

## Main Features

- Intel® LGA1700 socket supports 14th/13th/12th Gen Intel® Core™ processor (max 125W)
- Intel® Q670E express chipset
- 4 x DDR5 4800MHz up to 128GB
- 1 x Intel® i225-LM 2.5GbE, 2 x Intel® i225-V 2.5GbE
- 2 x M.2 slot (Key M), 1 x M.2 slot (Key E), 1 x M.2 slot (Key B)
- 4 x SATA 3.0 (6Gb/s), support Raid 0/1/5/10
- 1 x VGA, 1 x HDMI®, 1 x DP
- 6 x COM (COM1/2 support RS232/422/485; COM1/2/3/4 support 5V/12V TTL)
- 2 x PCIe x16, 2 x PCIe x4 , 2 x PCIe x1, 1 x PCI slots
- 24 + 8-pin ATX power input
- ATX form factor (305 x 244mm)

## Product Overview

The NEX 919 is an ATX board. It is equipped with the 14th/13th/12th Gen Intel® Core™ processors to support up to a maximum of 125W max and Intel® Q670E chipset. It comes with 4 x DDR5 4800MHz DIMM sockets up to 128GB with non-ECC, un-buffered memory, dual-channel memory architecture and an integrated UHD graphic controller. With Intel® Q670E PCH, the NEX 919 provides high performance and rich expansions. The SATA 3.0 ports with RAID 0, 1, 5, and 10, helps to provide quick access to data files and data protection. Furthermore, it also features an integrated Intel® AMT 12 for easier maintenance. NEX 919 is a high-performance system and PCIe x16 Gen 4 is suitable for IOT, AI, AOI, AI vision, and logistics, etc.

## Specifications

### CPU/Chipset

- Intel® 14th/13th/12th Gen Intel® Core™ , LGA 1700 socket, processor Max 125W
- Intel® Q670E chipset
- AMI 256Mb flash ROM

### Main Memory

- 4 x DDR5 (4800MHz x 4, up to 128GB)
- Non-ECC, dual-channel memory architecture

### BIOS

- 256mb flash ROM, AMI BIOS

### Display

- Intel® UHD graphics, shared memory
- 1 x VGA connector (resolution up to 1920 x 1080@60Hz)
- 1 x HDMI® 2.0b connector (resolution Up to 4096 x 2160 @ 60 Hz)
- 1 x DP 1.4a connector (resolution Up to 4096 x 2304@60 Hz)

### Storage

- 4 x SATA 3.0 ports (6Gb/s) support RAID 0/1/5/10
- 1 x M.2 2242/2280 Key M (PCIe Gen 4 x4 interface) support NVMe

- 1 x M.2 2242/2280 Key M (PCIe Gen 4 x4/SATA interface)support NVMe

### Expansion Slot

- 2 x PCIe x16 slot (1 x PCIe Gen 4 x16 or 2 x PCIe Gen 4 x8)
- 2 x PCIe x4 slot (Gen 4)
- 2 x PCIe x1 slot (Gen 3)
- 1 x PCI
- 1 x M.2 3042/3052 Key B (PCIe Gne 3 x1/USB 3.2 Gen 2/USB 2.0) support 4G/5G module
- 1 x M.2 2230 Key E (PCIe Gen 3 x1/USB 2.0) support CNVi

