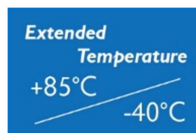
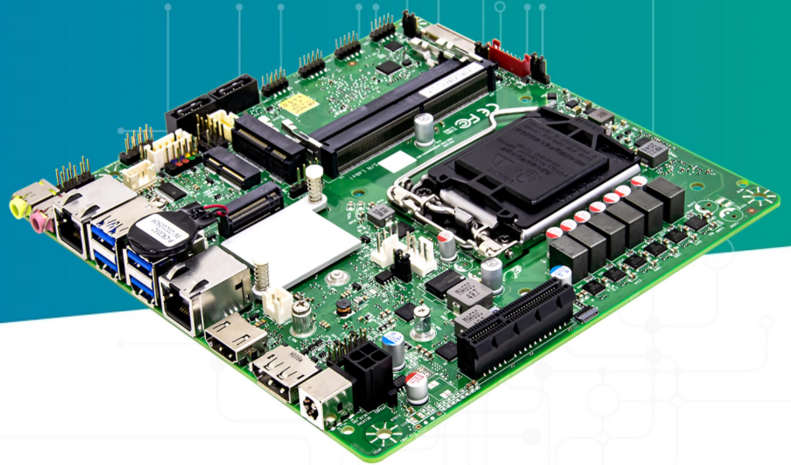


Mini-ITX Form Factor Intel® 10th Gen. Core™ i9/ i7/ i5 / i3 processors



- Support Intel® 10th Core™ i9/ i7/i5/i3 Comet Lake-S LGA1200 35W/65W Socket Processor
- Intel® H410 Chipset
- 2 x DDR4 SO-DIMM up to 64GB
- Support triple display for HDMI, DisplayPort and LVDS
- 1 x M.2 2280M-key (NVME), 1 x M.2 2230 E-key (CNVi), 1 x mPCIe Full size, 1 x PCIe X4
- 2 x Intel® Gigabit Ethernet
- 2 x SATAIII, 4 x USB3.1, 5 x USB2.0, 4 x COM(1 x support RS232/422/485)
- DC-IN 12V / (Optional : 19V)
- Operating Temperature : ET : -20°C ~ 70°C ; UT : -40°C ~ 85°C(Optional)

Specifications

SYSTEM

CPU	10th Gen Intel® Comet Lake LGA1200 Socket Processor / Core i9/i7/i5/i3 Processor, TDP 35/65W
Memory type	DDR4 2933 MHz / 2 x 260-pin SO-DIMM / Max. 64GB (Non-ECC) Horizontal
Chipset	Intel® H410
I/O Chipset	Nuvoton NCT6126D
TPM	TPM Header
H / W Monitor	Temperature Monitor, Voltage Monitor, Fan Monitor
Watchdog	1-255 sec. or 1-255 min. software programmable and can be generate system reset
Smart Fan Control	CPU FAN / System FAN
BIOS	AMI BIOS

EXPANSION SLOT

M.2	1 x M.2 2242 / 2280 M key (Gen3 PCIe X4, SATAIII) 1 x M.2 2230 E key (PCIe, USB 2.0)
Mini PCIe	1 x Mini PCIe Full size (SATA/ USB)
PCIe Slot	1 x PCIe3.0 X4 slot

DISPLAY

Chipset	Intel® HD Graphics
HDMI	Up to 4K (4096 x 2160) @30 Hz
Display Port	Up to 4K (4096 x 2304) @60 Hz
LVDS	Up to 1920 x 1200 @60 Hz

ETHERNET

Chipset	Intel® I219-LM Giga LAN + Intel® I211-AT Giga LAN
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AUDIO

Codec	Realtek® ALC662/ALC888
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FRONT I/O

USB3.1	4
Display port	1 x DP 1.2 ; 1 x HDMI 1.4
LAN	2

Audio 1 x Mic-in ; 1 x Line-out

INTERNAL I/O

SATAIII 2

SATA Power 1(Header)

USB 5 x USB2.0(1 x USB share mPCIe)

Display I/O
1 x LVDS
1 x Backlight connector

Audio 1 x Stereo Speaker Header

GPIO 1 x MiAPI Header (10-bit)

Serial 4 (1 x Support RS-232/422/485)

