

Main Features

- ◆ Intel® Skylake-U (6th generation Core™ i7/i5/i3) processor, 15W~25W TDPs, BGA 1356
- ◆ Support two DDR4 SO-DIMM socket
- ◆ Support multiple display from DP1.2/HDMI1.4/LVDS
- ◆ 2 x SATAIII, 2 x GbE LAN, 4 x COM, 4 x USB 3.0, 2 x USB 2.0, 8bit DIO, HD audio, 1 x PCIe 2.0 x1, 1 x M.2, 1 x mini-PCIe
- ◆ DC input +12V
- ◆ Low profile system
- ◆ Optional:
 - Wi-Fi module
 - M.2 storage

Product Overview

NEX614A is mini-ITX PC onboard Intel® Skylake-U (support for Intel® Core™ i7-6600U/i5-6300U/i3-6100U/Celeron® 3955U) processor to support 15~25W CPU. NEX614A operates temperature range from 0°C ~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.

NEX614A supports a maximum memory of 32GB DDR4 SDRAM. Also, it offers display outputs of two DP or HDMI with 4K/2K@60Hz, in order to provide the flexibility of supporting a range of peripherals and high resolution.

Specifications

CPU Support

- ◆ Intel® Skylake-U (support for Intel® Core™ i7-6600U/ i5-6300U/ i3-6100U/Celeron® 3955U (default) processor TDP: 15W~25W)

Display

- ◆ 1 x DP connector (DP1.2 resolution up to 4096 x 2304@60Hz)
- ◆ 1 x HDMI connector (HDMI1.4 resolution up to 4096 x 2160@60Hz)
- ◆ 1 x LVDS connector (resolution up to 1920 x 1080@60Hz)
LVDS (colay eDP, default LVDS)

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 GbE LAN controller
- ◆ 2 x dual deck USB 3.0
- ◆ 1 x USB 2.0 header
- ◆ 4 x Serial ports:
 - 1 x RS232/485/422 by COM1(DB9)
 - 3 x RS232 by COM2~4 (+5V/R/+12V select by COM 2)
- ◆ 1 x 8-Bit DIO header (by BIOS setting)
- ◆ WDT 1~255 steps by software program
- ◆ Support Realtek HD audio:
 - 1 x HD audio jack (Line-out)
 - 1 x Front panel connector
- ◆ 1 x DC jack (5.5/2.5mm), 1 x ATX 4-pin power connector

Storage Device

- ◆ 2 x SATA III 6.0Gb/s (SATA2 3955U not support)
- ◆ 1 x M.2 Key-M, 2242/2280 (default), only support SATA

Expansion

- ◆ 1 x mini-PCI express slot (half/full_default) size, support PCIe/USB interface
- ◆ 1 x PCIe x4 slot

Power Requirements

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

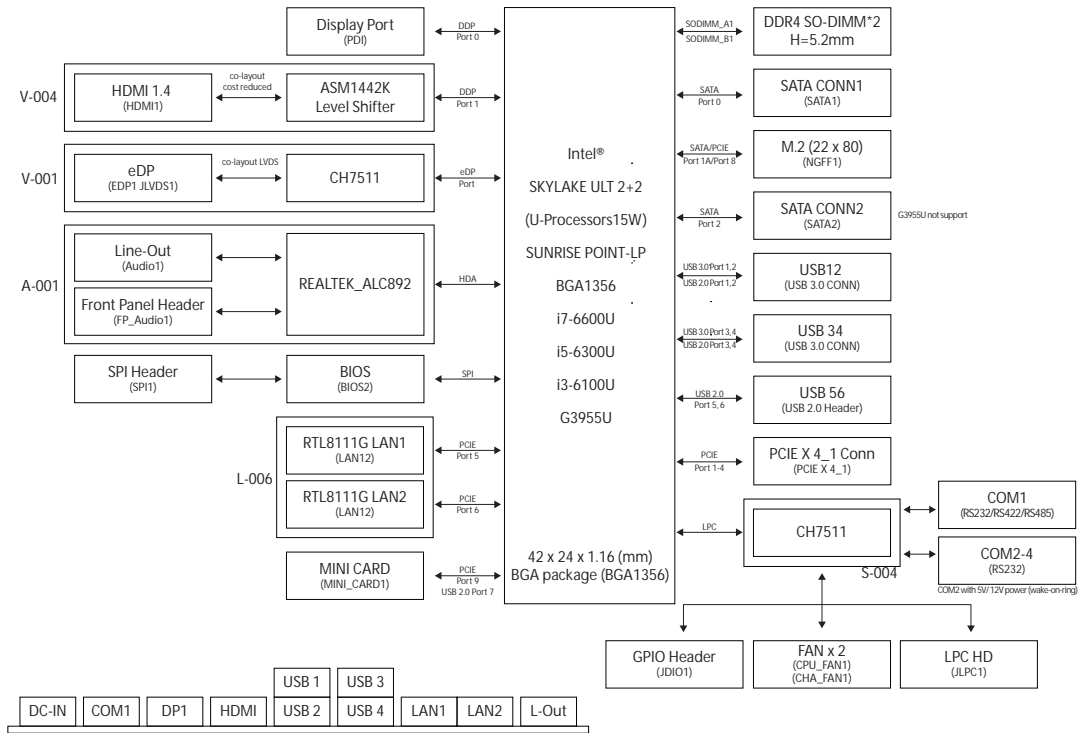
I/O Interface

- ◆ 1 x DC power jack
- ◆ 1 x Serial port
- ◆ 1 x DP connector
- ◆ 1 x HDMI connector
- ◆ 2 x USB 3.0 (double deck)
- ◆ 2 x GbE controller
- ◆ 1 x Line-out

Mechanical & Environment

- ◆ Operating temperature: 0°C~40°C
- ◆ Storage temperature: -20°C~80°C
- ◆ Relative humidity: operating 10%~90%, non-condensing

Block Diagram



Dimension

- Display head: mini-ITX, 6.7" x 6.7" (170mm x 170mm)

Operating System

- Windows 7 32/64-bit, 8.1, 10 64-bit & Fedora

Certificate

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- 5fh"BC"%) (+\$- "NEX614A-3955U

Optional Accessories

- 12V, 60W power adapter w/o power cord (P/N: 7400060028X00)
- COM PORT cable (P/N: 603COM0092X00)
- USB cable (P/N: 60233USB71X00)
- SATA cable (P/N: 60233ATA48X00)
- SATA power cable (P/N: 60233PW168X00)

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