

Main Features

- Intel Atom® x6000 processor
- 1 x SO DIMM DDR4 with ECC or non-ECC SO DIMM 3200 MHz up to 32GB
- Support triple display VGA, HDMI, eDP
- 2 x Intel® GbE LAN, 2 x USB 3.2 Gen1), 3 x USB 2.0, 3 x RS232, 1 x RS232/485/422, 1 x SATA 3.0, 8-bit GPIO, HD audio
- 2 x M.2
- TPM 2.0
- 12V or 24V auto-detect

Product Overview

The EBC 358 is a 3.5" SBC. It is equipped with Intel Atom® x6000 processor. It comes with four DDR4 DIMM sockets up to 32 GB DDR 4 3200 MHz with non-ECC support and integrated UHD graphic controller.

EBC 358 operates at a temperature range from 0°C to 60°C, this design is ideal for embedded applications that run in outdoor or semi outdoor or semi outdoor environments, such as kiosks, outdoor systems installed in harsh environments, home automation, and thin clients.

3.5" SBC Target Market:

POS/ATM/webkiosk: ibon/MRT TVM/self checkout/speed camera/evator signage

Specifications

CPU Support

- Intel Atom® x6000 series processors, BGA 1493
 - (Industrial SKUs) for WT
 - Intel Atom® x6425RE processor, quad-core, 1.5M Cache, 1.8GHz (3.0GHz), 12W(Embedded SKUs) for ST
 - (Embedded SKUs) for ST
 - Intel Atom® x6425E processor, quad-core, 1.5M Cache, 1.8GHz (3.0GHz), 12W
 - Intel Atom® x6413E processor, quad-core, 1.5M Cache, 1.5GHz (3.0GHz), 9W
 - Intel Atom® x6211E processor, dual-core, 1.5M Cache, 1.2GHz (3.0GHz), 6W

Main Memory

- DDR4 3200 SO DIMM sockets supported
- Single channel, max. 32GB

BIOS

- AMI (UEFI)

Display

- VGA x 1 (resolution up to 1920 x 1080@60Hz)
- HDMI 1.4b x 1 (resolution up to 3840 x 2160@30Hz)

- Dual channel 18/24bit LVDS) (1920 x 1080@60Hz)

Storage

- SATA 3.0 x 1/SATA power connector x 1(+5V)
- M.2 2242 or 2280 Key M x 1(SATA 0)

Expansion Slot

- Full size mPCIe x1 with nano SIM
- Support SATS/PCIe/USB interface
- M.2 3052 Key B x 1 (for LTE 5G), (PCIe/USB 3.0) with nano SIM

