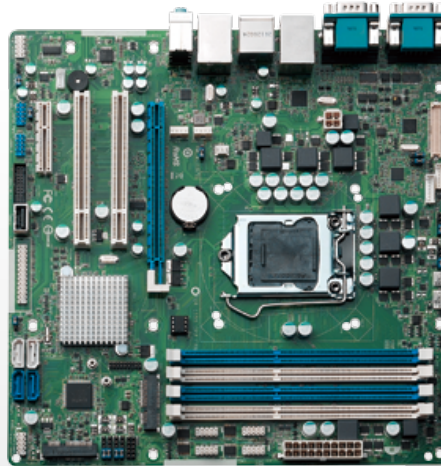


# NEX 883

Micro-ATX, Socket LGA1155 3rd/ 2nd Generation Intel® Core™ i7/i5/i3, Q77  
4x DDR3, DP/ HDMI/ DVI-I, PCIe x16/ PCIe x4/ 2x PCI/ mPCIe, mSATA



## Main Features

- Support Socket 1155 for 3rd./ 2nd. Generation Intel® Core™ i7/i5/i3, Celeron Processors
- 4x DDR3 DIMM Socket up to 32 GB
- Support HDMI/ DVI-I/ DisplayPort dual displays
- 2x Intel® GbE, 4x SATA3.0/ 2.0, mSATA, 12x USB3.0/ 2.0, 6x COM, 8x GPIO
- 1x PCIe x16, 1x PCIe x4, 1x mPCIe, 2x PCI (v2.3)
- Support AT/ ATX mode by ATX Power Input

## Product Overview

NEX 883 is an industrial motherboard with Micro-ATX form factor, which support 3rd and 2nd Generation Intel® Core™ i7/i5/i3 and Celeron® processors. NEX 883 support dual channel DDR3 2133/1600/1333/1066MHz memory in four long DIMM slots up to 32GB system memory and PCIe16 (3.0/ 2.0 by CPU)

The Q77 PCH support multiple displays by three DDI (digital display interfaces) for HDMI/ DVI-I (VGA) / DP (shared LVDS) ports. 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 883 support PCIe4, mPCIe, legacy 2 x PCI slots, dual Intel GbE ports and up to 6x Series ports incl. 2x RS-232/ 422/ 485 pre-selected in BIOS setting. NEX 883 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 LGA1155, 3rd or 2nd Generation Intel® Core™ i7/i5/i3, Celeron® processors

### Main Memory

- 4x 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

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

### Display

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

### Expansion

- 1x PCIe x16 (Gen. 3.0/ 2.0 by CPU)
- 1x PCIe x4
- 2x PCI (v2.3)

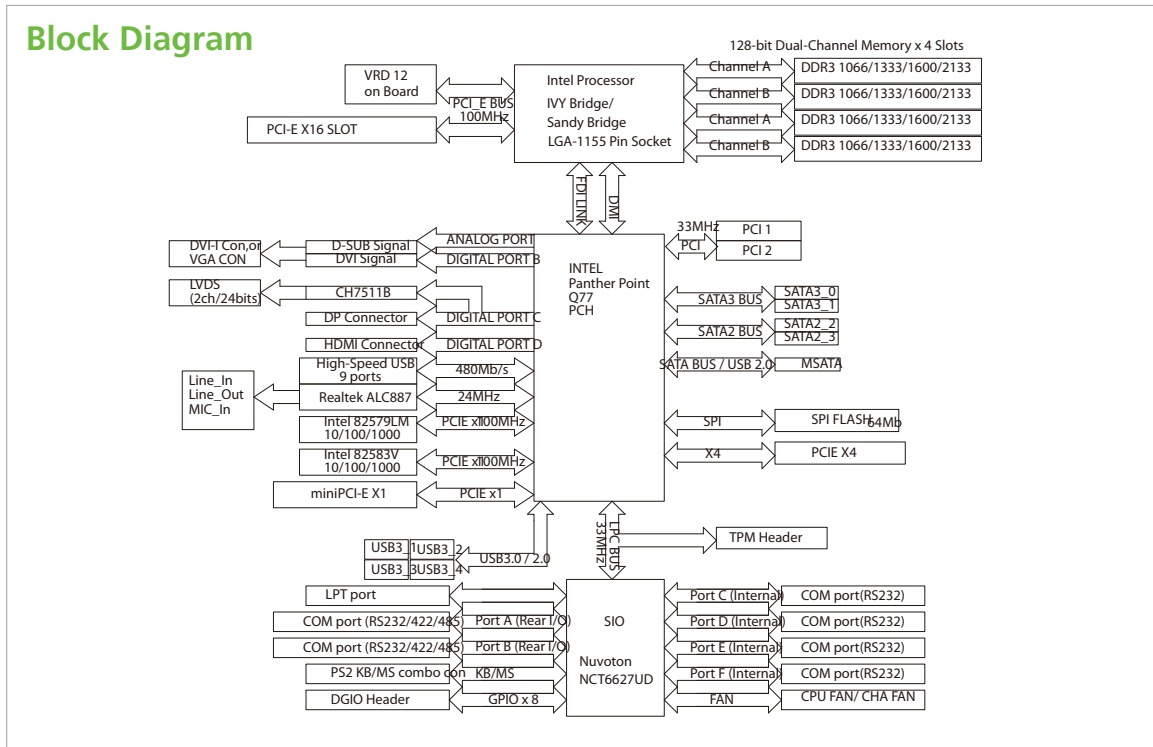
### Edge I/O Interfaces

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

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## Block Diagram



### I/O Interface

- USB 3.0: 4 ports ( 2x USB3.0 on edge I/O, 2x internal box-header)
- USB 2.0: 8 ports ( 4x USB2.0 on edge I/O, 4x internal box-header)
- Serial: 6 ports (default 2x RS232 pre-selected RS422/485 in BIOS, 4 x RS232 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 2x 4Pins
- Support Software RAID 0/ 1/ 5/ 10 and Intel® Matrix Storage
- GPIO: Supports 4 x GPI and 4 x GPO with TTL level (5V or 12V by Jumper)

### Interface:

- On-board buzzer x1
- 9x pins system header for Power LED/ Power On/ Reset/ HDD LED
- 1x 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, 244mm x 244mm; 9.6" 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 883-10PBK (P/N : 10G00088301X0)

Bulk-Packed 10x pcs u-ATX, LGA1155 3rd/ 2nd Generation Intel® Core™ i7/ i5/ i3, Celeron processors, Q77 with 4x DDR3/ DIMM, HDMI/ DP/ DVI-I, PCIe x16/ PCIe x4/ 2PCI/ mPCIe, 2x SATA3.0/ 2x SATA 2.0, 4x USB 3.0/ 8x USB 2.0, 2GbE, 6COM, mSATA, ATX Power Input

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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