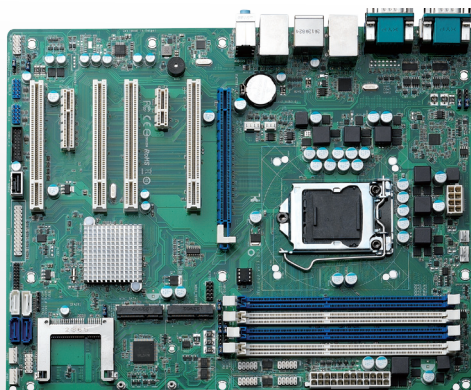# NEX 980

ATX, Socket LGA1155 3rd/ 2nd Generation Intel® Core™ i7/ i5/ i3, Q77
4DDR3, DP/ HDMI/ VGA, PCIe x16/ PCIe x4/ 4PCI/ PCIe x1/ mPCIe, mSATA/ CFast

Main Features

- Support Socket LGA 1155 for 3rd/ 2nd Generation Intel® Core™ i7/ i5/ i3, Celeron Processors
- 4x DDR3 DIMM Socket up to 32 GB
- Support DisplayPort/ HDMI/ VGA multiple displays

- 2 x Intel® GbE, 4 x SATA3.0/ 2.0, mSATA, CFast, 12 x USB3.0/ 2.0, 6 x COM, 8 x GPIO
- 1 x PCIe x16, 1 x PCIe x4, 1 x PCIe x1, 1 x mPCIe, 4 x PCI (v2.3)
- Support AT/ ATX mode by ATX Power Input

Product Overview

NEX 980 is an industrial motherboard with Standard ATX form factor, which support 3rd. and 2nd. Generation Intel® Core™ i7/ i5/ i3 Celeron processors. NEX 980 support dual channel DDR3 2133/ 1600/ 1333/ 1066MHz memory in four long DIMMs up to 32GB system memory and PCIex16 (3.0/ 2.0 by CPU)

The Q77 PCH support multiple displays by three DDI (digital display interfaces) by HDMI/ DP ports as well as legacy VGA. Intel Q77 PCH manages up to 2 x SATA 3.0/ 2 x SATA 2.0 with software RAID 0/ 1/ 5/ 10 supported and performs up to 12 x USB (4 x USB3.0/ 8 x USB2.0) ports. NEX 980 support PCIe x4, PCIe x1, mPCIe, legacy 4 x PCI slots, dual Intel GbE ports and up to 6 x COM incl. 2 x RS-232/ 422/ 485. NEX 980 could be integrated into 1U/ 2U/ 4U rack mounted chassis or Desktop Towers as completed system solution for widely industrial applications in the new era of digital infrastructure with NEXCOM.

Specifications

CPU Support
- Socket LGA1155, 3rd. or 2nd. Generation Intel® Core™ i7/ i5/ i3, Celeron processors

Main Memory
- 4 x 240-pin dual channel long DIMMs support DDR3 1066/ 1333/ 1600/ 2133Mhz up to 32GB system memory

Chipset
- Intel® Q77 Platform Controller Hub

BIOS
- AMI BIOS UEFI
- Plug and play support

On-board LAN
- 1 x Intel® 82579V/ LM PHY for AMT 8.0
- 1 x Intel® 82583V PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2 x RJ45 with LEDs