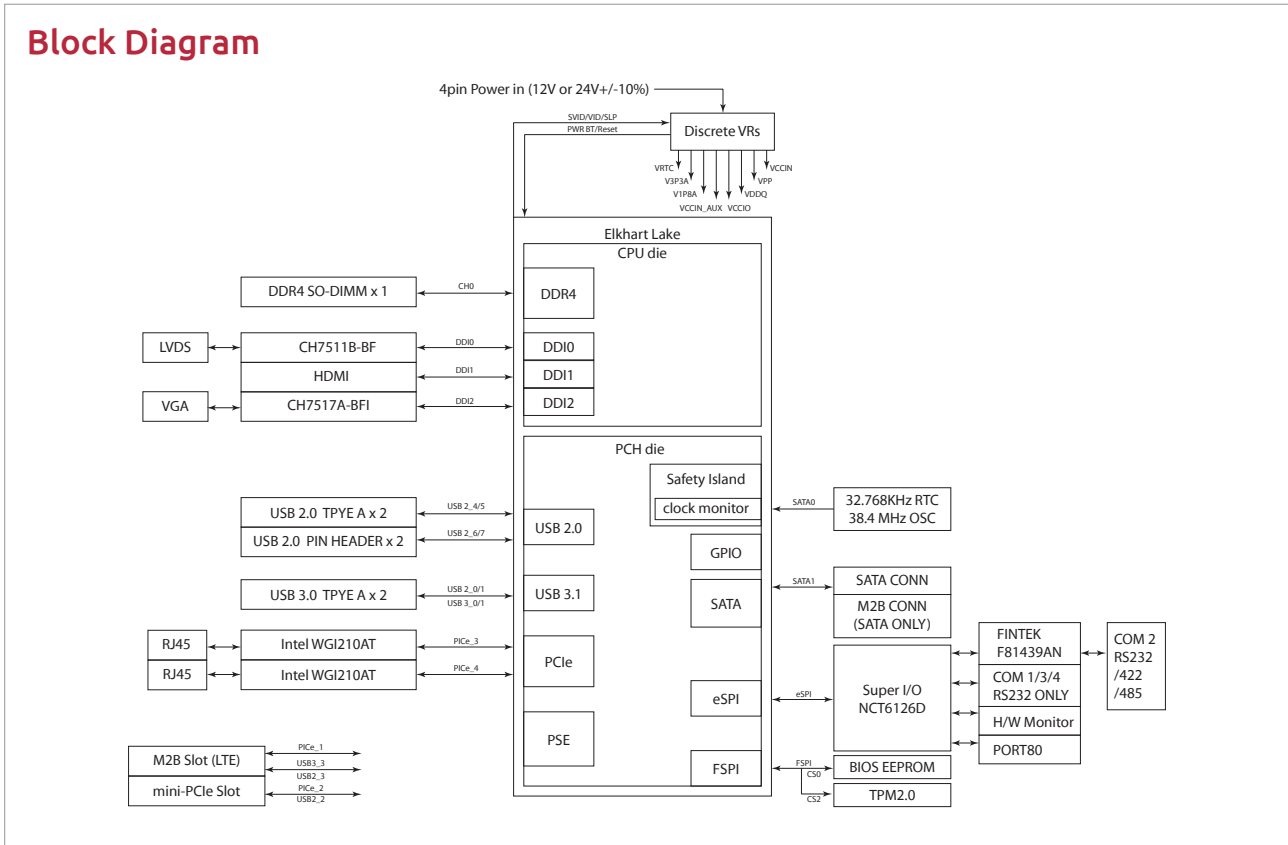
Rear I/O

- USB 3.1 Gen1 x 2 GbE LAN x 2
- Intel® I211-AT x 2 (or optional I210)
- USB 2.0 x 2
- VGA x 1, HDMI x 1

Internal I/O

- 2 x USB 2.0 (pin header)
- 4 x Serial ports
- 1 x RS232, 2 x RS232/485/422
- 1 x Front panel header, 8-bit digital I/O (4 In/4 Out)
- HD audio (Line-out, SPK out, Mic-in)

Block Diagram



- WDT, supports onboard TPM 2.0
- 1 x Fan connector
- Input power DC 12V/24V only (ATX 4P (2 x 2) & 2-pin terminal block)

Power Requirement

- 1 x 24-pin ATX connect/1 x 8-pin (2 x 4) ATX 12V power connector
- Support both AT and ATX power supply mode

Dimensions

- 3.5" SBC form factor, (146mm x 105mm)

Environment

- Board level operation temperature: 0°C to 60°C
- Storage temperature: 40°C to 85°C
- Relative humidity:
 - 10% to 95% (operating, non condensing)
 - 5% to 95% (non operating, non condensing)

Certifications

- Meet CE/FCC Class A

Ordering Information

Barebone

• EBC 358 (P/N: 10E00035800X0)

Intel Atom® x6000 series processors, DDR4 x 2 up to 64GB, HDMI/VGA/LVDS, 2 x USB 3.2 (Gen1), 2 x USB2.0, 2 x GbE LAN, 1 x SATA 3.0, 3 x RS232, 1 x RS232/422/485, M.2 and mini-PCle.

• EBC 358-6211E (P/N: 10E00035801X0)

3.5" SBC, Intel Atom® X x6211E (4C4T, 2.00GHz up to 3.00GHz, 12W), 1 x DDR4 SODIMM up to 32GB
HDMI/VGA/LVDS, 1 x DDR4 SODIMM, 2 x GbE LAN, 2 x USB 3.2 Gen1, 4 x USB 2.0, 4 x COMs, 1 x SATA, 1 x M2 slot, 1 x mini-PCle slot, SIM card, HD audio, onboard TPM2.0, DC 12V In, dimension : (146mm x 105mm)

• EBC 358-6413E (P/N: 10E00035802X0)

Intel Atom® x6000 series processors, DDR4 x 2 up to 64GB, HDMI/VGA/LVDS, 2 x USB 3.2 (Gen1), 2 x USB 2.0, 2 x GbE LAN, 1 x SATA 3.0, 3 x RS232, 1 x RS232/422/485, M.2 and mini-PCle.