NEX 912P

Main Features

- Intel® 7th/ 6th Generation (Kaby Lake-S/Skylake-S) Core™ i7/i5/i3/ Pentium®/Celeron® 14nm LGA1151 socket processor, PCH Q170
- 4 x U-DIMM DDR4 with non-ECC SO DIMM 2133/1867 MHz up to 64GB
- Support triple display 2 x HDMI, VGA

- 2 x Intel® GbE LAN, 10 x USB 3.2 (Gen1), 4 x USB 2.0, 5 x RS232, 1 x RS232/485/422, 4 x SATA 3.0, PS/2 combo port, 8-bit GPIO, HD audio.
- 1 x PCIe x16, 2 x PCIe x4, 4 x PCI slots

Product Overview

The NEX 912P is an ATX board. It is equipped with 7 th/6 th Generation (Kaby Lake S/Skylake S) Intel® Core™ i7/i5/i3/ Pentium® /Celeron® 14 nm LGA 1151 socket processor to support 65W max and Intel® Q170 chipset It comes with four DDR 4 DIMM sockets up to 64 GB DDR 4 2133/1867 MHz with non-ECC support and integrated HD graphic controller. The NEX912P with Intel® Q170 PCH provides high performance and rich expansion. Furthermore it also features an integrated Intel® AMT 11 for easier maintenance.

NEX 912P 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 Support
- 7th/6th Generation (Kaby Lake S/Skylake S) Intel® Core™ i7/i5/i3/ Pentium®/Celeron® 14nm LGA1151 socket processor

Main Memory
- 4 x DDR4 U DIMM memory socket with non-ECC support, up to 64 GB 2133/1867 MHz

BIOS
- AMI (UEFI)

Display
- 1 x VGA connector (resolution up to 1920 x 1200@60Hz)
- 2 x HDMI 1.4 connector (resolution Up to 4096 x 2160@24 Hz)
  - * Tip: Multiple display: (VGA + HDMI, HDMI + HDMI, VGA + HDMI + HDMI)

System
- 10 x USB 3.2 (Gen1), 4 x USB 2.0
- 5 x RS232, 1 x RS232/485/422
- Realtek HDA codec
- 1 x Front panel header, 8-bit digital I/O (in/out programmable), WDT, chassis intrusion
- 2 x Fan connector

Storage
- 4 x SATA 3.0 (6.0Gb/s) ports

Expansion Slot
- 1 x PCIe x16, 2 x PCIe x4, 4 x PCI slots

Rear I/O
- 1 x 4 deck USB 3.2 (Gen1)
- 1 x VGA, 2 x HDMI
- 1 x RS232/455/422
- 2 x RJ45
  - Intel® PHY I219-LM GbE LAN x 1 (supports Intel® AMT 11.0)
  - Intel® I210-AT GbE LAN x 1
- 4 x USB 3.2 (Gen1)
- 1 x 3 ports HD audio Jack (Line, Mic-in, Line-out)

Internal I/O
- 4 x USB 2.0 (pin header)
- 5 x serial ports
  - 5 x RS232
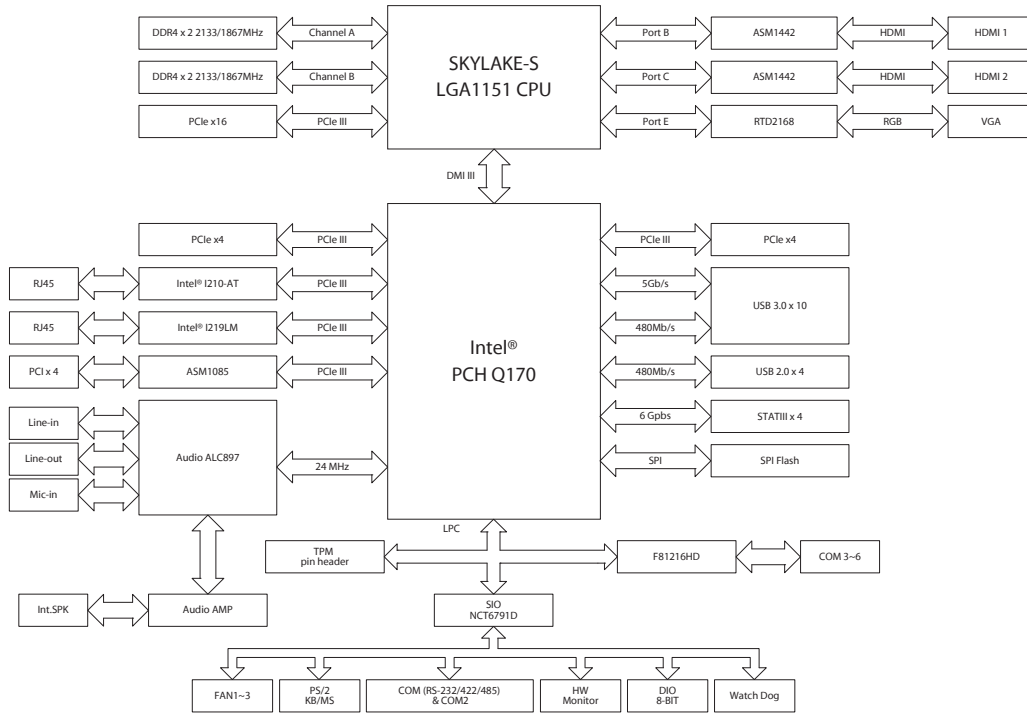- 1 x 8-bit digital I/O interface (in/out programmable)

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

Dimensions
- ATX form factor, 12"x9.6" (305mm x 244mm)

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Block Diagram

Environment

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

- **NEX 912P (P/N: 687ANEX91201F)**
  ATX form factor, 6th/7th Generation Intel® Core™, Q170, LGA1151, 4 x DDR4 U-DIMM, 2 x HDMI, VGA, 10 x USB 3.2 (Gen2), 4 x USB 2.0, 2 x GbE LAN, 4 x SATA 3.0, 5 x RS232, 1 x RS232/422/485, 1 x PCIe x16, 2 x PCIe x4, 4 x PCI