

Main Features

- On-board Intel Atom® processor N2930, SoC w/ DDR3L SO-DOMM
- Support 1 x VGA, 1 x eDP, 1 x LVDS, 2 x LAN, 1 x SATA, 1 x USB 3.0, 7 x USB 2.0, 1 x Line-out Jack, 1 x full-size mSATA/mini-PCIe, 1 x half-size mini-PCIe
- DC +9V~24V input
- 3.5" fanless
- Optional: Wi-Fi module, mSATA storage

Product Overview

EBC 355A is a 3.5" SBC embedded board with an on-board Intel Atom® processor N2930 product family (formerly codenamed "Bay Trail-I") with 1MB L2 cache, which supports DDR3L 1066/1333, along with integrated Intel® Gen. 7 Graphics Engine Enhanced Gfx & Video, support DX 11*, OGL3.2, Full HD decode (MPEG2, VC1, AVC, H.264), along with integrated graphics for large display applications to support multiple displays. Intel Atom® processor N2930 product family provides one SATA, four serial ports, one USB 3.0 port, seven USB 2.0 ports, two Gigabit Ethernet LAN ports, and two mini-PCIe.

Interfaces for application. Able to support matrix-displays with rich I/O, the EBC 355A is a great solution featuring a low power consumption and small footprint for multimedia applications.

Specifications

CPU Support

- On-board Intel Atom® processor N2930 SoC, dual core 1.8GHz, TDP: 7.5W

Display

- 1 x VGA connector (resolution up to 1920 x 1200@60Hz.)
- 1 x eDP connector (resolution up to 1920 x 1080@60Hz.)
- 1 x LVDS connector (resolution up to 1920 x 1080@60Hz.)

System

- 1 x DDR3L 1333MHz SO-DIMMs, up to 8GB
- 2 x GbE LAN: Realtek 8111G GbE.
- 4 x RS232 (3 x RS232, 1 x RS232/485/422 by COM1) with 5/12V selectable header
- 1 x USB 3.0, 7 x USB 2.0 (3 x connector/4 in header)
- 1 x HD Audio Jack (Line-out), 1 x SPDIF out header
- 1 x Front panel audio header
- Watchdog Timer 1~255 sec./min. programmable
- 1 x SMBUS header
- 1 x 8-bit GPIO(4 in/4 out)
- Support Chassis intrusion
- Support 9~24V DC Jack input

BIOS

- AMI 64Mb Flash ROM

Storage Device

- 1 x SATAIII 3Gb/s

Expansion

- 2 x mini-PCI express slot,
 - Half size support & PCIe/USB interface
 - Full size support m-SATA & PCIe/USB interface)

Power Requirements

- Single power 9~24V DC input.
- AT/ATX mode (by jumper setting default-ATX)

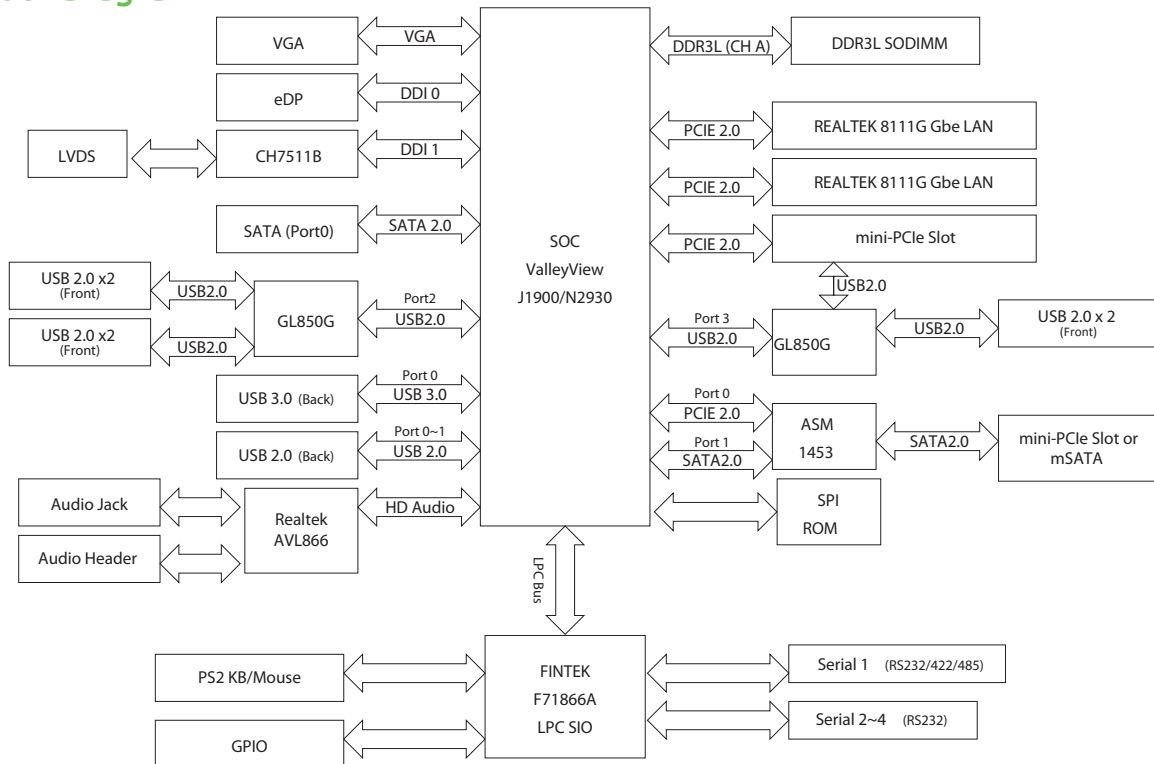
Front I/O

- 2 x Button (ATX power on/off & reset button)
- 2 x LAN LED activity header (power & HDD LED)

Rear I/O

- 2 x RJ45 GbE controller
- 1 x Double stack (1 USB 3.0 & 1 USB 2.0)
- 1 x Double stack USB 2.0
- 1 x VGA display output
- 1 x HD Audio Jack
- 1 x DC Jack input

Block Diagram



Mechanical & Environment

- Operating temperature: 32°F~140°F (0°C~60°C)
- Storage temperature: -40°F~185°F (-40°C~85°C)
- Relative humidity: operating 10%~90%, non-condensing

Dimension

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

Operating System

- Windows 7/8.1/10 32/64-bit
- Linux

Certifications

- EMC & Safety
- CE/FCC (Class B)

Ordering Information

Barebone

- **EBC 355A-N2930 (P/N: 10E00035514X0)**
On-board Intel Atom® processor N2930, Soc w/DDR3L SO-DOMM, support 1 x VGA, 1 x eDP, 1 x LVDS, 2 x LAN, 1 x SATA, 1 x USB 3.0, 5 x USB 2.0, 1 x Line-out Jack, 1 x full-size mSATA/mini-PCle, 1 x half-size mini-PCle, DC +9V~24V input

Optional Accessories

- **12V, 60W power adapter w/o power cord (P/N: 7400060028X00)**
- **COM port cable (P/N: 603COM0090X00)**
- **USB cable (P/N: 603USB0084X00)**