



Main Features

- 2nd generation Intel® Core™ processor family
- Intel® QM67 chipset
- Two 204-pin SO-DIMM socket supports up to 8 GB DDR3 1066/1333 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (2 x DF13 20-pin 18/24/36/48-bit dual channel)
- 1x mini-PCIe, 1x PCIe x16 slot
- 2x Intel® Gigabit Ethernet
- 4x SATA
- 10x USB, 4-in/4-out GPIO, Mic-in , Line-out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

Product Overview

The NEX 607 is a Mini-ITX board with 2nd generation Intel® Core™ processor family, which supports DDR3 1066/1333 memory and is equipped with integrated graphics controller, Intel® HD Graphics 3000. It makes NEX 607 an ideal multimedia solution for large, multi-display applications. Geared with Intel® QM67 chipset, NEX 607 also provides four SATA, four serial ports, ten USB 2.0 ports, two Gigabit Ethernet LAN port, one PCIe x16 slot, one mini-PCIe interface for applications.

Specifications

CPU Support

- Support 2nd generation Intel® Core™ processor family

Processor	i7-2710QE	i5-2510E	i3-2330E	Celeron® B810
# of Core	4	2	2	2
Clock Speed	2.1GHz	2.5GHz	2.2GHz	1.6GHz
Max. TDP	45W	35W	35W	35W

Main Memory

- Two 204-pin SO-DIMM socket supports up to 8 GB DDR3 1066/1333MHz SDRAM Chipset

Chipset

- Intel® QM67 chipset

BIOS

- AMI BIOS
- Plug & play support
- Advanced power management
- Advanced configuration & power interface

On-board LAN

- 2x Intel® PCI Express Gigabit Ethernet
- Support Boot From LAN (PXE)
- 2x RJ45 with LED

Display

- 2nd generation Intel® Core™ processor integrated Intel® HD Graphics 3000 engine. Intel® HD Graphics concluding high-performance graphics and media processing is built in the processor, which is capable of delivering sophisticated graphics for large, multi-display applications.
- Analog VGA interface: 1 x VGA connector
Resolution up to 2048x1536 75Hz
- DVI interface: 1 x DVI-I connector
Resolution up to 1920x1200
- HDMI interface: 1 x HDMI connector
- LVDS1 interface: Dual LVDS panel, 2xDF13 20-pin LVDS connector for internal connection
- LVDS2 interface (option, Through SDVO w/CH7308):
Dual LVDS panel, 2x DF13 20-pin LVDS connector for internal connection
- CCFL interface: 2 x CCFL for LCD Panel Backlight Inverter

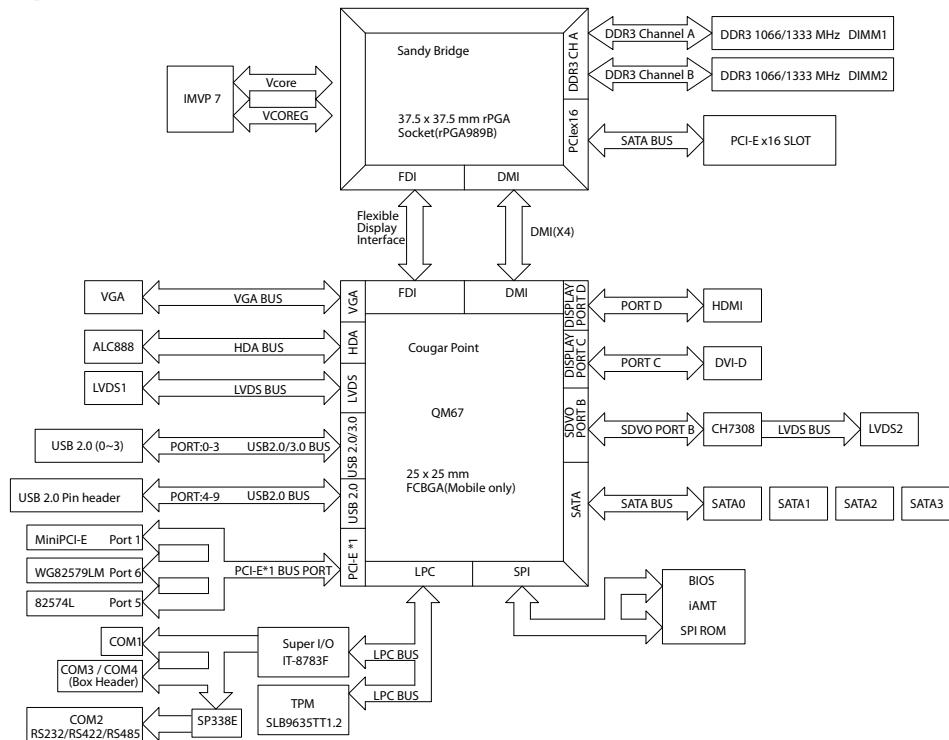
Audio

- Realtek ALC886 CODEC for High Definition
- 1x phone jack for Mic-In.
- 1x phone kack for Line-out .
- 1x 4 2.0 pitch pin header for Line-In.
- 1x 5 pin 2.0 pitch pin header for speak-out

Expansion

- 1x mini-PCIe
- 1x PCIe x16

Block Diagram



I/O Interface

- Serial port: 4 port
COM1: RS232 DB-9 male connector on edge I/O
COM2: RS232/422/485 DB-9 male connector on edge I/O
COM3,4: RS232 2x5/2.54mm box header
- USB 2.0: 10 ports
4 ports edge connector
6 ports by 2.0mm pin connector
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board power LED and HDD active LED pin header
- 1x 4-pin fan connector (for CPU)
- 1x 3-pin fan connector (for system)
- 1x keyboard/ mouse pin header
- On board buzzer/ SMBus2.0/ reset SW/ on & off switch button

Edge I/O Interface

- 1 x DVI/ VGA connector
- 1x HDMI connector
- 2x dual stack USB and RJ45 connector
- 1x dual stack serial port connector
- 1x Mic-in and Line out phone jack

Watchdog Timer

- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage

- 4x SATA port

System Monitor

- Monitoring of 4 voltages and 2 temperatures and 2 fan speed detection
- 4 voltages (Vcore, +12V, +3.3V, 5V)
- 2 temperatures (CPU, System)
- 2 fan speed detection

On-board RTC

- On-chip RTC with battery backup
- 1x External Li-Ion battery

Power Input

- Support AT and ATX mode

Power Requirements

- Power requirement: +12V DC input
- One 4-pin power connector

Dimensions

- Mini-ITX M/B form factor
- 170mm (L) x 170mm (W)

Environment

- Operating temperatures: -15°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: operating 10% to 90%, non-condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

• NEX 607 (P/N: 10G00060700X0) RoHS Compliant

Mini-ITX, 2nd generation Intel® Core™ processor family and based on Intel® integrated graphics engine w/ VGA/dual channel LVDS/ 10x USB2.0/ 4x COMs/ 1x Mini-PCIe/ 1x PCIe x16/ 2x Gigabit LAN/ 4x SATA, DC 12V input