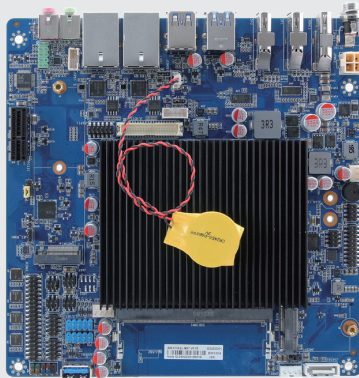


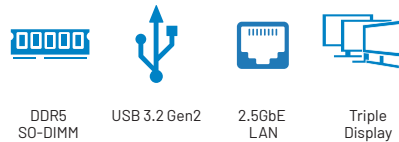
# EMX-ASLP

Onboard Intel® Processor N97, and Intel® Core™ i3-N305 Processor, Intel Atom® x7000RE series processors, Thin Mini ITX Motherboard



## Features

- Onboard Intel® Processor N97, and Intel® Core™ i3-N305 Processor, Intel Atom® x7000RE series processors
- 1 x 262-pin DDR5 4800 MHz SO-DIMM Socket, Supports Up to 16GB Max
- HDMI, DP++, DP, eDP or LVDS
- 1 x PCIe x1
- 2 x Intel® i226V or i226IT
- 2 x USB3.2 Gen2, 3 x USB3.2 Gen1, 4 x USB 2.0
- 1 x M.2 Type B, 1 x M.2 Key E, 1 x M.2 Key M
- 6 x COM
- DC in +12V-24V