Fan 1 x 4-pin CPU Fan Connector / 1 x 4-pin System Fan Header

Power
1 x AT / ATX Mode Select Jumper
/ 1 x 4-pin ATX Power Connector

Others
1 x Front Audio Header (Mic-in / Line-out), 1 x CMOS Jumper,
1 x panel power select header, 1 x SATA power,
1x buzzer header, 1x Digital MIC

MECHANICAL AND ENVIRONMENTAL

Form Factor Mini ITX

Power Type 12V DC-IN(Optional : 19V)

Dimension 170mm x 170mm

Operating Temperature
ET : -20°C ~ 70°C
UT : -40°C ~ 85°C

Storage Temperature -40°C ~ 85°C

Relative humidity 10% to 95%, non-condensing

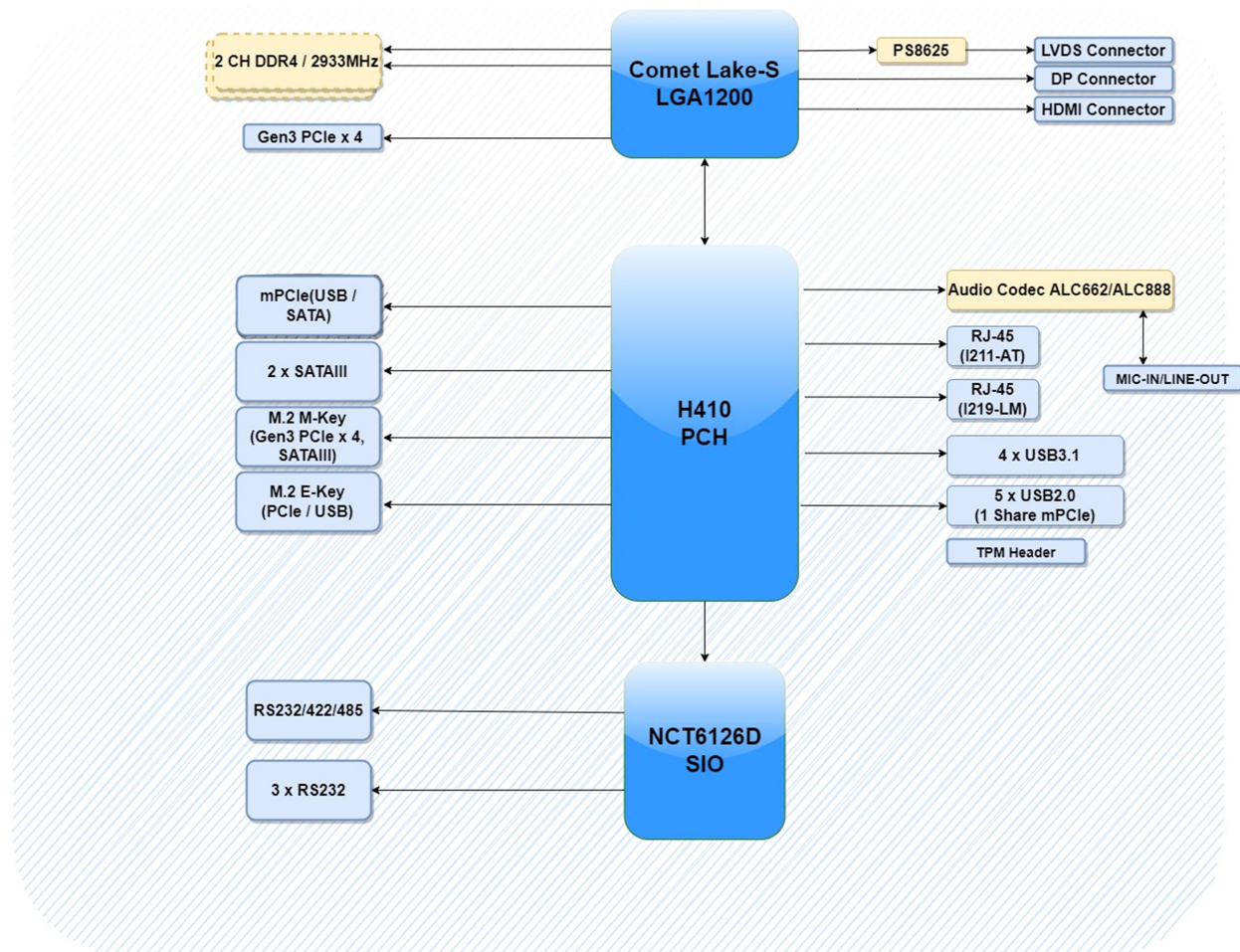
