NEX913

INTEL® 8TH/9TH GENERATION (COFFEE LAKE-S, COFFEE LAKE-S REFRESH) CORE™ I9/I7/I5/I3/Pentium



Main Features

- Intel® 8th/9th Generation (Coffee Lake-S, Coffee Lake-S Refresh) Core™ i9/i7/i5/i3, Pentium 14nm LGA 1151 socket Processor, Max. 95W, PCH Q370
- 4 x U-DIMM DDR4 with ECC or non-ECC SO-DIMM 2666MHZ up to 64GB
- Support triple display HDMI, DP, VGA
- 2 x Intel® GbE LAN ports (BOM option: RJ45 x 3), 4 x USB 3.1 (Gen2), 2 x USB 3.1 (Gen1), 4 x USB 2.0, 5 x RS232, 1x RS232/485/422, 4 x SATAIII, 8bit GPIO, HD Audio
- 1 x PCIex16, 2 x PCIex4, 2 x PCIex1, 2 x PCI, 1 x M.2 (2230 E-Key), 1 x M.2 (2280 M-Key)
- TPM (optional)

Product Overview

The NEX913 is an ATX Board. It is equipped with Intel® 8/9th generation Core™ i9/i7/i5/i3/Pentium 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. The NEX913 with Intel® Q370 PCH provides high performance and rich expansion. The SATA3.0 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.

NEX913 operates at a temperature range from 0°C to 60°C, this design is ideal for embedded applications that run in 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™ i9/i7/i5/i3/Pentium LGA 1151 socket Processor, Max. 95W
- Intel® Q370 Express Chipset

Main Memory

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

BIOS

- AMI (UEFI)

Display

- 1 x VGA connector (resolution up to 1920x1080@60Hz).
- 1 x HDMI1.4b connector (resolution Up to 4096 x 2160 @ 24 Hz/ 2560 x 1600 @ 60 Hz, with Digital Audio)
- 1 x DP connector (resolution Up to 4096 x 2160 @ 24 Hz/3840 x 2160 @ 60 Hz, with Digital Audio)

System

- 4 x USB3.1 (Gen2), 2 x USB3.1 (Gen1), 4 x USB2.0
- 5 x RS232, 1 x RS232/485/422 & (COM1, supports 5V/12V/RI optional)
- Realtek ALC887 6Channel HDA Codec
- 1 x Front panel header, 8 bit digital I/O (In/Out programmable), WDT, Chassis Intrusion
- Supports on board TPM 2.0 (optional)
- 3 x Fan connector

Storage

- 4 x SATA III (6.0Gb/s) ports, support RAID 0/1/5/10
- 1 x M.2 2280 M-key (PCIex4/SATA3)

Expansion Slot

- 1 x PCIex16, 2 x PCIex4 (open edge), 2 x PCIex1 (open edge), 2 x PCI
- 1 x M.2 2230 E-key (PCIex1/USB2.0/CNVi)