## Specifications

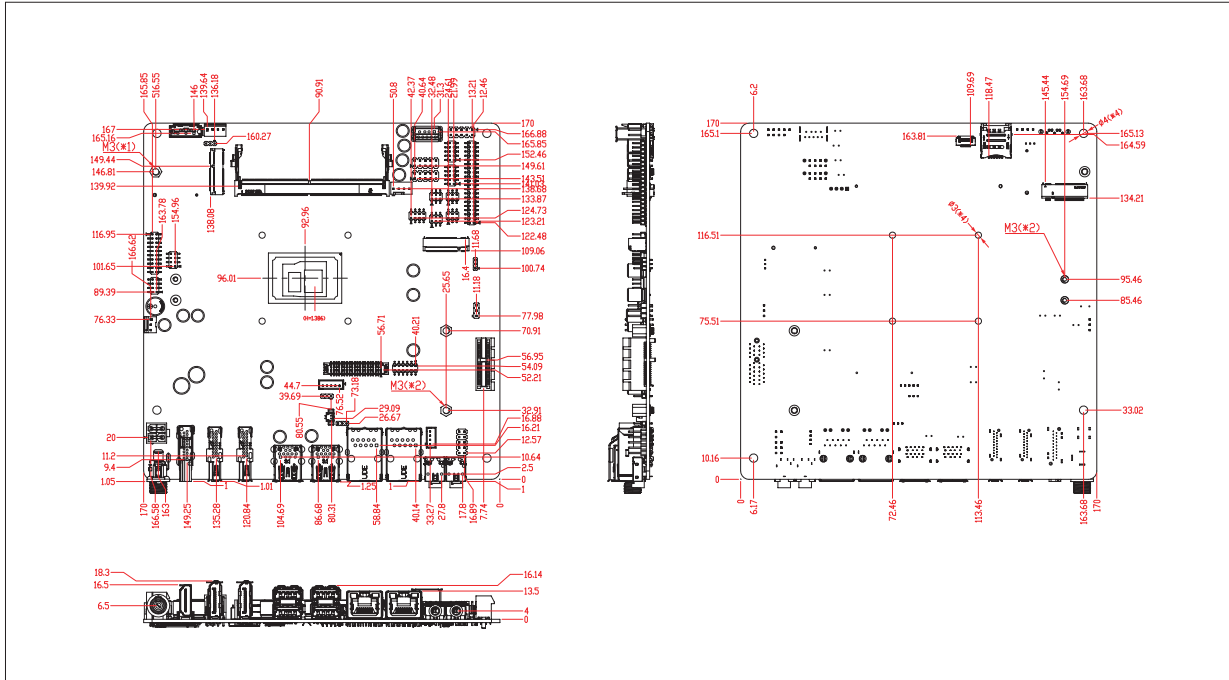
System Information	
<b>Processor</b>	Onboard Intel® Processor N97, and Intel® Core™ i3-N305 Processor, Intel Atom® x7000RE series processors
<b>System Memory</b>	1 x 262-Pin DDR5 4800MHz SO-DIMM Socket Supports Up to 16GB
<b>I/O Chipset</b>	EC ITE IT5571
<b>Watchdog Timer</b>	H/W Reset: 1Sec. ~ 65535Sec./Min. and 1 Sec. or 1Min./Step
<b>BIOS</b>	AMI uEFI BIOS, 256Mbit SPI Flash ROM
<b>H/W Status Monitor</b>	CPU Temperature Monitoring Voltage Monitoring CPU Fan Speed Control
<b>TPM</b>	Onboard nuvoTon NPCT754AADYX support SPI TPM 2.0 (BOM option)
<b>Board</b>	Thin Mini ITX
Expansion	
<b>Expansion</b>	1 x M.2 Type B slot for 3042/3052/2242 size with USB 3.2 Gen1x1, USB 2.0, SIM Slot for LTE/I/O Cards support WWAN+GNSS 1 x M.2 Key E 2230 (1 x PCIe Gen3 x1 & USB 2.0 Signal) 1 x M.2 Type M 2242/2280 SSD Support PCIe Gen3 x1 or SATA III
Display	
<b>Graphic Chipset</b>	Intel® UHD Integrated Graphics
<b>Spec. &amp; Resolution</b>	1 x HDMI 2.0b HDMI 2.0b Max resolution 4096 x 2160@60Hz 1 x DP++ DP++ Max resolution 1920 x 1080@60Hz 1 x DP 1.4a Max resolution 4096 x 2160@60Hz 1 x eDP or LVDS eDP 1920 x 1080@60Hz (2 Lanes) LVDS 1920 x 1080 (Dual Channel 18/24-bits)
<b>Multiple Display</b>	Triple Display
<b>LVDS</b>	1 x LVDS (Dual Channel 18/24-bits) or 1 x eDP (2 Lanes) Chrontel CH7513A-BF eDP to LVDS Converter
Audio	
<b>Audio Codec</b>	Realtek ALC888S HD Audio Decoding Controller
<b>Audio Interface</b>	Mic-in, Line-out
<b>Audio Amplifier</b>	2 x 2W 4Ω Amplifier

Ethernet	
<b>LAN Chipset</b>	2 x Intel® i226V or i226IT 2.5 Gigabit Ethernet
<b>Ethernet Interface</b>	100/1000/2500 Base-Tx GbE compatible Gigabit Ethernet
<b>LAN Port</b>	2 x RJ-45
Software Support	
<b>OS</b>	Windows 10, Windows 11, Linux
Certification	
<b>Certification Information</b>	CE, FCC, RoHS Compliant
I/O	
<b>USB</b>	2 x USB 3.2 Gen2 2 x USB 3.2 Gen1 1 x USB 3.2 Gen1 Vertical Type A 4 x USB 2.0
<b>COM Port</b>	4 x RS232 2 x RS232/422/485
<b>SIM Slot</b>	Co-lay 1 x 10pin FPC Connector for SIM Card Adapter
<b>SATA</b>	1 x SATA III 1 x SATA Power
<b>DIO</b>	1 x 16-bit GPIO
Mechanical & Environmental	
<b>Operating Temp.</b>	Standard Temperature: 0-60°C (32-140°F) with 0.5m/s air flow Extend Temperature: -20-70°C (-4-158°F) with 0.5m/s air flow
<b>Storage Temp.</b>	-40 ~ 75°C (-40 ~ 167°F)
<b>Operating Humidity</b>	40°C at 95% relative humidity, non-condensing
<b>Weight</b>	0.88lbs (0.4Kgs)
<b>Power Requirement</b>	DC in +12V-24V
<b>Power Mode</b>	AT/ATX (Default Setting: ATX)
<b>Dimension (L x W)</b>	6.7" x 6.7" (170mm x 170mm)

