X314

3.5" SBC with Intel® Skylake-U i3/i5/i7 Processor, HDMI/LVDS, 5 x USB 2.0, SATA 3.0, LAN, M.2 Key B, mini-PCIe, 1 x SIM Card

Main Features

- Intel® Skylake-U 6th generation Core™ i3/i5/i7 Processor (TDP: 15W)
- 1 x DDR4 SO-DIMM socket support up to 16GB 2133MHz
- Support multiple display from HDMI/LVDS dual channel
- 1 x M.2 2242 Key B

- 1 x Intel® I211-AT Gigabit Ethernet
- 1 x SATA 3, 5 x USB 2.0, 8-bit DIO, Mic-in, HD audio, 1 x mPCIe, 1 x SIM card
- Support AT/ATX mode and single +12VDC input

Product Overview

X314 has a compact design desired for low-power, high-efficiency consumption in confined environments, X314 is 3.5" SBC embedded board with an Intel® Skylake-U processor CPU. X314 supports dual display through LVDS and HDMI ports with integrated graphics using Intel® HD graphics 520 for multiple display applications. The 3.5" board is aimed at embedded applications, supporting DDR4 SO-DIMM socket up to 16GB 2133MHz. The X314 series is ideal for panel PC applications, AI detecting applications, outdoor systems and machines.

Specifications

CPU Support
- Intel® Skylake-U Core™ i3/i5/i7 processor (TDP: 15W)

Main Memory
- One DDR4 SO-DIMM socket, support up to 16GB 2133MHz

Display
- 1 x HDMI 1.4 connector (resolution up to 4096 x 2304@24Hz)
- LVDS dual channel 18/24-bit

Storage Device
- 1 x SATA III
- 1 x M.2 2242 Key B (SATA)

Onboard LAN
- 1 x Intel® I211-AT GbE LAN
- Support PXE boot from LAN, wake on LAN function

Expansion
- 1 x mPCIe, 1 x SIM card

Audio
- Realtek ALC886 HD codec
- 1 x 4 2.0 pitch pin header for Mic-in
- 1 x 4 2.0 pitch pin header for Line-out
- 1 x 4 2.0 pitch pin header for Line-in
- 1 x 4 header for Speaker-out (with amplifier 3.2W/4Ω)

Power Requirements
- Support AT/ATX mode
- 2-Pin DC Phoenix Contact power input connecter

Internal I/O
- 1 x 4-in/4-out GPIO (2 x 5 2.0mm pin header)
- 1 x 4-pin fan connector support PWM fan
- 1 x 3-pin header for AT/ATX mode
- 1 x SATA connector & 1 x SATA power connector
- 1 x Light sensor connector
- 1 x 6-pin header for status LED
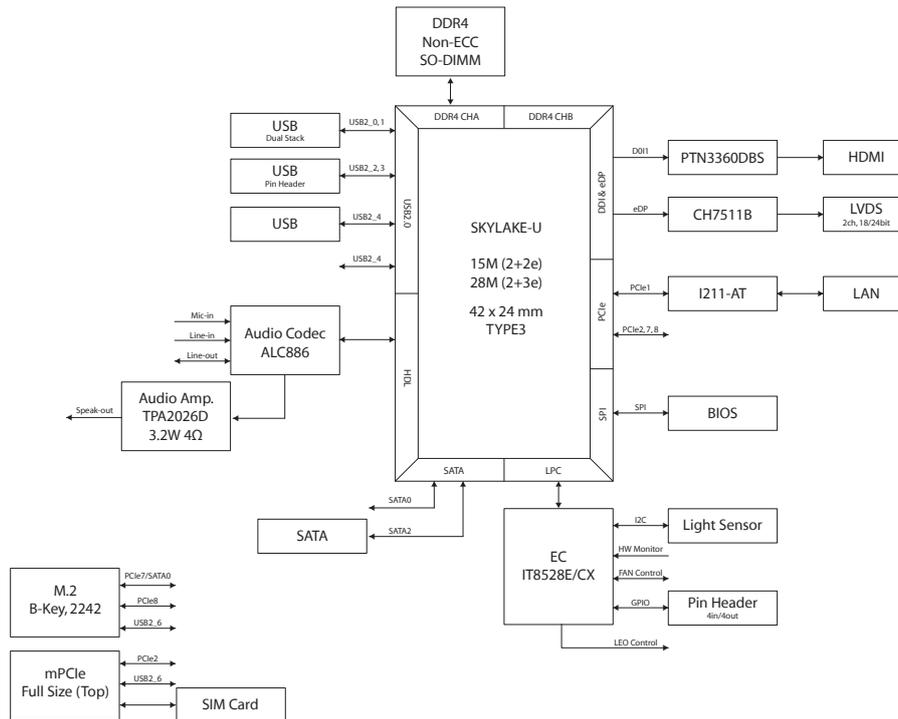- 1 x 10-pin header for 2 USB 2.0

Edge I/O
- 1 x 12V DC input Phoenix Contact connector
- 1 x SIM card socket
- 1 x HDMI 1.4
- 1 x RJ45 with LED connector
- 1 x Dual stack USB 2.0 connector
- 1 x USB 2.0 vertical connector
- 1 x Power button
- 1 x Reset button

Watchdog Timer
- Watchdog time-out 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)

NEXCOM

Block Diagram

Environment

- Operating temperature: 0°C~60°C
- Storage temperature: -10°C~70°C
- Relative humidity: operating 10%~90%, non-condensing

Dimension

- 3.5" SBC form factor (148mm x 102mm)

Operating System

- Windows 10
- Linux

Certificate

- CE/FCC Class A

Ordering Information

- **X314 (P/N: 10W10X31400X0)**
  Intel® Skylake-U i3/i5/i7 processor, HDMI/LVDS, 5 x USB 2.0, 1 x SATA, 1 x Intel® GbE LAN, 1 x M.2 2242 Key B, 1 x mini-PCIe, 1 x SIM card