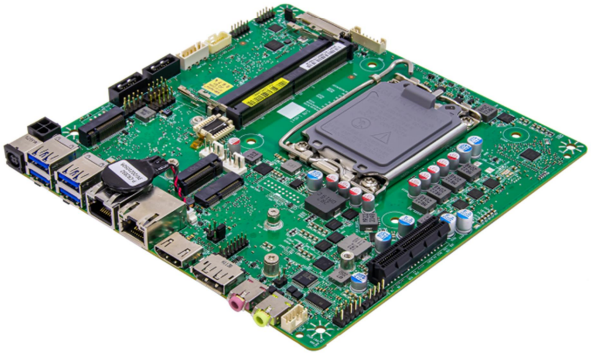
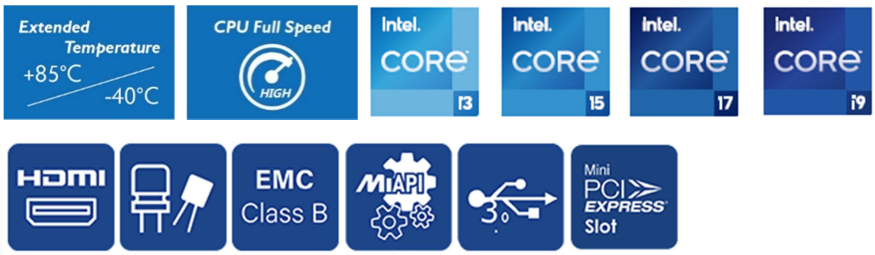
INS8367B

Mini-ITX Form Factor Intel® 12th Gen. Core™ i9/ i7/ i5/i3 processors





- Support Intel® 12th Core™ i9/ i7/i5/i3 Alder Lake-S LGA1700 35W/65W Socket Processor
- Intel® Q670 Chipset
- 2 x DDR5 SO-DIMM up to 64GB
- 6 x USB3.1; 5 x USB2.0
- 1 x HDMI ; 1 x DP ; 1 x LVDS
- 1 x M.2 M-Key 2242/2280, 1 x M.2 E-Key 2230, 1 x M.2 B-Key 3042, 1 x PCIe 3.0 x4
- 2 x SATAIII
- 1 x 2.5GbE +1 x GbE LAN
- DC-IN 12V
- Operating Temperature : ET : -20°C ~ 70°C ; UT : -40°C ~ 85°C

Specifications

System

CPU	12th Gen Intel® Alder Lake LGA1700 Socket Processor / Core i9/i7/i5/i3 Processor, TDP 35/65W
Memory type	DDR5 4800 MHz / 2 x 262-pin SO-DIMM / Max. 64GB (Non-ECC) Horizontal
Chipset	Intel® Q670
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

M.2	1 x M.2 2230 E-Key (PCIe 3.0X1 , USB2.0) 1 x M.2 2242/2280 (PCIe3.0 X4, SATAIII) 1 x M.2 3042 B-Key (USB2.0, PCIe3.0 X1, SATAIII)
PCIe Slot	1 x PCIe 3.0 X4 slot

Display

Chipset	Intel® UHD Graphics 770
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 GbE LAN + Intel® I225V 2.5 GbE LAN

