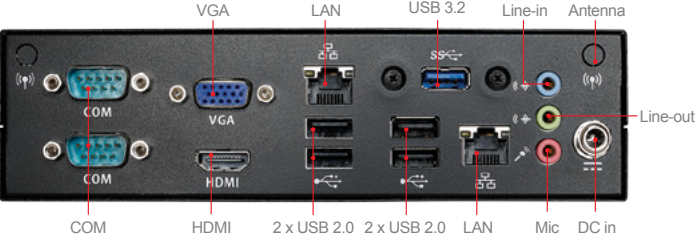
Swappable Box PC with Intel® BayTrail/Haswell Platform for Low-Power & High-Performance Solution



MS-9A78 with Haswell



MS-9A78 with Bay Trail



Features

- Intel® Bay Trail-D/Bay Trail-M Series SoC
 - 2 DDR3L 1333/1066 MHz SODIMM slots up to 8GB
 - Dual independent displays: VGA, HDMI
 - 2 GbE LAN with RJ-45
 - 1 Mini-PCle (Full size, with mSATA) slots
 - SATA 2.0 (2.5" SSD/HDD, 7mm) for storage
 - USB 3.2 Gen 1, 6 USB 2.0, 5 COM(1 RS485), Audio, System FAN
 - DC-IN 12V
- Intel® 4th Gen Haswell-S/ Haswell Refresh-S Series with Q87
 - 2 DDR3L 1600/1333 MHz SODIMM slots up to 16GB
 - Triple independent displays: VGA, 2 DP
 - 2 GbE LAN with RJ-45
 - 1 Mini-PCle (Full size, with mSATA), 1 Mini-PCle (Half size) slots
 - mSATA, SATA 3.0 (2.5" SSD/HDD, 7mm) for storage
 - 4 USB 3.2 Gen 1, 4 USB 2.0, 4 COM(1 RS485), PS/2, Audio, System FAN
 - DC-IN 12V

Ordering Information

Part Number	Description
939-9A78-001	J1900, 12V 84W DC-in DOE VI Adaptor, EU Power Cord
939-9A78-002	J1900, 12V 84W DC-in DOE VI Adaptor, USA Power Cord
939-9A78-003	Q87, DC12V 150W Adapter, EU Power Cord
939-9A78-004	Q87, DC12V 150W Adapter, USA Power Cord
939-9A78-005	Q87, 12V 130W DC-in DOE V Adaptor, USA Power Cord, White Brand
939-9A78-008	Q87, 12V 130W DC-in DOE VI Adaptor, USA Power Cord

Specifications

System Processor	CPU	Intel® Celeron® Processor J1900/ N2930, QC, 10W/7.5W	4th Gen Intel® Desktop Haswell/ Haswell Refresh Core™ i7/i5/i3/ Celeron®/Pentium® Processor, Max. 45W
	Frequency	2GHz~2.42GHz (J1900) 1.83GHz~2.16GHz (N2930)	1.5GHz~2.3GHz (Depends on CPU)
	L2 Cache	2MB	2M~8M (Depends on CPU)
	CPU Type	BGA	Socket (LGA 1150)
	Chipset BIOS	N/A AMI	Intel® Q87 Express
Memory	Technology	Dual-channel DDR3L 1066/1333MHz	Dual-channel DDR3/DDR3L 1333/1600MHz
	Max. Capacity	Up to 8GB	Up to 16GB
	Socket	2 x 204-pin SO-DIMMs	
Graphic	Controller	Intel® HD Graphics	
	Graphic Memory	Depends on CPU	
	Multiple Display	2 independent displays	3 independent displays
	Display Interface	VGA up to 2560 x 1600 @60Hz HDMI up to 1920 x 1080 @60Hz	VGA up to 1920 x 1200 @60Hz DP up to 3840 x 2160 @60Hz
Ethernet	Controller	2 x Intel® I210-AT GbE LAN	1 x Intel® I217-LM GbE PHY (iAMT 9.0 supported) 1 x Intel® I210-AT PCIe GbE LAN
	Audio	Controller	Realtek® ALC887 HD Audio Codec
H/W Monitor	Watchdog Timer	256-level Watchdog Timer	
	Smart Fan	Yes	
TPM	Controller	Pin header	
	M.2	N/A	
Expansion Slot	Mini-PCle	1 x Full-size (w/ mSATA)	1 x Full-size (w/ mSATA) 1 x Half-size
	Storage	SATA mSATA	1 x 2.5" HDD/SSD 1 2 N/A
I/O Interface	RJ-45	2	2
	PoE	N/A	
	Audio	1 x Mic-in; 1 x Line-out; 1 x Line-in	
	USB	6 x USB 2.0 1 x USB 3.2 Gen 1	4 x USB 2.0 4 x USB 3.2 Gen 1
	Serial	5 x COM ports COM1: RS-232/422/485, 0V/5V/12V COM2~5: RS-232, 0V/5V/12V	4 x COM ports COM1: RS-232/422/485, 0V/5V/12V COM2~4: RS-232
	PS/2	N/A	1
	GPIO	N/A	
	CANbus	N/A	
	HDMI	1	N/A
	DVI	N/A	
Power Supply	DisplayPort	N/A	2
	VGA	1	
	Antenna	2 openings reserved for antennas	
	DC Input	DC-in 12V	
Environment	AC Input	N/A	
	IP Rating	N/A	
	Operating Temperature	-10 ~ 50°C (HDD) -10 ~ 60°C (SSD)	-10 ~ 50°C (TDP: 35W) -10 ~ 40°C (TDP: 45W)
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	
Physical characteristics	Vibration	Operating: 0.25 Grms, 5-300Hz, 3axes (w/ HDD)	
	Shock	Operating: 3 G, half sine 11 ms duration (w/ HDD)	
	Dimensions (W x D x H)	180 x 183 x 49mm	
	Weight	1.80 kg	
Certification	Mounting	Wall mount	
	EMC Safety	FCC, CE, RCM, VCCI, BSMI	
Software Platform	OS Support	Windows 7 (32/64-bit) Windows 8 (32/64-bit) Windows 10 (64-bit)	Windows 7 (32/64-bit) Windows 8 (32/64-bit) Windows 10 (64-bit) Linux Fedora V19 (Kernel 3.8.2)

Packing List

Part Number	Description
Please check MSI IPC website at http://ipc.msi.com for details.	