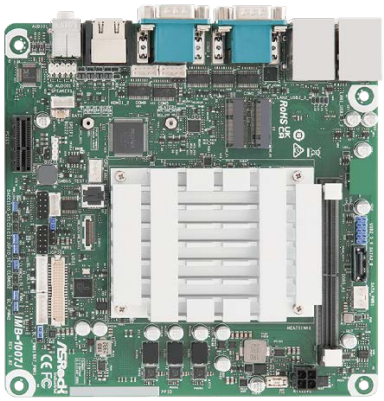
ASRock Industrial

IMB-1007J

Mini-ITX Motherboard



KEY FEATURES

- Intel® Alder Lake-N Processors
- 1 x 262-pin SO-DIMM DDR5 4800 MHz, up to 32GB
- 1 x PCIe x1 (Gen3), 2 x USB 3.2 Gen2, 4 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 6 x COM, 1 x SATA3
- 2 x Realtek Gigabit LAN
- Support Triple display, 2 x HDMI 2.0b, 1 x LVDS or eDP
- 12V DC-In

SPECIFICATIONS

Form Factor

Dimensions	Mini-ITX (6.7-in x 6.7-in x 1.6-in, 17.0 cm x 17.0 cm x 4.0 cm)

Processor System

CPU	Intel® Alder Lake-N Processors IMB-1007J (N97, QC, Max Speed Up to 3.6GHz, 12W)
BIOS	AMI SPI 256 Mbit

Memory

Technology	Single Channel DDR5 4800 MHz
Capacity	32GB
Socket	1 x 262-pin SO-DIMM

Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 2.0b Max resolution up to 4096 x 2160@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz (Connector shared with eDP)
eDP	Max resolution up to 1920 x 1080@60Hz (Connector shared with LVDS)
MultiDisplay	Triple Display

Expansion Slot

PCIe	1 x PCIe x1 (Gen3)
M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless

Audio

Interface	Realtek ALC897 HD, High Definition Audio.Mic-in, Line-out

Ethernet

Controller/ Speed	LAN1: Realtek RTL8111H with 10/100/1000 Mbps LAN2: Realtek RTL8111H with 10/100/1000 Mbps
Connector	2 x RJ-45

Rear I/O

HDMI	2 x HDMI 2.0b
Ethernet	2 x 1 Gigabit LAN
USB	2 x USB 3.2 Gen2 2 x USB 2.0
Audio	2 (Mic-In, Line-Out)
COM	COM1 (RS-232/422/485) COM2, COM3, COM4 (RS-232)

Internal Connector

USB	2 x USB 2.0 (1 x 2.54 pitch header)
COM	COM5, COM6 (RS-232)
GPIO	4 x GPI, 4 x GPO
LVDS	1 (Connector with LVDS/eDP signal, switch by BIOS)
SATA PWR Output	1
Speaker Header	1

Security

TPM	Intel® PTT

Storage

M.2	1 x M.2 (Key M, 2242/2280) with PCIe Gen3 x1 or SATA3 for SSD
SATA	1 x SATA3 (6Gb/s)

Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

Power Requirements

Input PWR	12V DC-In with 4-pin plug PWR cable
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

Environment

Operating Temp	-20°C ~ 70°C
Storage Temp	-40°C ~ 85°C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

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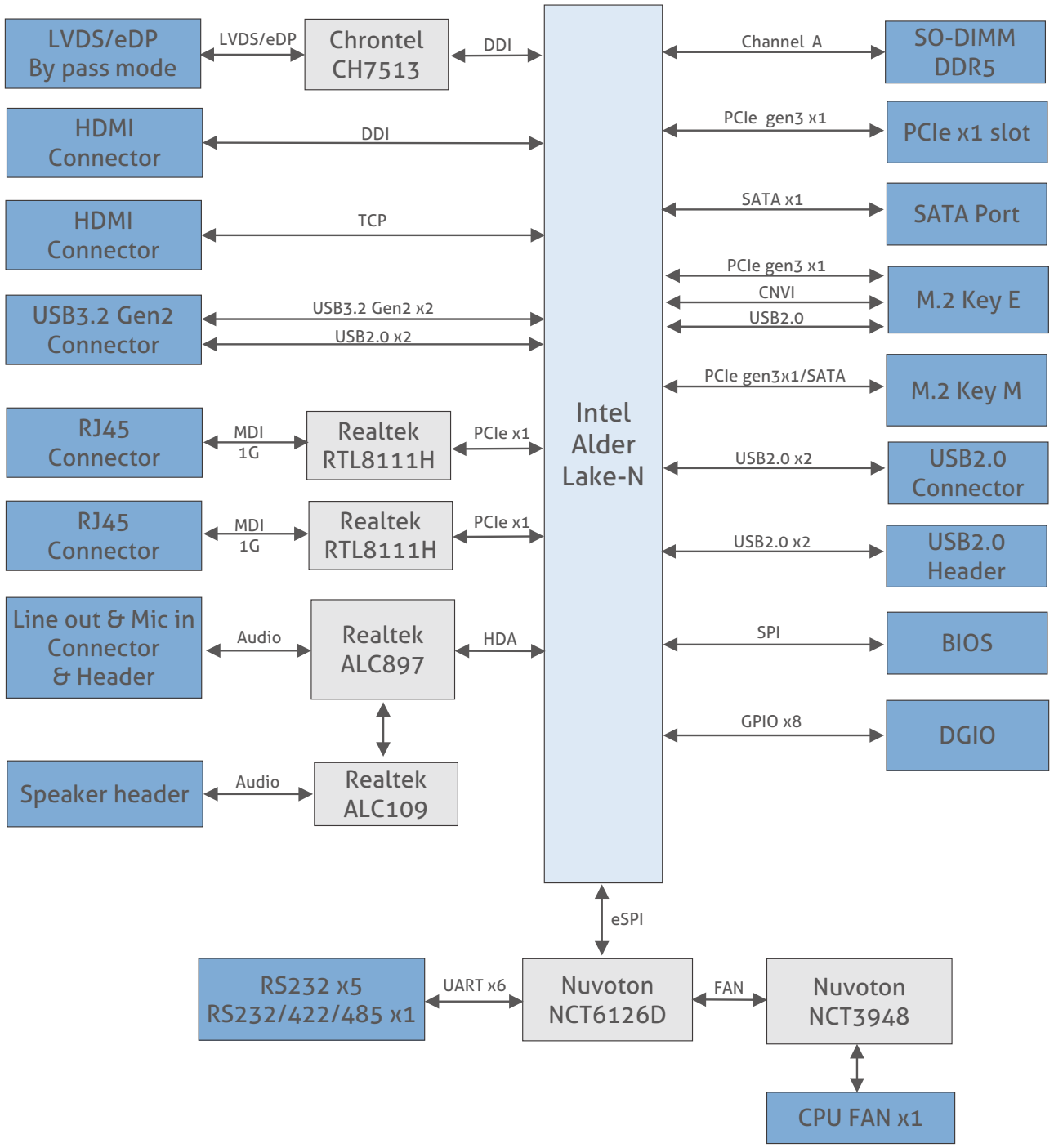
BLOCK DIAGRAM



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