

## Main Features

- Intel® 8th/9th Generation (Coffee Lake S, Coffee Lake S Refresh) Core™ i7/i5/i3, Pentium® 14nm LGA 1151 socket processor, PCH Q370
- 4 x U-DIMM DDR4 with non-ECC SO-DIMM 2666MHz up to 64GB
- Support triple display VGA, DVI-D, DP , eDP
- 2 x Intel® GbE LAN ports, 6 x USB 3.1 (Gen1), 7 x USB 2.0, 5 x RS232, 1 x RS232/485/422, 1 x RS232/485, 4 x SATA 3.0, PS/2, HD audio
- 1 x PCIe x16, 4 x PCIe x4, 2 x PCI, 2 x mini-PCIe, SIM card
- 8-bit DIO, onboard TPM 2.0

## Product Overview

NEX 913C is an ATX board. It is equipped with the Intel® 8/9th Generation Core™ i7/i5/i3 processors to support 95W Max and Intel® Q370 chipset. It comes with four DDR4 DIMM sockets up to 64GB DDR4 2666MHz with non-ECC support and integrated HD graphic controller. NEX 913C with Intel® Q370 PCH provides high performance and rich expansion. The SATA 3.0 ports with RAID 0, 1, 5, and 10, provides quick access to data files and data protection. Furthermore, it also features an integrated Intel® AMT 12 for easier maintenance.

NEX 913C operates at a temperature range from 0°C to 60°C, the designed is aimed at embedded applications for outdoor or semi-outdoor environments, such as kiosks, outdoor systems installed in harsh environments, home automation, and thin clients.

## Specifications

### CPU/Chipset

- Intel® 8/9th Generation (Coffee Lake S, Coffee Lake S Refresh) Core™ i7/i5/i3 LGA 1151 socket processor, Max. 95W
- Intel® Q370 express chipset
- \* Notice: Support MAX CPU TDP: Hexa-Core 65W and Octa-Core 35W

### Main Memory

- 4 x DDR4 U-DIMM memory socket with non-ECC support, up to 64 GB 2666MHz

### BIOS

- AMI (UEFI) / (support Watchdog timer)

### Display

- Integrated Intel® Generation9 graphics graphic engine
- 1 x VGA connector (resolution up to 1920 x 1080@60Hz)
- 1 x eDP pin header (resolution up to 1920 x 1080@60Hz)
- 1 x DVI-D connector (resolution up to 1920 x 1080@60Hz)
- 1 x HDMI1.4b connector (resolution up to 4096 x 2160 x 30MHz)

### System

- 1 x PS/2 connector, 6 x USB 3.1 (Gen1), 7 x USB 2.0
- 4 x RS232, 1 x RS232/485/422, 1 x RS232/485
- Realtek ALC662 5.1 channel HDA codec
- 1 x Front panel header, 8-bit digital I/O (in/out programmable), SMBus

- Supports on board TPM2.0
- 3 x Smart fan connector

### Storage

- 4 x SATA 3.0 (6.0 Gb/s) ports, support RAID 0/1/5/10
- 1 x mSATA (by SATA port1)

### Expansion Slot

- 1 x PCIe x16 (Gen. 3.0), 4 x PCIe x4, 2 x PCI, 1 x mini-PCIe, 1 x SIM card

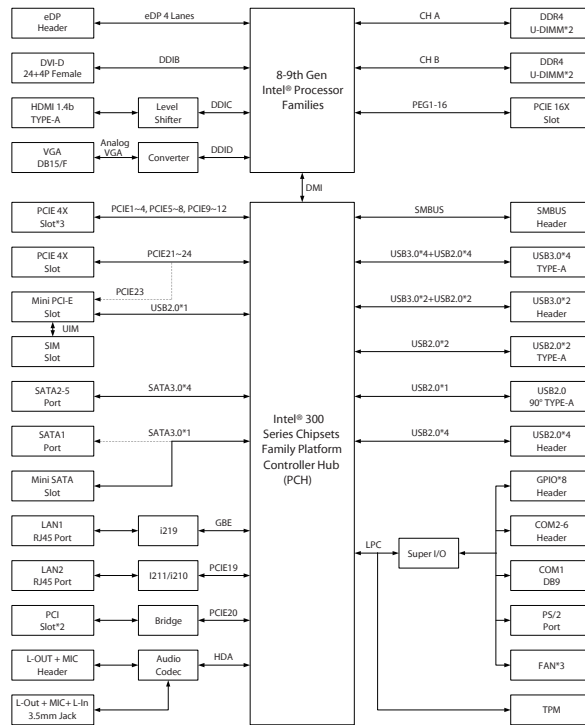
### Rear I/O

- 1 x PS2/2 Combo (mouse and keyboard supported)
- 2 x USB 2.0
- 1 x DVI-D, 1 x VGA, 1 x HDMI
- 1 x COM (by COM1)
- 2 x RJ45
  - LAN 1: Intel® PHY I219-LM Gb LAN (supports iAMT 11.0)
  - LAN 2: Intel® I211-AT Gb LAN
- 4 x USB 3.1 (Gen1)
- 1 x HD audio connector (1 x Line-out + MIC + Line-in 3.5mm Jack)

### Internal I/O

- 4 x USB 2.0
- 1 x USB 2.0 (vertical TYEP-A), 4 x USB 2.0 (header)
- 2 x USB 3.1 (Gen1)

## Block Diagram



- 5 x Serial ports
- 3 x RS232, 1 x RS232/485/422 (by COM3), 1 x RS232/485 (by COM4)
- HA audio:
  - 1 x Audio pin header (Line-out + MIC), 1 x SPDIF out pin header

### Power Requirement

- 1 x 24-pin ATX connect/1 x 8-pin (2 x 4) ATX 12V power connector
- Support both AT and ATX power supply mode

### Dimensions

- 305mm x 244mm (ATX)

### Environment

- Board level operation temperature: -0°C to 60°C
- Storage temperature: -20°C to 75°C
- Relative humidity:
  - 10% to 95% (operating, non-condensing)
  - 5% to 95% (non-operating, non-condensing)

### Certifications

- Meet CE/FCC Class A

## Ordering Information

### Barebone

- **NEX913C (P/N: 6879MBNX9131F)**

ATX, Intel® 8th/9th Coffee Lake Core™ i (up to 95W), Q370, LGA1151, DDR4 x 4 up to 64GB, HDMI/DVI-D/VGA/eDP, 6 x USB 3.0, 7 x USB 2.0, 2 GbE, SATA x 5, 2 x mini-PCIe (SATA/PCIe), COM x 6, 1 x DB9, 1 x RS232/422/485, 1 x RS232/485, 1 x PCIe x16, 4 x PCIe x4, 2 x PCI, ATX