Rear I/O

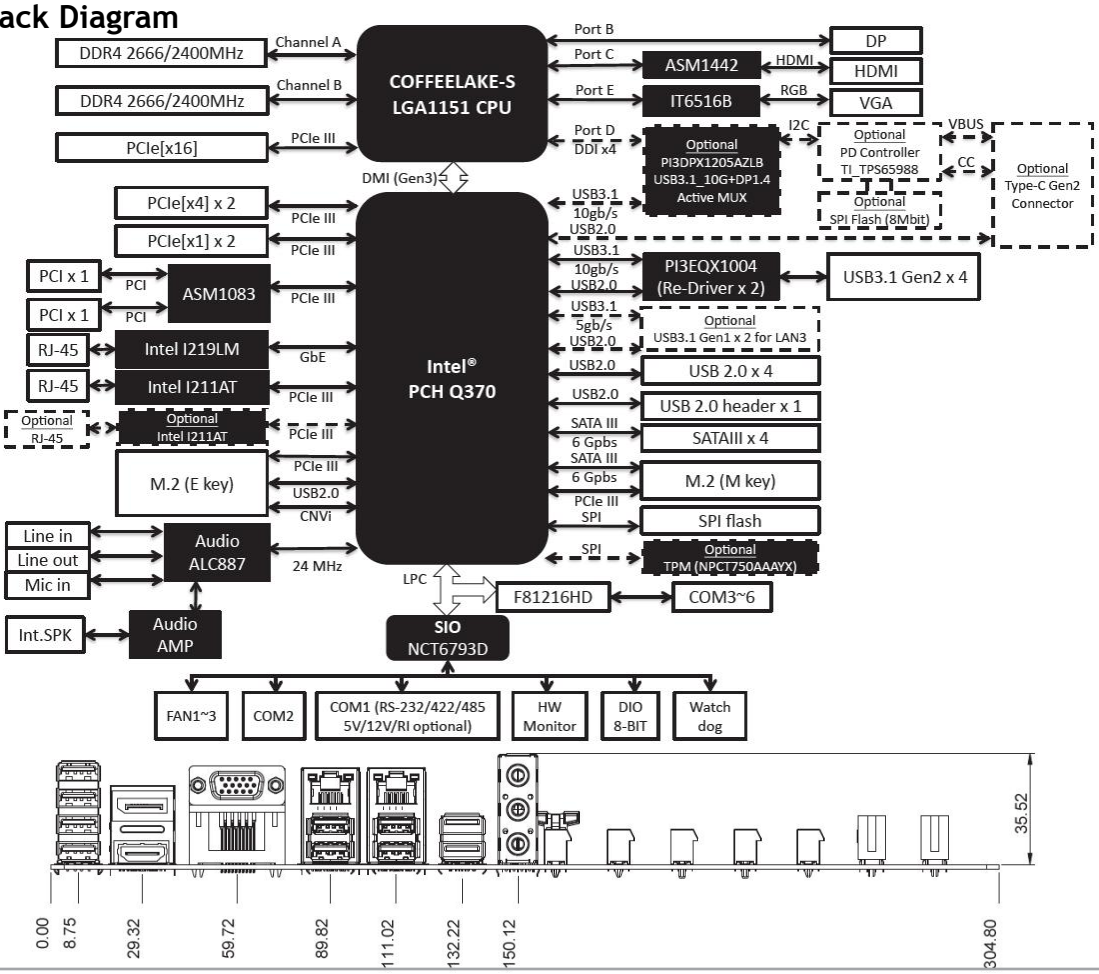
- 1 x 4 deck USB 2.0
- 1 x VGA, 1 x HDMI, 1 x DP
- 2 x RJ45
  - Intel® PHY i219LM Giga LAN x 1 (supports Intel® AMT 12.0)
  - Intel® i211AT Giga LAN x 1, (BOM option: i211AT x 2)
- 4 x USB 3.1 (Gen2), 2 x USB 3.1 (Gen1)
- 1 x HD Audio connector (1 x Line-Out + MIC + Line-In 3.5mm Jack)

Internal I/O

- 2 x USB2.0 (Pin Header)
- 6 x serial ports
  - 5 x RS232, 1 x RS232/485/422 (by COM1)
- 1 x 8-bit Digital I/O interface (In/Out programmable)
- HA Audio:
  - 1 x speaker header (Line-out)

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Black Diagram



Power Requirement

- 1 x 24-pin ATX connect/1 x 8-pin (2x4) ATX 12V Power connector
- Support both AT and ATX power supply mode

Dimensions

- ATX Form Factor, 12”x9.6” (305mm x 244mm)

Environment

- Board level operation temperature: -0˚C to 60˚C
- Storage temperature: -40˚C to 85˚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

- **NEX913 (P/N:6879G0009130F)**

ATX, Intel® 8th/9th Coffee lake Core™ I (up to 95W), Q370, LGA1151, DDR4 x 4 up to 64GB, VGA, HDMI, DP , 4 x USB 3.1 (Gen2), 2 x USB 3.1 (Gen1) ,2 x USB2.0, 3 x GbE LAN , 4 x SATAIII, 5 x RS232, 1 x RS232/422/485, 1 PCIex16, 2 PCIex4, 2 PCI, 2 M.2.

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