### Audio

- Realtek ALC888S-Channel high definition Audio CODEC

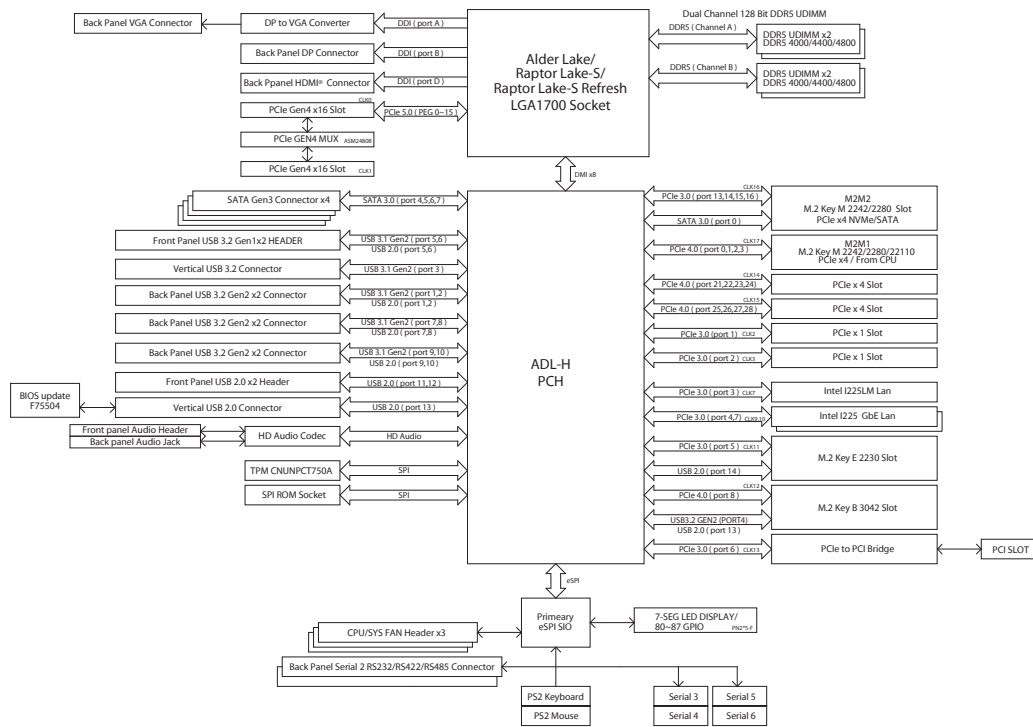
### Watchdog Timer

- 256 segments (10sec ~ 255min)

### Power Requirement

- 1 x 24-pin ATX connector, 1 x 8-pin ATX 12V power connector
- Support both AT and ATX power supply mode

## Block Diagram



### TPM

- TPM 2.0 on board

### Rear I/O

- 1 x VGA, 1 x HDMI® 2.0, 1 x DP 1.4
- 3 x RJ45 (1 x Intel® i225-LM 2.5GbE, 2 x Intel® i225-V 2.5GbE)
- 6 x USB 3.2 Gen2
- 2 x COM DB-9 COM (supports RS-232/422/485, 5V/12V/RI)
- Audio Jack x 3: Line-in, Mic-in, Line-out

### Power Requirement

- ATX power
  - AT: Directly PWR on as power input ready
  - ATX: Press button to PWR on after power input ready

### Environment

- Board level operation temperature : -10°C to 50°C
- Storage temperature : -20°C to 85°C
- Relative humidity: 10% to 90% (operating, non-condensing)

### Certifications

- Meet CE/FCC/RoHS/REACH

### OS Support:

- Windows 10,11, Linux

## Ordering Information

### Barebone

#### ♦ NEX 919 (P/N: 6879G0009190F)

ATX supports 14th/13th/12th Gen Intel® Core™ LGA1700 socket processor, processor max 125W TDPs, PCH Q670E, 4 x DDR5 U-DIMM, 1 x VGA, 1 x HDMI®, 1 x DP, 6 x USB 3.2 Gen2, 4 x SATA 3.0 (6Gb/s), 3 x 2.5GbE LAN, 6 x COM, 2 x PCIe x16, 2 x PCIe x4, 2 x PCIe x1, 1 x PCI, 4 x M.2

#### ♦ Packing List

- SATA cable
- COM cable
- NEX 919 mainboard

#### ♦ Optional Accessories

**CPU cooler (P/N:685050200001F)**

**CPU cooler (P/N:685050200002F)**