



KEY FEATURES

- Intel® 10th Gen (Comet lake-S) Core™ Processors with H410 chipset
- 2 x 260-pin SO-DIMM Support Dual Channel DDR4 2933 (i9/i7 CPU)/ 2666 (i5/i3 CPU) / 2400 (Pentium/ Celeron CPU), up to 64GB
- 1 x PCIe x16 Gen3, 4 x USB 3.2 Gen1, 4 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 6 x COM, 4 x SATA3
- 2 x Intel 1 Gigabit LAN
- Support Dual display, 1 x DP1.2, 1 x VGA, 1 x HDMI 1.4, 1 x LVDS or eDP(BOM option)
- ATX-PWR (24+4-pin)

SPECIFICATIONS

Form Factor

Dimensions	Mini-ITX (6.7-in x 6.7-in)
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Processor System

CPU	Intel® 10th Gen (Cometlake-S) Core™ Processors, up to 65W *The performance of CPUs over 65W will be limited due to power design.
Chipset	Intel® H410
Socket	LGA1200
BIOS	AMI SPI 128 Mbit

Memory

Technology	Dual Channel DDR4 2933/2666/2400 MHz - Intel Core i9/i7 CPUs support DDR4 up to 2933 MHz - Intel Core i5/i3 CPUs support DDR4 up to 2666 MHz - Intel Pentium/Celeron CPU support DDR4 up to 2400 MHz
Capacity	64GB (32 GB per DIMM)
Socket	2 x 260-pin SODIMM

Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 1.4 Max resolution up to 4096x2160 @30Hz
DisplayPort	DisplayPort 1.2, DP++ Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920x1200@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz
eDP	N/A
DVI	N/A
MultiDisplay	Dual Display

Expansion Slot

PCIe	1 x PCIe x16 (Gen3)
PCI	N/A
mini-PCIe	N/A
M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 for Wireless
SIM Socket	N/A

Audio

Interface	Realtek ALC897 HD , High Definition Audio. Line-out, Mic-in.
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Ethernet

Controller/ Speed	LAN1: Intel® I219V with 10/100/1000 Mbps LAN2: Intel® I210 with 10/100/1000 Mbps
Connector	2 x RJ-45

Rear I/O

HDMI	1 x HDMI 1.4
DisplayPort	1x DP 1.2
VGA	1
DVI	N/A
Ethernet	2 x 1 Gigabit LAN
USB	2 x USB2.0, 2 x USB 3.2 (Gen1)
Audio	2 (Mic-in, Line-out)
COM	COM1,2 (support RS-232/422/485), COM3(support RS-232 only)
PS2	N/A

Internal Connector

USB	2 x USB 3.2 Gen1 (1 x USB 3.2 Gen1 header) 2 x USB 2.0 (1 x 2.54 pitch header)
COM	3 x COM (RS-232)
Parallel	N/A
GPIO	4 x GPI, 4 x GPO
TPM	N/A
LVDS	1
eDP	(BOM Option)
VGA	N/A
SATA PWR Output	N/A
Speaker Header	1

Storage

M.2	1 x M.2 (Key M, 2242/2260/2280) with PCIe x4
mSATA	N/A
SATA	4 x SATA3 (6Gb/s)
eMMC	N/A

Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

Power Requirements

Input PWR	ATX PWR 4pin+24 Pin
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

Environment

Operating Temp	0°C ~ 60°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%