Display
- 3rd or 2nd Generation Intel® Core™ socket LGA1155 processors Integrated HD graphics
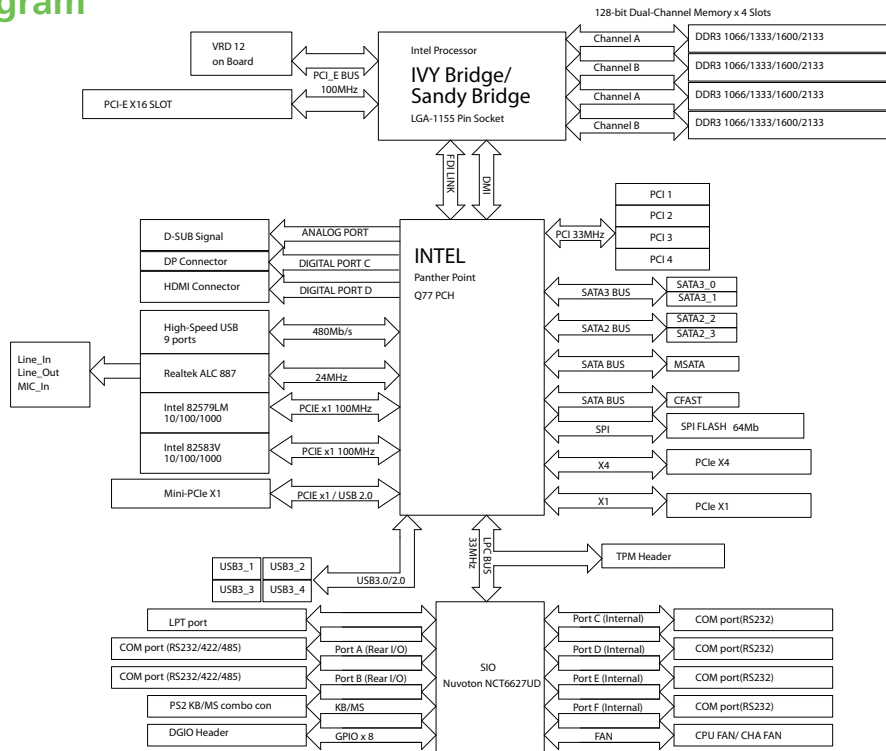- 1 x HDMI
- 1 x DisplayPort
- 1 x VGA

Expansion
- 1 x PCIe x16 (Gen. 3.0/ 2.0 by CPU)
- 1 x PCIe x4
- 1 x PCIe x1
- 4 x PCI (v2.3)

Edge I/O Interfaces
- 1 x Combo for PS2 KB/MS
- 2 x stack DB9 for COM1 & COM2
- 1 x DisplayPort
- 1 x HDMI with dual stack USB 2.0 (black)
- 1 x VGA
- 2 x RJ45 with dual stack USB 3.0 (blue) and dual stack USB 2.0 (black) connectors
- Line-In/ Line-Out/ MIC phone jack

Block Diagram

I/O Interface

- USB 3.0: 4 ports (2 x USB3.0 on edge I/O, 2 x internal box-header)
- USB 2.0: 8 ports (4 x USB2.0 on edge I/O, 4 x internal box-header)
- Serial: 6 ports (default 2 x RS-232 pre-selected RS422/ 485 in BIOS, 4 x RS-232 by internal pins-header)
- SATA HDD: 4 ports, port 0, 1 support SATA 3.0, port 2, 3 support SATA 2.0, dual SATA Power by 2 x 4xpins
- Support Software RAID 0/ 1/ 5/ 10 and Intel® Matrix Storage
- GPIO: Supports 4xGPI and 4 x GPO with TTL level (5V or 12V by Jumper)

Interface

- On-board buzzer x 1
- 9 x pins system header for Power LED/ Power On/ Reset/ HDD LED
- 1 x 4-pin fan connector (for CPU); 1x 3-pin fan connectors (for CPU or System)
- On-chip RTC with battery/ CR2032 backup holder onboard

System Monitor

- 4 Voltages (+3.3V, +5V, +12V, Vcore)
- 2 Temperatures (For CPU and System)
- 3 FAN speed monitors (1 for CPU and 2 for Chassis Fan/ System)

Power Input

- Support AT/ ATX mode
- Standard ATX 24-pin connector for +12V/ +5V/ +3.3V/ +5Vsb/ -12V
- ATX 4-pin connector for +12V

Dimensions

- Micro ATX
- Dimension: Lx W, 305mm x 244mm; 12"x 9.6"

Environment

- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications

- Meet CE
- Meet FCC

Ordering Information

- **NEX 980-10PBK (P/N : 10G00098001X0)**

  Bulk-Packed 10 x pcs ATX, LGA1155 of 3rd/ 2nd Generation Intel® Core™ i7/ i5/ i3, Celeron processors, Q77 with 4DDR3/ DIMM , HDMI/ DP/ VGA, PCIe x16/ PCIe x4/ PCIe x1/ 4PCI/ mPCIe, 4SATA3.0/ 2.0, 12USB3.0/ 2.0, 2GbE, 6COM, mSATA, CFast and ATX Power Input

NEXCOM

Industrial Mother Board

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

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