

Main Features

- Intel® 7th/6th Generation Intel® Core™ LGA1151 processor, PCH Q170
- 4 x U DIMM DDR4 with ECC or non-ECC SO DIMM 2400 MHz up to 64GB
- Support triple display 2 x HDMI, VGA
- 2 x Intel® GbE LAN, 10 x USB 3.2 (Gen1), 3 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 Intel® Generation (Kaby Lake S/Skylake S) Intel® Core™ i7/i5/i3/ Pentium® /Celeron® 14 nm LGA 1151 socket processor to support 95W max and Intel® Q170 chipset. It comes with four DDR 4 DIMM sockets up to 64 GB DDR 4 2400 MHz with non-ECC support and integrated HD graphic controller. The NEX 912 A 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 2400MHz

BIOS

- AMI (UEFI)

Display

- 1 x VGA connector (resolution up to 1920 x 1080@60Hz)
- 2 x HDMI 1.4 connector (resolution Up to 4096 x 2340@24 Hz)

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 RS232/485/422
- 2 x RJ45
 - Intel® PHY I219-LM Giga LAN x 1 (supports Intel® AMT 12.0)
 - Intel® I210AT (Giga LAN)
- 4 x USB 3.2 (Gen1)
- 1 x HD audio connector (1 x Line-out + Mic-in + Line-in 3.5mm Jack)

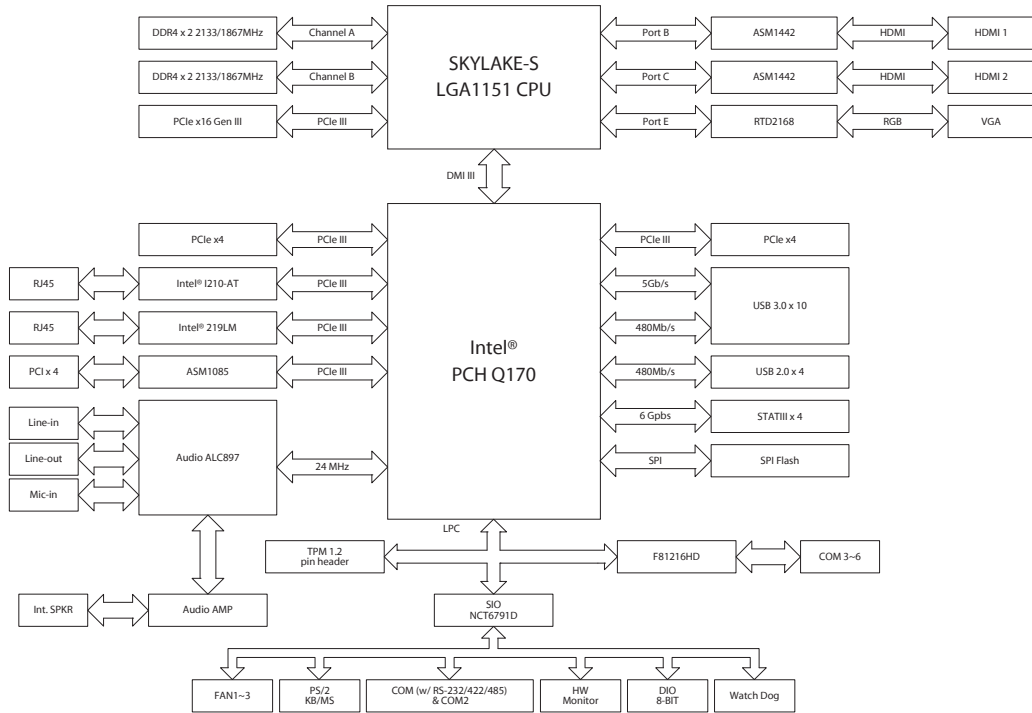
I/O Interface

- USB 2.0: 4 ports by internal pin-header
- Serial: 5 ports RS232 by internal pin-header
- SATA HDD: 4 ports SATA6.0Gb/s, supports RAID 0/1/5/10
- GPIO: supports 4 x GPI and 4 x GPO

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)
- HA audio jack

Block Diagram



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

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

Dimensions

- ATX
- Dimension: 305mm (L) x 244mm (W) (12" x 9.6")

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

♦ NEX 912P (P/N: 687ANEX91201F)

ATX, 7th/6th Generation Intel® Core™ LGA1151 processor, Q170, LGA1151, DDR4 x 4 up to 64GB, 2 x HDMI, VGA, 10 x USB 3.2 (Gen1), 4 x USB 2.0, 2 x GbE LAN, 4 x SATA3.0, 5 x RS232, 1 x RS232/422/485, 1 x PCIe x16, 2 x PCIe x4, 2 x PCI slots