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## Mechanical Drawing



## Ordering Information

P/N	Processor	Chipset	LAN	USB	COM	PCIe Slot	Power Input	Temp.
EMX-ASLP-N97-A1R	Intel Processor N97	Integrated	2	9	6	1	+12~24V DC	0 ~ 60°C (32 ~ 140°F)
EMX-ASLP-X7433-A1R	Intel® Atom® x7433RE	Integrated	2	9	6	1	+12~24V DC	-20 ~ 70°C (-4 ~ 158°F)

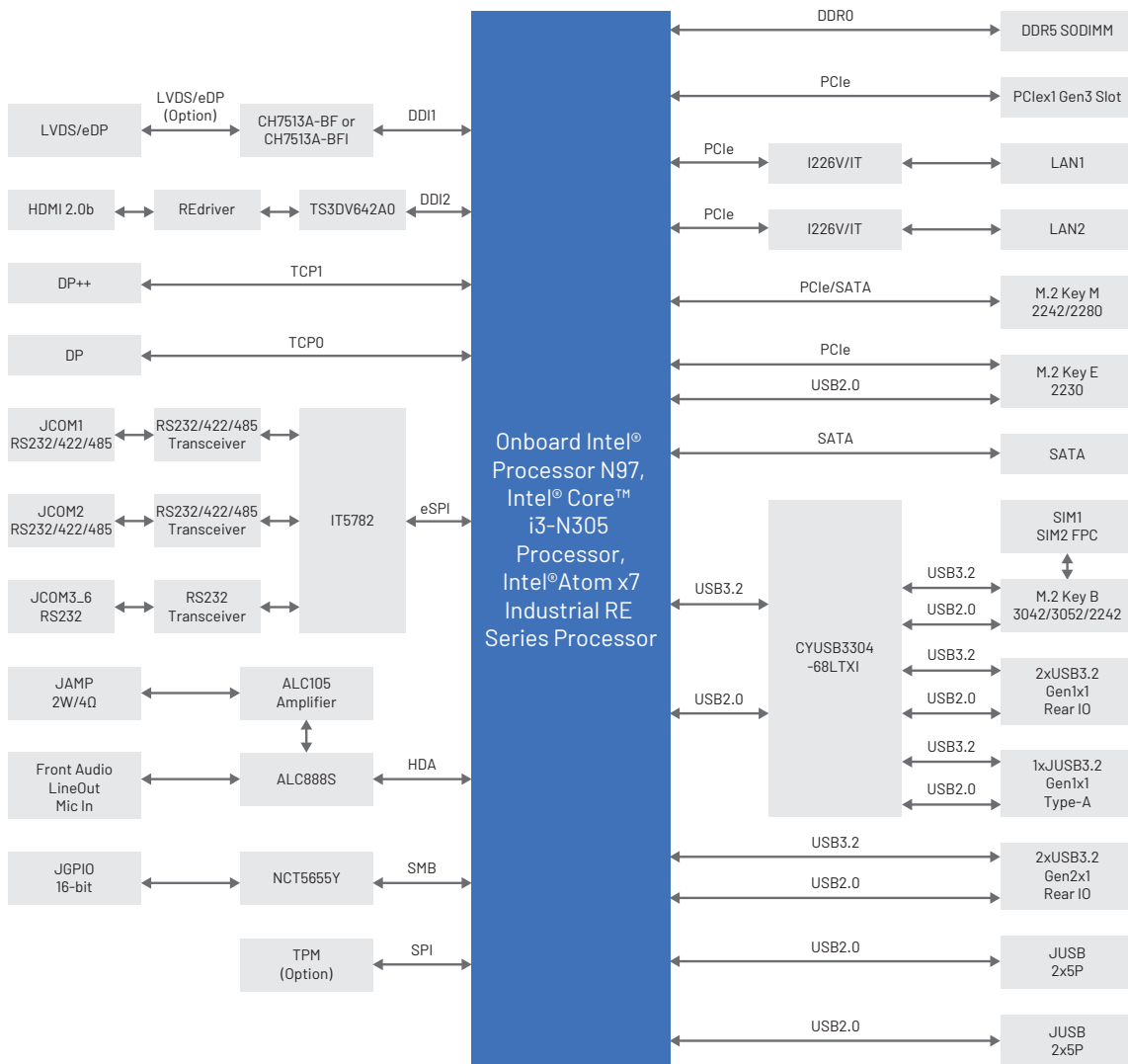
## Packing List

Item	P/N	Quantity
