NEX 912

ATX, Socket LGA1151 6th Gen. Intel® Core™ & Celeron® Processor Product Family with Q170, 4 x DDR4, VGA/2 x HDMI, PCIe x16/2 x PCIe x4/4 x PCI, 2 x GbE/10 x USB/6 x COM



Main Features

- Support socket LGA1151 for 6th generation Intel® Core™ i7/i5/ i3 and Intel® Celeron® processors (codenamed Skylake) or next generation Intel® Core™/Celeron® processors
- 4 x DDR4 DIMM Socket, up to 64GB
- Support triple independent display: 2 x HDMI/VGA
- 2 x Intel® GbE, 4 x SATA 3.0, 14 x USB 3.0/2.0, 6 x COM, 4-in/4-out GPIO, HD Audio
- 1 x PCIe x16, 2 x PCIe x4, 4 x PCI
- TPM supported
- Support AT/ATX mode by ATX power input

Product Overview

NEX 912 is an industrial motherboard with standard ATX form factor, which supports 6th generation Intel® Core™ i7/i5/i3 processors and Intel® Celeron® processors (codenamed Skylake) and as well as next generation Intel® Core™/Celeron® processors. NEX 912 supports dual channel DDR4 2133/1867MHz memory in four long DIMM slots up to 64GB system memory and PCIe x16 (gen. 3.0).

The Q170 PCH supports triple displays by three DDI (digital display interfaces) using among two HDMI and one VGA ports. Intel® Q70 PCH manages up to 4 x SATA 3.0 with RAID 0/1/5/10 supported and performs up to 14 x USB (10 x USB 3.0/4 x USB 2.0) ports; and dual Intel® GbE ports and up to six Series ports including one supporting RS-232/422/485. NEX 910 supports two PCIex4 and 4 x PCI slots. TPM function is as optional. NEX 912 could be integrated into 1U/ 2U/ 4U rack mounted chassis or desktop tower as completed system solution for widely industrial applications in the new era of digital infrastructure with NEXCOM.

Specifications

CPU Support

- Socket LGA1151, Intel® 6th and next generation Core™ i7/i5/i3 processor and Intel® Celeron® processors

Main Memory

- 4 x 288-pin dual channel long DIMMs support DDR4 2133/1867MH up to 64GB, non-ECC, un-buffered system memory

Chipset

- Intel® Q170 PCH

BIOS

- AMI system BIOS
- Plug and play support

On-board LAN

- 2 x RJ45 connectors with LED
- LAN1: Intel® PHY I219LM GbE LAN (support AMT 11.0)
- LAN2: Intel® I211AT GbE LAN
- Support PXE boot from LAN, wake on LAN function

Display

- 2 x HDMI 1.4 connector (resolution up to 4096 x 2160@24Hz)
- 1 x VGA (resolution up to 1920 x 1200@60Hz)

Expansion Slot

- 1 x PCIe x16 (gen. 3.0)
- 2 x PCIe x4
- 4 x PCI

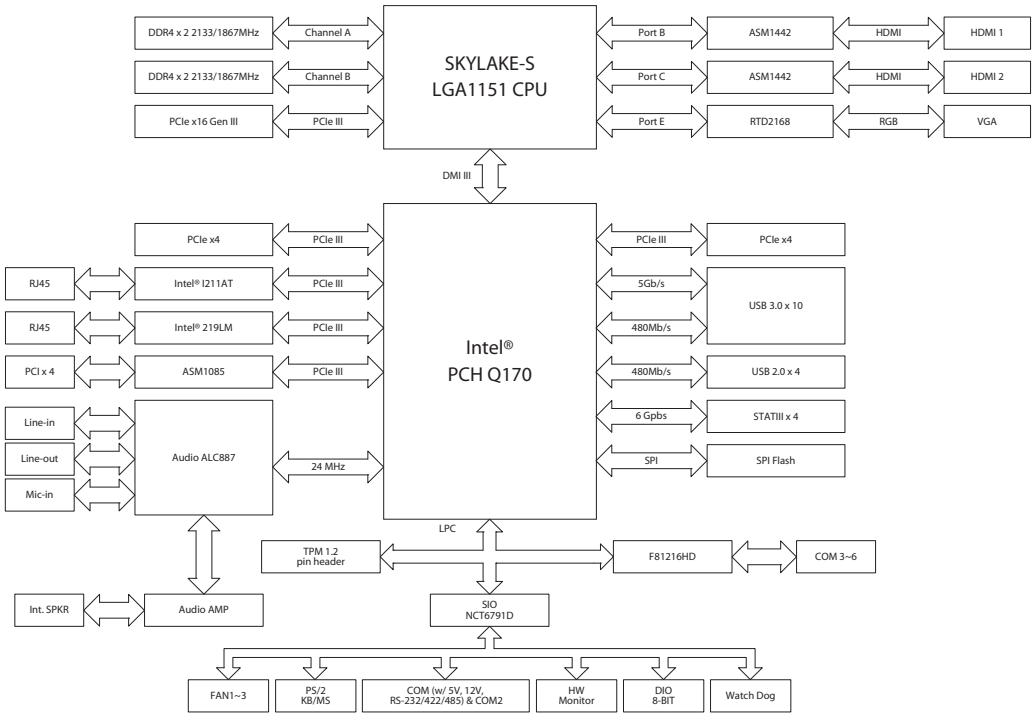
Edge I/O Interfaces

- 2 x HDMI
- 1 x VGA
- 2 x RJ45 connectors with GbE transformer inside & LED
- 10 x USB 3.0 (blue)
- 2 x USB 2.0 (black)
- 1 x RS-232/422/485 DB-9 connector (COM1)
- 1 x Combo PS/2 KB and MS
- 1 x Audio Jack: Line-in/Line-out/Mic-in

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

Block Diagram



Interface
- 1 x Pin header for TPM
- 1 x 4-pin CPU fan connector; 2 x 4-pin chassis fan connector
- 1 x Front panel header; 1 x clear CMOS jumper
- 1 x Chassis Intrusion
- 1 x Speaker header (Line-out)
- 1 x BIOS flash header (2x4P, P=1.27mm)

System Monitor
- 4 voltage (for +3.3V/+5V, +12V, Vcore)
- 2 temperatures (CPU, system temperatures)
- 2 fans speed (CPU and system fans)

Power Requirements
- 1 x 24-pin ATX connector,
- 1 x 8-pin ATX 12V power connector

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

Environment
- Board level operating temperatures: 0˚C to 60˚C
- Storage temperatures: -40˚C to 85˚C
- Relative humidity:
  - 0% to 90% (operating, non-condensing)
  - 5% to 95% (non-operating, non-condensing)

Certifications
- Meet CE/FCC Class A

Ordering Information

- **NEX 912 (P/N: 10G00091200X0)**
  ATX, socket LGA1151 6th gen. Intel® Core™ & Celeron® processor product family with Q170, 4 x DDR4, VGA/2 x HDMI, PCIe x16/ 2 x PCIe x4/4 x PCI, 2 x GbE /10 x USB/6 x COM
- **NEX 912-10PBK (P/N: 10G00091201X0)**
  10-in-1 pack, ATX, socket LGA1151 6th gen. Intel® Core™ & Celeron® processor product family with Q170, 4 x DDR4, VGA/2 x HDMI, PCIe x16/2 x PCIe x4/4 x PCI, 2 x GbE /10 x USB/6 x COM

We reserve the right to change specifications and product descriptions at any time without prior notice.