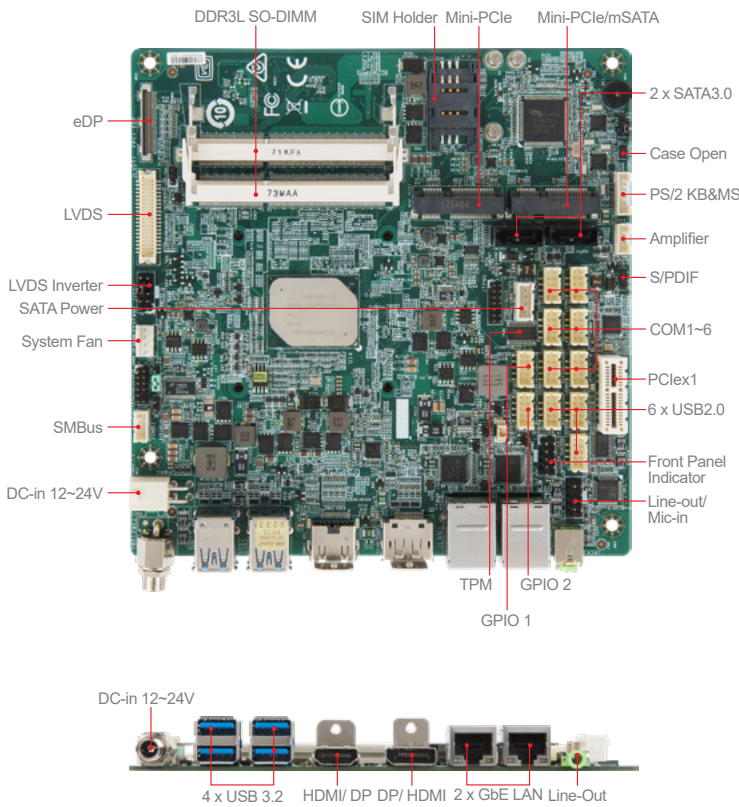


# MS-9892

Mini-ITX with Intel® Apollo Lake/Apollo Lake-I for Fanless, Low-Power, High-Performance & Wide Temperature Solution

NEW



## Features

- Intel® Apollo Lake/Apollo Lake-I Series SoC
- 2 DDR3L 1866 MHz SODIMM slots up to 8GB
- Triple independent displays : DP, HDMI, LVDS/eDP
- 2 GbE LAN with RJ-45
- 1 PCIe x1 (Gen 2), 1 Mini-PCle (Full/Half size, with SIM Holder), 1 Mini-PCle (Full size, with mSATA) slots
- mSATA, 2 SATA 3.0 for storage
- 4 USB 3.2 Gen 1, 6 USB 2.0, 6 COM (2 RS-485), GPIO, PS/2, Audio, S/PDIF, System FAN
- Onboard TPM 2.0
- SMBus, Chassis Intrusion
- Wide operating temperature : -40~85°C (by option)
- Wide Voltage DC-IN 12~24V

## Packing List

Part Number	Description
Please check MSI IPC website at <a href="http://ipc.msi.com">http://ipc.msi.com</a> for details.	

## Packing List

Part Number	Description	Quantity
K14-1018003-V03	COM Port Cable, 300mm	1
K1D-1012115-V03	SATA Cable with Power, 230mm	1
E21-9892010-C22	I/O SHIELDING	1

## Specifications

		SKU1	SKU2
<b>System Processor</b>	CPU	Intel® Pentium® Processor N4200, QC, 6W Intel® Celeron® Processor N3350, DC, 6W Intel® Celeron® Processor J3455, QC, 10W Intel® Atom™ x5 Processor E3940, QC, 9W	Intel® Atom™ x5 Processor E3940, QC, 9W Intel® Atom™ x5 Processor E3930, DC, 6W
	Frequency	N4200, 1.1 GHz, up to 2.5 GHz N3350, 1.1 GHz, up to 2.4 GHz J3455, 1.5 GHz, up to 2.3 GHz E3940, 1.6 GHz, up to 1.8 GHz	E3940, 1.6 GHz, up to 1.8 GHz E3930, 1.3 GHz, up to 1.8 GHz
	L2 Cache	1MB~2MB (Depends on CPU)	
	CPU Type	BGA	
	Chipset	Integrated in SoC	
	BIOS	AMI	
	<b>Memory</b>	Technology	Dual-channel DDR3L 1866 MHz
Max. Capacity		Up to 8 GB	
<b>Display</b>	Socket	2 x 204-pin SO-DIMMs	
	Controller	Intel® HD Graphics	
	Graphic Memory	Depends on CPU	
	LVDS	1 x Dual channel 18/24-bit	
	eDP	1 (co-lay with LVDS)	
	HDMI	1 (co-lay with DP)	
	DisplayPort	1 (co-lay with HDMI)	
	Multiple Display	3 independent displays	
	Display Interface	LVDS up to 1920 x 1200 @60 Hz	
		eDP up to 4096 x 2160 @60Hz HDMI up to 3840 x 2160 @30Hz DP up to 4096 x 2160 @60Hz	
<b>Ethernet</b>	Controller	2 x Intel® I211-AT GbE LAN	2 x Intel® I210-IT GbE LAN
<b>Audio</b>	Controller	Realtek® ALC887-VD2-CG HD Audio Codec	
<b>Super I/O</b>	Controller	Fintek F81867D-I	
<b>H/W Monitor</b>	Watchdog Timer	256-level Watchdog Timer	
	Smart Fan	Yes	
<b>TPM</b>	Controller	Infineon SLB9665TT 2.0	Infineon SLB9665XT 2.0
<b>I/O Interfaces</b>	USB	6 x USB 2.0 (internal) 4 x USB 3.2 Gen 1 (rear)	
	Serial	6 x COM ports (internal) COM1/2: RS-232/422/485, 0V/5V/12V COM3~6: RS-232, W/O Power	
	Parallel	N/A	
	PS/2	1 (pin header)	
	GPIO	GPIO 1: 8-bits (4 x GPI; 4 x GPO), 3.3V GPIO 2: 8-bits (4 x GPI; 4 x GPO), 5V	
<b>Expansion Slot</b>	PCIe x1	1	
	M.2	N/A	
	Mini-PCle	2 x Full-size (one w/SIM holder & one w/mSATA)	
<b>Storage</b>	SATA	2 x SATA 3.0 (SATA2 share with mSATA)	
	mSATA	1 (shared w/SATA2)	
<b>Power Supply</b>	DC	DC-in 12V~24V	
	ATX	N/A	
<b>Environment</b>	Operating Temperature	-10 ~ 60°C	-40 ~ 85°C
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	-40 ~ 85°C
	Storage Humidity	10 ~ 90%, non-condensing	
<b>Form Factor</b>	Dimensions (W x D x H)	170 x 170mm (Mini-ITX)	
	Weight	0.37 kg	
<b>Certification</b>	EMC	FCC, CE, RCM, VCCI, BSMI	
<b>Software Platform</b>	OS Support	Windows 10 IoT Enterprise LTSC/SAC 1809 (64-bit, RS5) Linux Fedora 25 (by request) Linux Ubuntu 16.04 (by request)	