

Main Features

- ◆ Intel® 7th/6th Generation Core™ i7/i5/i3, LGA1151 socket processor, max. 65W TDPs, LGA1511, H110
- ◆ Support two DDR4 SO-DIMM socket
- ◆ Support multiple display from two HDMI, LVDS
- ◆ 2 x SATA III, 2 x GbE LAN, 2 x COM, 4 x USB 3.0, 4 x USB 2.0, 8-bit DIO, HD Audio, 1 x PCIe 2.0 x1, 2 x mini-PCIe
- ◆ DC input +12V
- ◆ Low profile system
- ◆ Optional: Wi-Fi module/TPM module

Product Overview

NEX 614B is Mini-iTX PC based on Intel® 7th/6th Generation Core™ i7/i5/i3, LGA1151 socket processor (codenamed “Skylake/Kabylake”) to support 65W CPU. NEX 614B operates temperature range from 0°C to 60°C. This is aimed at embedded applications for outdoor or semi-outdoor environment. Such as kiosk, small smart equipment, outdoor systems installed in harsh environments, home automation and thin clients...etc.

NEX 614B supports a maximum memory of 32GB DDR4 SDRAM. Also, it offers display outputs of HDMI with 4K/2K@30Hz, in order to provide the flexibility of supporting a range of peripherals and high resolution.

Specifications

CPU Support

- ◆ Intel® 7th/6th Generation Core™ i7/i5/i3, LGA1151 socket processor, max. 65W TDPs

Display

- ◆ 2 x HDMI connector (resolution up to 4096 x 2160 @ 24 Hz/2560 x 1600 @ 60 Hz)
- ◆ LVDS connector (resolution up to 1920x1080@60Hz)

System

- ◆ 2 x DDR4 2133 SO-DIMM sockets support up to 32GB, non-ECC
- ◆ 2 x SATAIII 6Gb/s connector
- ◆ 1 x SATA power connector
- ◆ 2 x Realtek RTL8111G PCIe GbE LAN controller
- ◆ 2 x Dual deck USB 3.0
- ◆ 2 x USB 2.0 2 x 5 2.0mm header
- ◆ 2 x Serial ports:
 - 1 x RS232/485/422 by COM1
 - 1 x RS232 by COM2
- ◆ 1 x 8-bit DIO header (4in/4out)
- ◆ WDT 1~255 steps by software program
- ◆ 1 x TPM connector
- ◆ Support Realtek HD Audio:
 - 2 x HD Audio jack (Line-out, Mic-in)
 - 1 x Speaker out header (4Ω/2W)
 - 1 x Front panel connector

- ◆ 1 x DC jack(5.5/2.5mm) , 1 x ATX 4-pin Power connector

BIOS

- ◆ 64Mbit Flash ROM x 1, AMI BIOS

Storage device

- ◆ 2 x SATA III 6.0Gb/s

Expansion

- ◆ 1 X PCIe 2.0 [x1](Gen2)
- ◆ 2 x mini-PCI express slot:
 - 1 x Half size, support PCIe + USB interface
 - 1 x Full size, support mSATA (default)/(PCIe+USB optional)

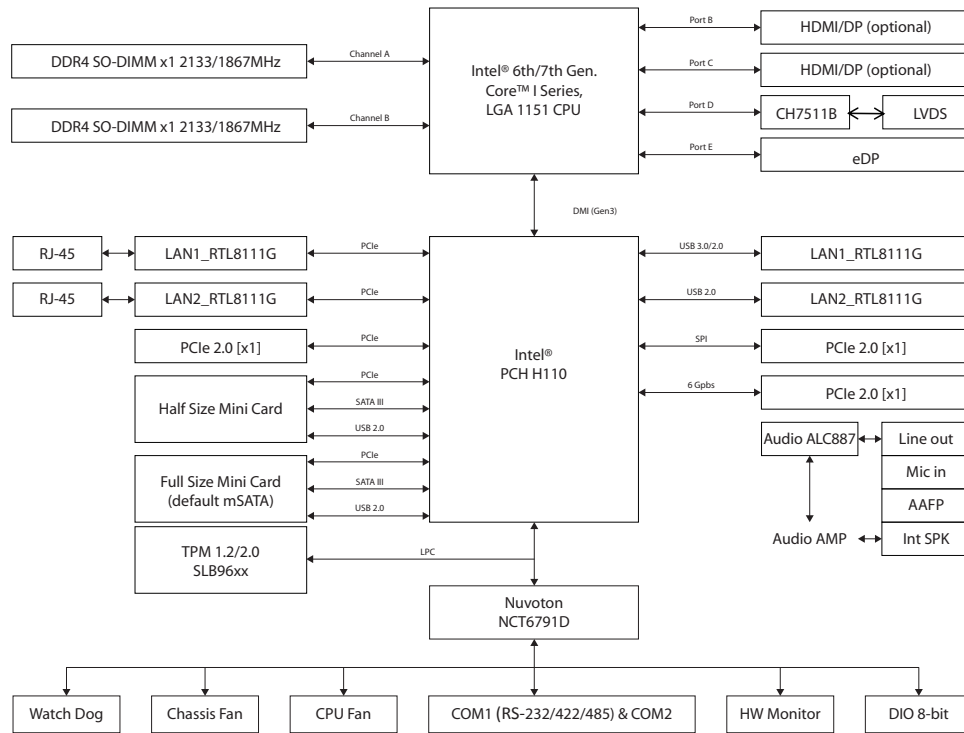
Power Requirements

- ◆ 12V DC input:
 - DC lockable jack or ATX 4-pin power connector
 - AT/ATX mode select jumper (optional)

Rear I/O

- ◆ 1 x DC power jack
- ◆ 2 x HDMI
- ◆ 2 x USB 3.0 (double deck)
- ◆ 2 x GbE controller
- ◆ 1 x MIC-in
- ◆ 1 x Line-Out

Block Diagram



Mechanical & Environment

- Operating temperature : 0°C~60°C)
- Storage temperature : -20°C~80°C)
- Relative humidity : operating 10%~90%, non-condensing

Dimensions

- Display Head: Mini-ITX, 6.7" x 6.7" (170mm x 170mm)

Operating System

- Windows® 7 32/64bit, 8.1, 10 64-bit & Fedora
- * Notice: 7th processor support Windows 10 64-bit only

Certifications

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **NEX 614B (P/N: 10G00062100X0)**
Intel® 7th/6th Generation Core™ i7/i5/i3, LGA1151 socket processor, max. 65W TDPs, H110, 2 x DDR4, 2 x HDMI, 4 x USB 3.0, 4 x USB 2.0, 2 x GbE, 2 x SATA, 2 x RS232, 2 x mini-PCIe, 1 x PCIe x1, 12VDC, 0~ 60°C

Optional Accessories

- **12V, 60W power adapter w/o power cord (35 W CPU only) (P/N: 7400060028X00)**
- **12V, 80W power adapter w/o power cord (35/65 W CPU) (P/N:TDB)**
- **COM port cable (P/N: 603COM0093X00)**
- **USB cable (P/N: 603USB0084X00)**
- **SATA cable (P/N: 60233ATA48X00)**
- **SATA power cable (P/N: 60233PW168X00)**