

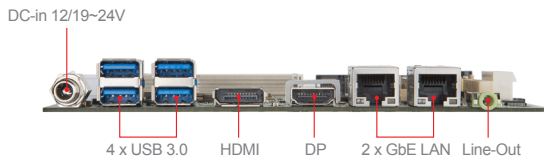
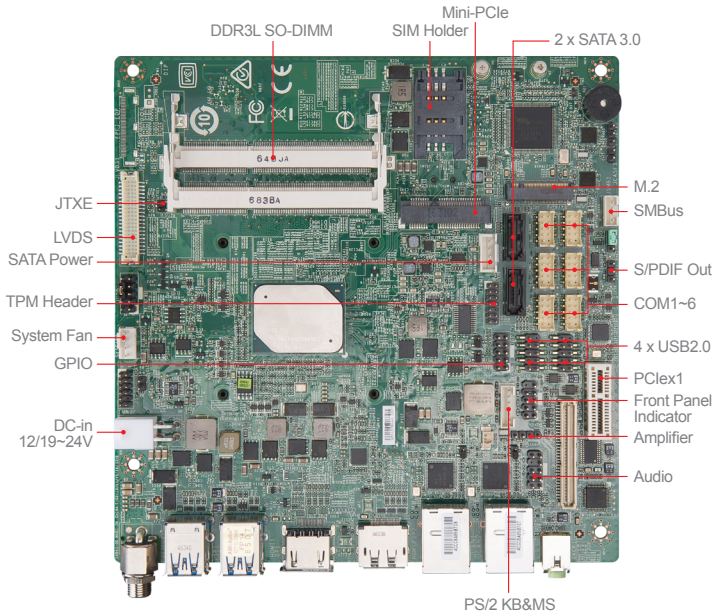
# MS-9892

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

NEW

## Specifications

		Apollo Lake SKUs	Apollo Lake-I SKUs
<b>Processor</b>	CPU	Intel® Pentium® Processor N4200, QC, 6W Intel® Celeron® Processor N3350, DC, 6W	Intel® Atom™ x7 Processor E3950, QC, 12W 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	E3950, 1.6 GHz, up to 2.0 GHz E3940, 1.6 GHz, up to 1.8 GHz E3930, 1.3 GHz, up to 1.8 GHz
	L2 Cache	1M~2M (Depends on CPU)	
	CPU Type	BGA	
	Chipset	Integrated in SoC	
<b>Memory</b>	BIOS	AMI	
	Technology	Dual-channel DDR3L 1866 MHz	
	Max. Capacity	Up to 16 GB	
<b>Display</b>	Socket	2 x 204-pin SO-DIMMs	
	Controller	Intel® HD Graphics	
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM	
	LVDS	1 x Dual channel 18/24-bit	
	eDP	1 (colay with LVDS)	
	HDMI	2 (colay with DP)	
	DisplayPort	2 (colay with HDMI)	
<b>Ethernet</b>	Multiple Display	3 independent displays	
	Display Interface	LVDS up to 1920 x 1200@60 Hz, eDP up to 3840 x 2160@60Hz HDMI up to 3840 x 2160@30Hz DP up to 4096 x 2160@60Hz	
<b>Ethernet</b>	Controller	Intel I211-AT GbE LAN	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	Pin header (Default) Infineon SLB9665TT 2.0 (by BOM option)	Pin header (Default) Infineon SLB9665XT 2.0 (by BOM option)
	<b>I/O Interface</b>	USB	4 x USB3.0 (Rear) 6 x USB2.0 (Internal) 6 x COM (6 x Internal)
Serial		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		16-bits (8 x GPI; 8 x GPO), 5V	
<b>Expansion Slot</b>	PCIe x 1	1	
	M.2	N/A	
<b>Storage</b>	Mini-PCIe	1 x Full/Half size (w/ SIM holder) 1 x Full size (mSATA)	
	SATA	2 x SATA3.0 (SATA2 share with mSATA)	
<b>Power Supply</b>	mSATA	1 (shared w/SATA2)	
	DC	DC-in 12V~24V	
<b>Environment</b>	ATX	N/A	
	Operating Temperature	-10 ~ 60°C	-40 ~ 85°C
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	-40 ~ 85°C
<b>Form Factor</b>	Storage Humidity	10 ~ 90%, non-condensing	
	Dimensions	170mm 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 (64-bit)	



## Features

- Intel® Apollo Lake/Apollo Lake-I Series SoC
- 3 independent displays : 1 x LVDS/eDP, 2 x DP/HDMI
- Supports DDR3L 1866MHz SO-DIMM memory up to 16GB
- Supports Dual SATA 3.0 ports, mSATA for storage
- Supports Dual Intel® GbE LAN, PCIe x1 and Mini-PCIe slot
- Supports 6 COM ports for flexible applications
- TPM supported with onboard chip or pin header
- Apollo Lake-I Series support wide operating temperature : -40 ~ 85°C
- Supports DC-in 12~24V

## Ordering Information

Part Number	Description
Coming soon	

## Packing List

Part Number	Description
Coming soon	