Audio

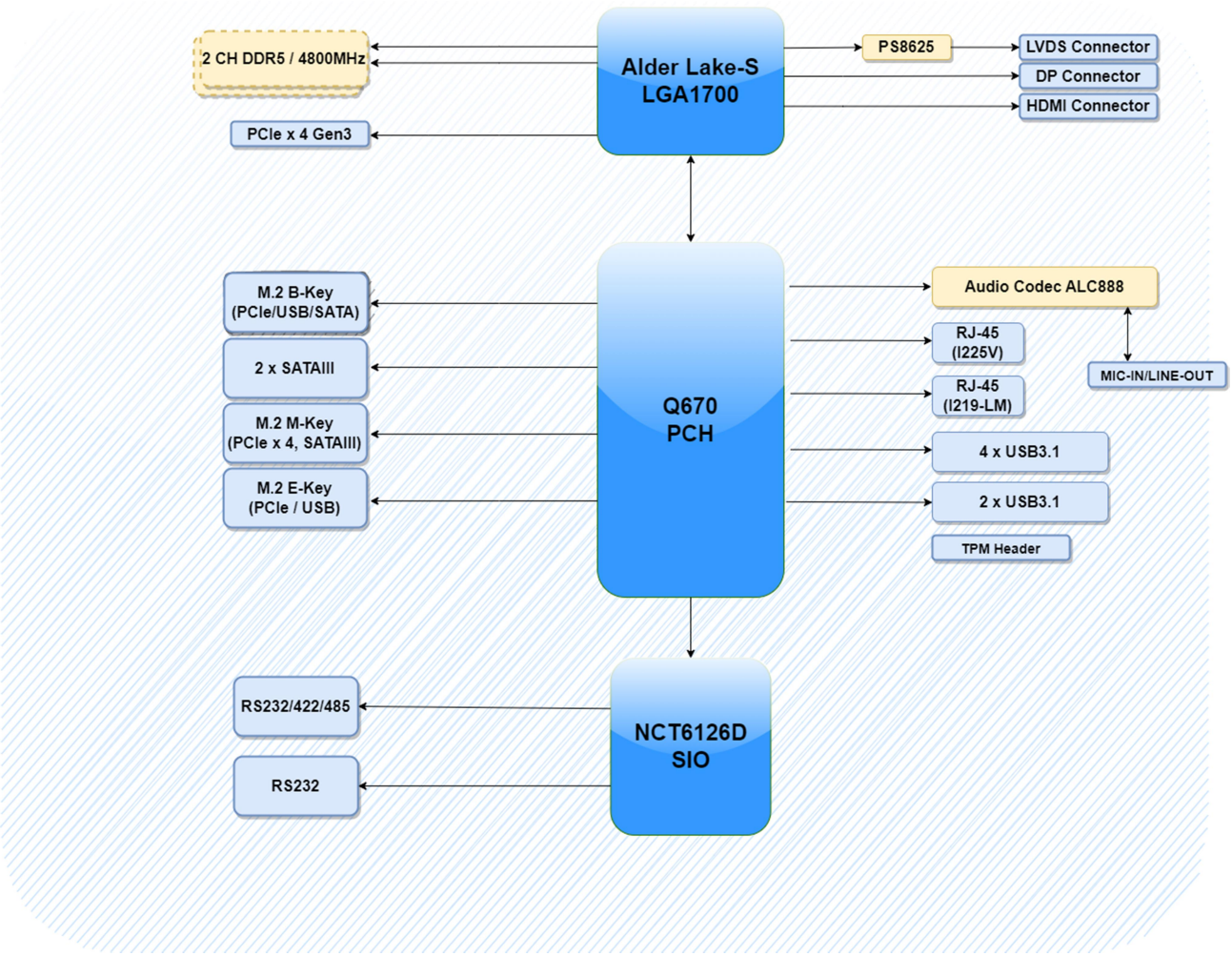
Codec	Realtek® ALC888

Rear I/O

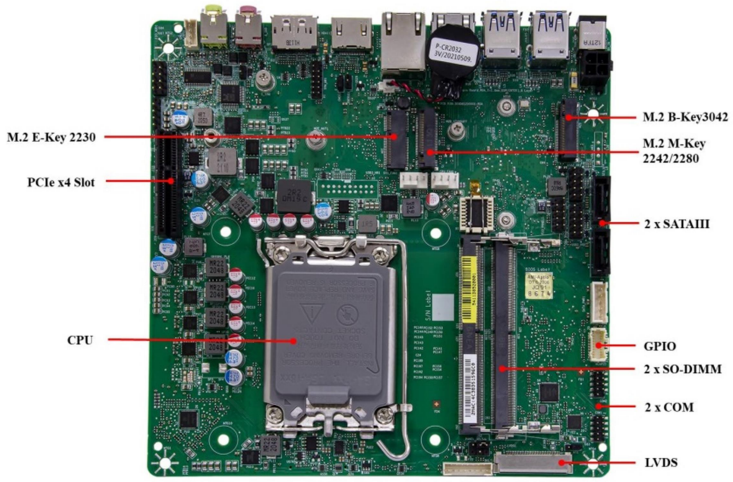
USB	4 x USB3.1
Display port	1 x DP ; 1 x HDMI

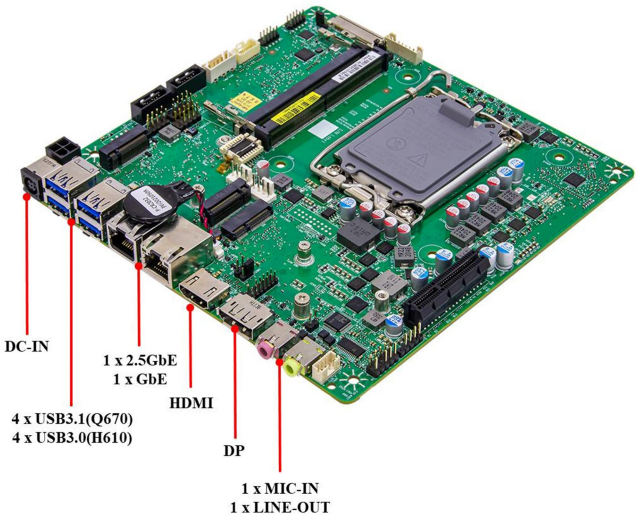
LAN	2(1 x GbE ; 1 x 2.5GbE)
AUDIO	1 x MIC-IN ; 1 x LINE-OUT
Internal I/O	
SATAIII	2
USB3.1	2
USB2.0	5
Display I/O	1 x LVDS 1 x Backlight connector
Serial	2 (1 x Support RS-232/422/485)
FAN	1 x 4-pin CPU Fan Connector / 1 x 4-pin System Fan Header
Power	1 x 12V DC IN Jack 1 x ATX 4pin (AT/ATX mode by jumper setting)
Others	1 x Front Audio Header (Mic-in / Line-out), 1 x CMOS Jumper, 1 x panel power select header,1 x SATA power, 1 x FIO header, 1 x intrusion switch header, 1 x DMIC header, 1x buzzer header 1 x GPIO header
Mechanical and Environmental	
Form Factor	Mini ITX
Power Type	12V DC-IN
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	Description
INS8367B-01ET	Intel 12th Gen. Alder Lake-S Core i9/i7/i5/i3, DDR5 up to 64GB, Chipset Q670, M.2 expansion slots: M.2 M-Key 2242/2280, M.2 E-key 2230, M.2 B-Key 3042, 1 x PCIex4 Slot, 6 x USB3.1, 5 x USB2.0, DC-IN 12V, Extended Temp. -20 to 70°C
INS8367B-01UT	Intel 12th Gen. Alder Lake-S Core i9/i7/i5/i3, DDR5 up to 64GB, Chipset Q670, M.2 expansion slots: M.2 M-Key 2242/2280, M.2 E-key 2230, M.2 B-Key 3042, 1 x PCIex4 Slot, 6 x USB3.1, 5 x USB2.0, DC-IN 12V, Extended Temp. -40 to 85°C