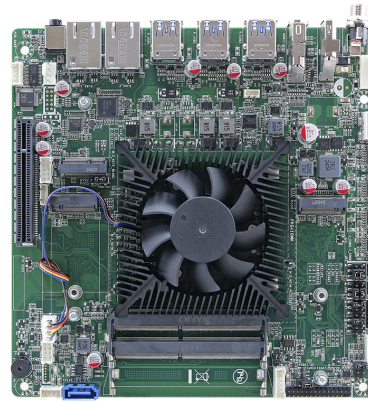


EMX-RLUC

12th Gen Intel® Core™ SoC i5/i3 BGA
Processor, Thin Mini ITX motherboard



Product Features

- 13th Gen Intel® Core™ SoC i5/i3 BGA Processor
- 1 x HDMI2.0, 1 x DP++ 1.4a, 1 x LVDS, Supports up to triple independent displays
- 2 x Intel® Gigabit Ethernet Controllers (I210AT and I219-LM)
- 1 x M.2 Key-B 2242/3052, 1 x M.2 Key-E 2230, 1 x M.2 Key-M 2280
- 2 x 260-Pin DDR4 3200MHz non-ECC SO-DIMM Socket Supports Up to 2 x 32GB
- 1 x PCIe x4 Gen4 with PCIe x8 slot
- 6 x USB3.2 Gen1, 2 x USB2.0
- 6 x COM Ports (4 x RS232, 2 x RS232/485)

Specification

System Information

Processor	Onboard 13th Gen Intel® Core™ SoC i5/i3 BGA Processor
System Memory	2 x 260-Pin DDR4 3200MHz non-ECC SO-DIMM Socket Supports Up to 2 x 32GB
I/O Chipset	Super I/O, ITE IT8786E-I
Watchdog Timer	H/W Reset, 1sec. – 65535sec./min.1sec. or 1min. step
BIOS	AMI uEFI BIOS, 256Mbit SPI Flash ROM for i5 CPU / 128Mbit SPI Flash ROM for i3 CPU
H/W Status Monitor	CPU Temperature Monitoring Voltage Monitoring CPU Fan Speed Control
TPM	Onboard Infineon SLB 9670VQ2.0 support TPM2.0
Board	Thin Mini ITX

Expansion

Expansion	1 x PCIe x4 Gen4 with PCIe x8 slot 1 x M.2 Key-B 2242/3052 1 x M.2 Key-E 2230 1 x M.2 Key-M 2280 1 x Wafer connector for SIM Card Cable (Option)
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Display

Graphic Chipset	Intel® Iris® Xe Graphics eligible
Spec. & Resolution	1 x HDMI 2.0: 4096 x 2340@60 Hz 1 x DP++ 1.4a: Max 4096 x 2340@60 Hz 1 x LVDS: 1920 x 1200 Dual channel 18/24-bits LVDS
Multiple Display	Triple Display
LVDS	Dual channel 18/24-bits (LVDS CapStone CS5211) 1920 x 1200@60Hz

Audio

Audio Codec	Realtek ALC888S HD Audio Decoding Controller
Audio Interface	Line-out + Mic-in 2in1 3.5mm Jack on rear I/O
Audio Amplifier	2 x 3W 8Ω Amplifier (TI TPA3113D2PWP)

Ethernet

LAN Chipset	1 x Intel® I210AT Gigabit Ethernet Controller 1 x Intel® I219-LM for core i5 CPU or 1 x Intel® I219V for i3 CPU Gigabit Ethernet Controller
Ethernet Interface	LAN1: Intel® I210AT 10/100/1000 Base-Tx GbE compatible LAN2: Intel® I219-LM/I219V 10/100/1000 Base-Tx GbE compatible
LAN Port	2 x RJ-45

Power Requirement

DC Input	DC in +12V
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Software Support

OS	Windows 10, Windows 11, Linux
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Certification

Certification Information	CE, FCC, RoHS Compliant
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I/O

USB	6 x USB3.2 Gen1x1 2 x USB2.0
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COM Port	4 x RS232 2 x RS232/485
SIM Slot	1 x 6 pin, pitch 1.25mm wafer connector for SIM Card (J_SIM1)
SATA	1 x SATA III
DIO	8-bit GPIO (4 x GPI, 4 x GPO)
Mechanical & Environmental	
Operating Humidity	40°C at 95% relative humidity, non-condensing
Weight	0.88lbs (0.4Kgs)
Power Requirement	DC in +12V
Power Mode	AT/ATX mode Switchable Through Jumper
Dimension (L x W)	6.7" x 6.7" (170mm x 170mm)
Ordering Information	
Ordering Information	EMX-RLUC-1335-A1R Thin MINI-ITX w/i5-1335U/6COM/8USB/I219-LM/15W/A1