EBC 359

Main Features

- Onboard Intel® Processor N-series Processors (formerly Alder Lake N) Intel® Processor N97
- 1 x DDR5 4800MHz SO-DIMM up to 16GB
- 2 x Intel i225V 2.5GbE
- 2 x HDMI 2.0b, 1 x eDP (co-layout LVDS), 1 x LVDS w/ Inverter

- 1 x SATA 3.0 (6Gb/s) , 6 x COM
- 1 x USB 3.2 (Gen 2) Type-A, 8 x USB 2.0, 1 x USB Type-C (ALT mode)
- 1 x M.2 2280 Key M support NVMe
- 1 x M.2 2230 Key E support CNVi
- Support 12~28V DC-in

Product Overview

The EBC359 is an 3.5" SubCompact board. It is equipped with onboard Intel® processor N-series processor. It comes with one DDR5 4800MHz SO-DIMM sockets to 32 GB with Non ECC support and integrated UHD Graphic controller.

To further enhance its 5G connectivity, the EBC 359 is designed with M.2 Key B and nano SIM slot compatible with 5G network. It provides 2 x Intel® i225V 2.5GbE LAN, 8 x USB 2.0, 1 x USB 3.2 Gen 2, 1x M.2 Key M, 1x M.2 Key E, 1x SATA 3.0, 1 x LVDS/eDP/MIPI-DSI, 2 x HDMI, 1 x DP support triple displays, These features make EBC359 an ideal solution for edge AI computing in AIoT applications.

3.5'' SBC target market:
POS / ATM / Web Kiosk: ibon / MRT TVM / Self checkout / Speed camera / Elevator Signage

Specifications

CPU/Chipset
- Onboard Intel® processor N-series processors (formerly Alder Lake N) Intel® processor N97

Main Memory
- 1 x DDR5 4800MHz, single channel SO-DIMM up to 16GB

BIOS
- UEFI BIOS

Display
- Intel® UHD graphics
- 1 x LVDS/eDP/MIPI-DSI, up to 1920 x 1200@60Hz (support 12V/2A panel) (optional eDP)
- 2 x HDMI 2.0b, up to 4096 x 2160@60Hz
- 1 x DP 1.4a, up to 4096 x 2304@60Hz (from external USB Type C)
- Support triple displays

Ethernet
- 2 x Intel i225V 2.5GbE

Storage
- 1 x SATA 3.0
- 1 x SATA power connector
- 1 x M.2 2280 Key M (PCIe 3.0 x2) support NVMe

