NEX 607

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)

- 1 x Mini-PCIe, 1 x PCIex16 slot
- 2 x Intel® Gigabit Ethernet
- 4 x SATA
- 10 x USB, 4-in/4-out GPIO, Mic-in , Line-out
- Serial port: 3 x RS232, 1 x 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 USB2.0 ports, two Gigabit Ethernet LAN port, one PCIex16 slot, one Mini-PCIe interface for applications.

Specifications

CPU Support
- Support 2ndgeneration 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
- 2 x Intel® PCI Express Gigabit Ethernet
- Support Boot From LAN (PXE)
- 2 x 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 2048 x 1536 75Hz
- DVI interface: 1 x DVI-I connector
  Resolution up to 1920 x 1200
- HDMI interface: 1 x HDMI connector
- LVDS1 interface: Dual LVDS panel, 2 x DF13 20-pin LVDS connector for internal connection
- LVDS2 interface (option, Through SDVO w/ CH7308):
  Dual LVDS panel, 2 x 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
- 1 x phone jack for Mic-in.
- 1 x phone kack for Line-out .
- 1 x 4 2.0 pitch pin header for Line-In.
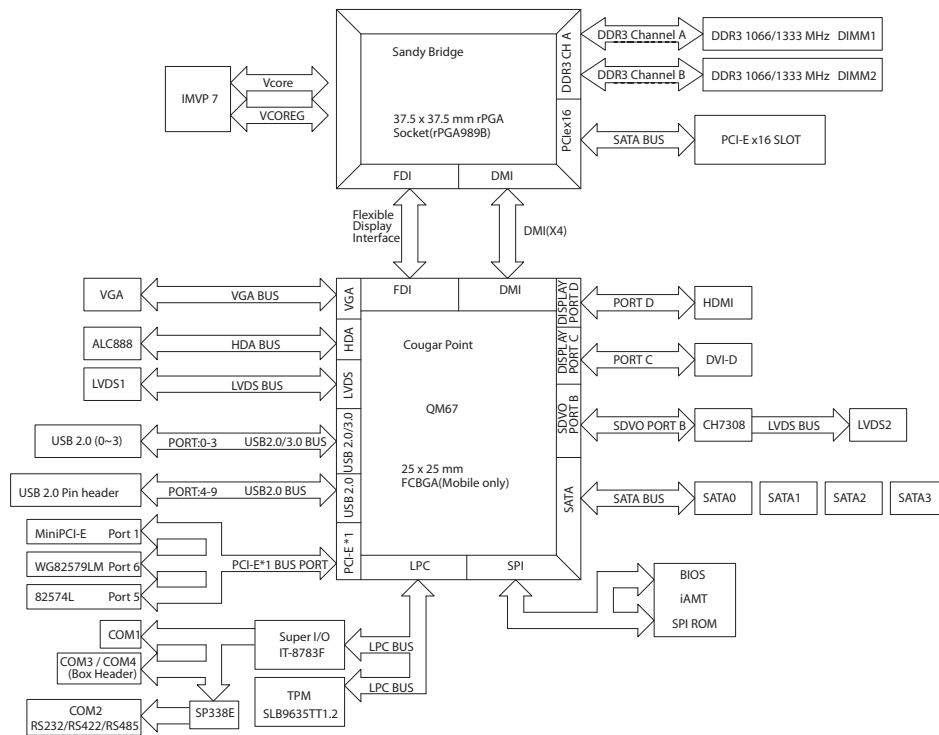- 1 x 5 pin 2.0 pitch pin header for speak-out

Expansion
- 1 x Mini-PCIe
- 1 x PCIex16

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

Block Diagram

COM3,4: RS232 2 x 5/2.54mm box header
- USB2.0: 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 (0/5V)
- On-board power LED and HDD active LED pin header
- 1 x 4-pin fan connector (for CPU)
- 1 x 3-pin fan connector (for system)
- 1 x keyboard/mouse pin header
- On board buzzer/SMBus2.0/reset SW/o n & off switch button

Edge I/O Interface
- 1 x DVI/VGA connector
- 1 x HDMI connector
- 2 x dual stack USB and RJ45 connector
- 1 x dual stack serial port connector
- 1 x 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
- 4 x 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
- 1 x 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/10 x USB2.0/4 x COMs/1 x Mini-PCIe/1 x PCIex16/2 x Gigabit LAN/4 x SATA, 12VDC input

- **CPU Cooler NEX 607 (P/N: 5050300544X00)**
  Optional CPU cooler for NEX 607 and rPGA 988 socket NEX 609