STANDARD COMPLIANCE

Standard Compliance CE/FCC

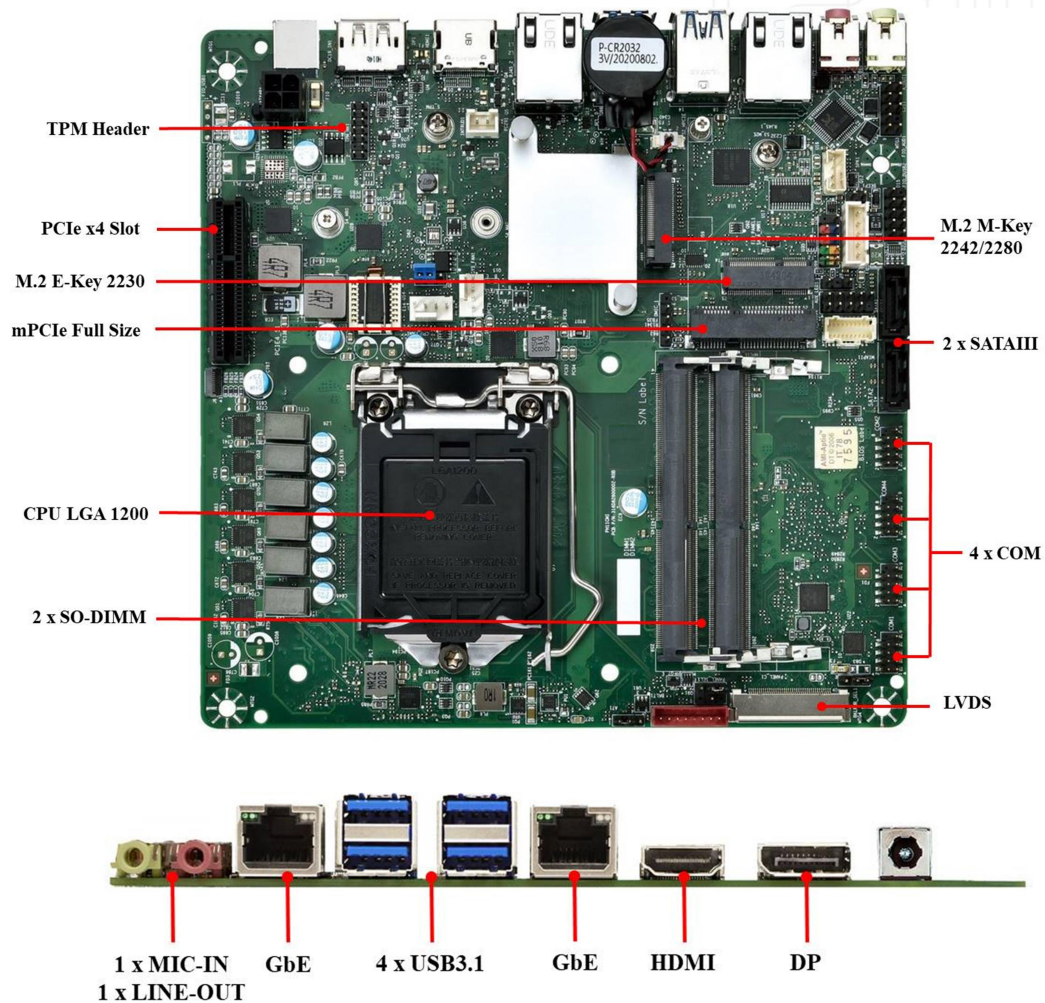
OS

OS Support
Windows® 10 64-bit
Linux(Support by request)

Block Diagram



Board Placement



Ordering Information

Model	CPU	PCH	Expansion	USB3.1/2.0	System Power Input	Operation Temp.
INS8366A-01ET	10 th LGA 1200 (Up to 65W)	H410	1 x M.2 M-Key 2242/2280 1 x M.2 E-Key 2230 1 x mPCIe Full Size 1 x PCIe4 Slot	4/5	DC 12V	-20 to 70°C
INS8366A-01UT						-40 to 85°C
INS8366A-02ET (Optional)					DC 19V	-20 to 70°C
INS8366A-02UT (Optional)						-40 to 85°C