Expansion Slot
- 1 x M.2 3042/3052 Key B (USB 3.1/USB 2.0 interface) support 4G/5G module
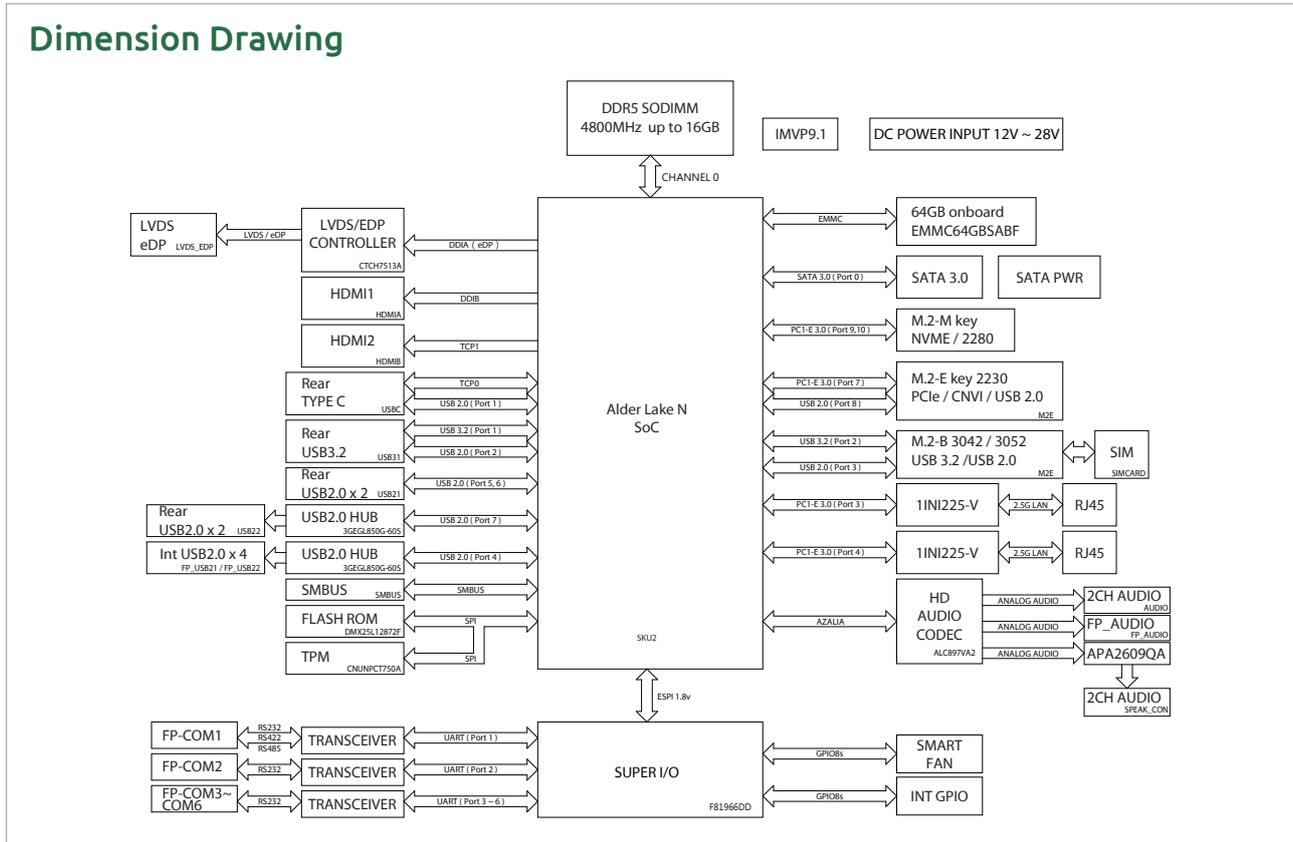- 1 x M.2 2230 Key E (PCIe x 1/USB 2.0 interface) support CNVi

Internal I/O
- 4 x USB 2.0
- 1 x RS232/422/485 (COM 1 support 5V/12V) 5 x RS232
- 1 x LVDS (optional eDP)
- 1 x Audio header
- 8-bit GPIO, SMBUS,
- 1 x CPU smart fan, Nano SIM, HDD LED, PWR LED, power button, reset

Audio
- 1 x audio (Line-out/MIC combo)

Dimension Drawing

Watch Dog
• 256 levels

External I/O
• 2 x HDMI 2.0b
• 1 x DP1.4a (from external USB Type C)
• 2 x 2.5GbE
• 1 x USB 3.2 (Gen 2) Type C (ALT mode)
• 1 x USB 3.2 (Gen 2)
• 4 x USB 2.0
• 1 x Audio jack (Line-out/MIC combo)
• 1 x 12V~28V DC in jack

Dimensions
• 148mm x 102mm (5.8" x 4")

Power Requirement
• 12~28V DC-in
• Support both AT and ATX power supply mode

Environment
• Board level operation temperature: -20℃ to 60℃
• Storage temperature: -20˚C to 85˚C
• Relative humidity: 10%~90% RH (non-condensing)

Certifications
• Meet CE / FCC Class A

OS Support
• Windows® 10 64-bit, Windows® 11 64-bit

Ordering Information

Barebone

• **EBC 359 (P/N: 7A00000511X00)**
  3.5'' SBC, onboard Intel® processor N-series,
  Intel® processor N97, TDP 12W, 1 x DDR5 SO-DIMM,
  2 x HDMI, 1 x DP, 1 x LVDS, 1 x USB 3.2 (Gen 2), 1 x USB
  3.2 (Gen 2) Type C (ALT Mode), 8 x USB 2.0, 2 x 2.5GbE,
  1 x SATA 3.0, 1 x RS232/422/485, 5 x RS232, 3 x M.2

Packing List

• **SATA cable**
• **SATA power cable**
• **COM cable**
• **EBC 359 mainboard**
• **EBC 359 Heatsprader**