Half Size IO Shield	-	1
SATA Cable	-	1
Wire SATA Power	-	1

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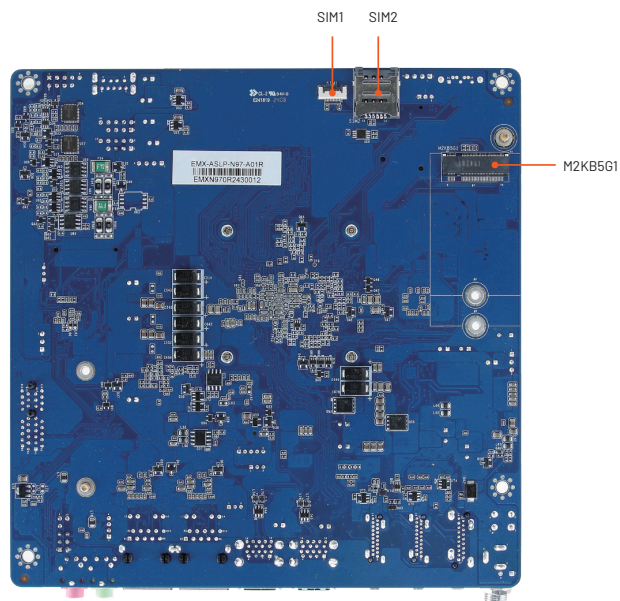
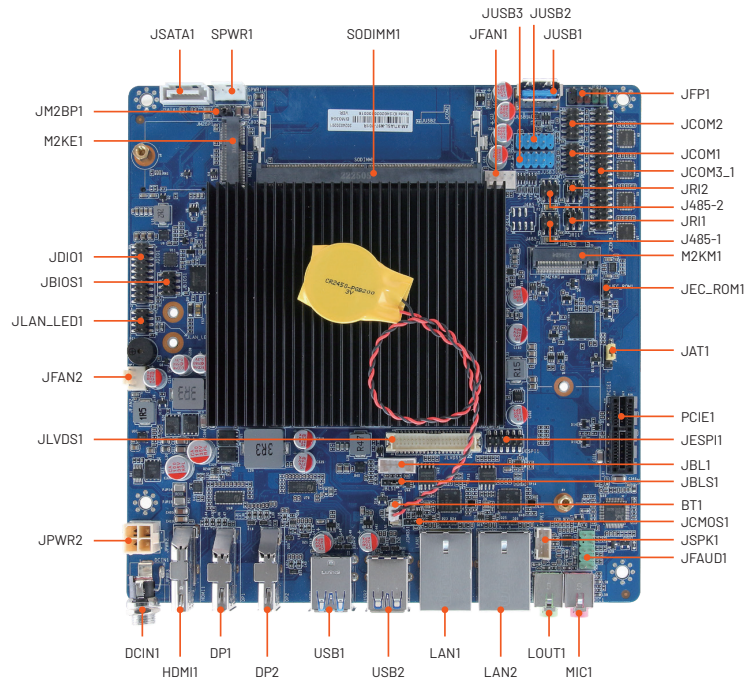
## Block Diagram



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## I/O Overview



## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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