



## Features

### MS-9A60

- Intel® mainstream mobile CPU (IvyBridge Core i3/i5/i7, Pentium, and Celeron) w/ TDP up to 35W
- 15" TFT LCD with 5-wire resistive touch panel
- Flexible storage interfaces (HDD/SSD/mSATA/SATA DOM)
- Support DC-in 12V or 19V
- Open-frame panel PC or with bezel (optional)
- IP65 front panel for water-proof applications

### MS-9A61

- Intel® mainstream mobile CPU (3rd-generation Atom CPU D2550 1.86GHz)
- 15" TFT LCD with 5-wire resistive touch panel
- Flexible storage interfaces (HDD/SSD/mSATA/SATA DOM)
- Support DC-in 12V
- Open-frame panel PC or with bezel (optional)
- IP65 front panel for water-proof applications

**Coming Soon**

## Specifications

		MS-9A60	MS-9A61	
<b>Display</b>	LCD Size	15"	15"	
	Resolution	1024x768	1024x768	
	Brightness (cd/m <sup>2</sup> )	250	250	
	Contrast Ratio	700:1	700:1	
	Support Colors	16.2M/262K	16.2M/262K	
	Pixel Pitch (H/V/mm)	0.297x0.297	0.297x0.297	
	Viewing Angle	H: 150~170 degree V: 140~160 degree	H: 150~170 degree V: 140~160 degree	
<b>Touch Panel</b>		5-wire resistive touch panel	5-wire resistive touch panel	
<b>System Processor</b>	CPU	Intel® 3rd-gen Mobile CPU 2.1GHz ~2.9GHz (support up to TDP 35W CPU)	Intel® Dual Core Cedarview 1.86GHz (D2550)	
	CPU Type	Socket G2	Onboard	
	Chipset	Intel HM76	Intel NM10	
	BIOS	AMI 64Mbit SPI	AMI 32Mbit SPI	
<b>Memory</b>	Technology	Dual-channel DDR3 SO-DIMMs 1600/1333/1066MHz	Single-channel DDR3 1066MHz	
	Max. Capacity	Up to 16GB	Up to 4GB	
	Socket	2 x 204-pin SO-DIMMs	1 x 204-pin SO-DIMM	
<b>Graphic</b>	Graphic Controller	Within CPU	Intel GMA3650 Graphics	
	Display Mode	3 independent displays	2 independent displays	
<b>Ethernet</b>	Controller	1 x Intel® 82579 PHY LAN 1 x Intel® I210-AT PCIe LAN	Realtek® RTL8111E GbE LAN	
	Audio	Controller	Realtek ALC887 HD Audio Codec	Realtek ALC887 HD Audio Codec
<b>H/W Monitor</b>	Watchdog Timer	255-level Watchdog Timer	255-level Watchdog Timer	
	Smart Fan	Yes	N/A	
<b>Expansion Slot</b>	PCIe x16	N/A	N/A	
	PCIe x4	N/A	N/A	
	PCIe x1	N/A	N/A	
	PCI	N/A	N/A	
	Mini-PCIe	2	1	
<b>Storage</b>	SATA	320G 2.5" HDD	320G 2.5" HDD	
	mSATA	1 (shared with Mini-PCIe slot)	1 (shared with Mini-PCIe slot)	
	CFast	N/A	N/A	
	CompactFlash	N/A	N/A	
<b>Rear I/O</b>	RJ-45	2	2	
	Audio	1 x Line-out, 1 x Line-in, 1 x Mic-in	1 x Line-out, 1 x Line-in, 1 x Mic-in	
	USB	4 x USB 2.0; 2 x USB 3.0	4 x USB 2.0	
	Serial	1x RS-232/422/485; 3 x RS-232 (0V/5V/12V)	1x RS-232/422/485; 4 x RS-232 (0V/5V/12V)	
	Parallel	N/A	1	
	PS/2	1 (for keyboard and mouse)	2	
	HDMI	N/A	1	
	DVI	1 (DVI-I)	N/A	
	VGA	N/A	1	
	DisplayPort	2	N/A	
	Antenna	N/A	N/A	
	<b>Power Requirement</b>	Power Consumption	DC 12V or DC 19V	DC 12V
	<b>Power Source</b>	Power Adaptor	DC-in 12V	DC-in 12V
Power Supply		N/A	N/A	
<b>Environment</b>	Operating Temperature	0~45°C (HDD) 0~50°C (SSD or mSATA)	0~45°C (HDD) 0~50°C (SSD or mSATA)	
	Operating Humidity	10 ~ 90%, non-condensing	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	-20 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	10 ~ 90%, non-condensing	
<b>Physical Characteristics</b>	Dimensions	366.5mmx74.70mmx229.10mm	366.5mmx74.70mmx229.10mm	
	Weight	5.0 kg (without bezel)	5.0 kg (without bezel)	
	Installation	VESA 75/100	VESA 75/100	
<b>Certification</b>	EMC	FCC, CE, C-Tick, VCCI, BSMI	FCC, CE, C-Tick, VCCI, BSMI	
	Safety	TUV, CB	Windows XP, Windows 7	
<b>Software Platform</b>	Operating	Windows XP, Windows 7, Windows 8	Windows XP, Windows 7	
	System Support			