

GIMN13-2401

**LGA 1700 socket supports Intel® Core™ i7/i5/i3 Processor,
formerly the Raptor Lake-S Platform
Mini ITX Motherboard**

Ver. 0.1

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Packing List

Before you begin installing your single board, please make sure that the following materials have been shipped:

- 1 x GIMN13-2401 mini-ITX
- 1 x I/O Shield
- 1 x USB cable



If any of the above items is damaged or missing, please contact your retailer.

Revision History

Revision	Revision History	Date
V 0.1	First release version	2024.11.07

Specifications Summary

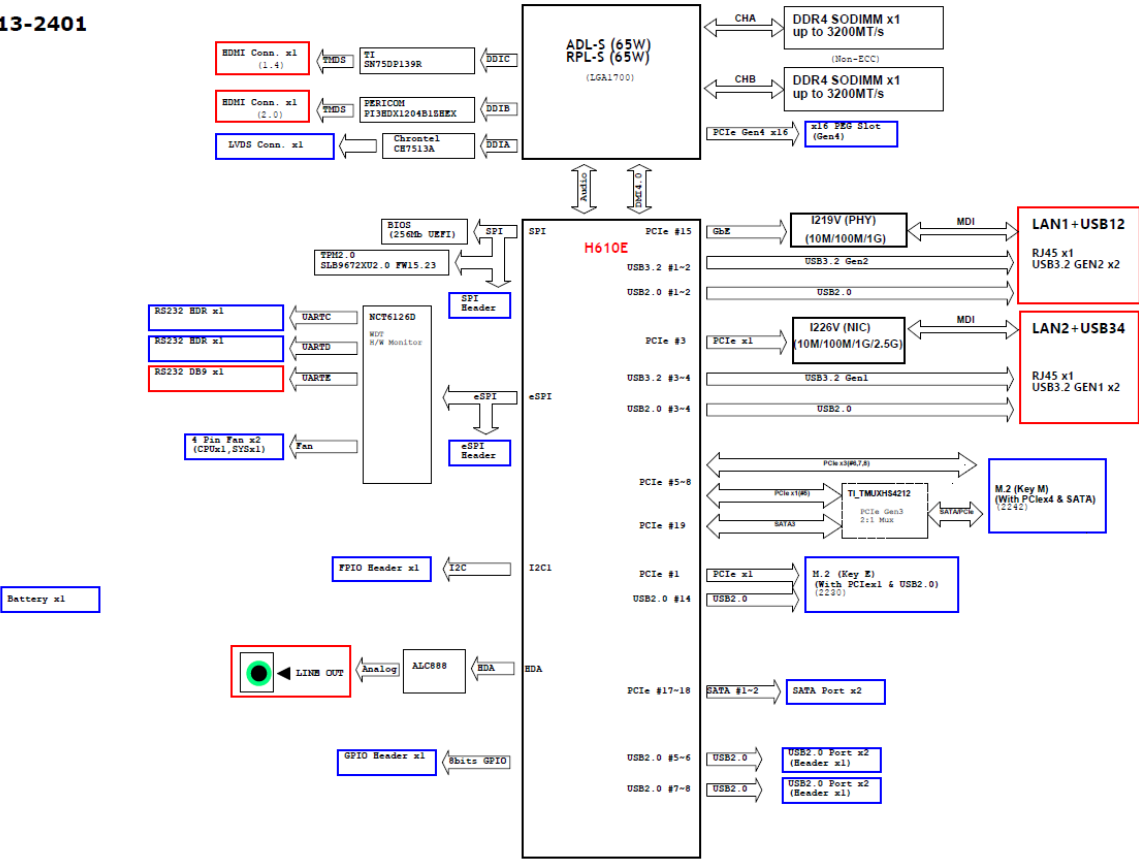
Specifications	
System	
CPU	LGA 1700 socket supports Intel® Core™ i7/i5/i3 Processor, formerly the Raptor Lake-S Platform
BIOS	AMI EFI 256Mb SPI
Memory	Dual Channel DDR4, up to 3200 MHz (non-ECC)
Watchdog Timer	1 ~ 255 sec timer
H/W Status Monitor	CPU & system temperature monitoring Voltages monitoring
Expansion Slots	1 x PCIe x16 slot, up to PCIe Gen4 (16GT/s) 1 x M.2 E-Key 2230 With PCIe x1 & USB2.0 1 x M.2 M-Key 2242 With PCIe x4 & SATA
Smart Fan Control	Yes
Display	
Chipset	Intel UHD Graphic Driven by Xe Architecture
Display Memory	Shared Memory
Display Output	1 x HDMI 2.0, resolution 4096 x 2160 @ 60 Hz 1 x HDMI 1.4a 1 x LVDS internal pin header, supports single/dual channel 18/24-bit with maximum resolution up to 1920 x 1200 @ 60 Hz
Multi-Display	Supports 3 Independent Displays
Ethernet	
LAN1	Intel® i219V Ethernet Controller
LAN2	Intel® I226V Ethernet Controller
Back I/O Port	
Back Panel	1 x DC-IN 12V4P(Default), Phoenix connector(Optional) 1 x LAN1 1G (i219V) 1 x USB12 USB3.2 Gen2 1 x LAN2 2.5G (i226V) 1 x USB34 USB3.2 Gen1 1 x COM3 (RS232) 1 x HDMI 2.0 1 x HDMI 1.4 1 x Line-Out
Internal I/O Connector	

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Internal I/O	1 x LVDS Data Connector – 40-pin (LVDS1)
	1 x LVDS Inverter Power Connector (INV1)
	1 x Front Panel USB Header (USB56,USB78)
	2 x SATA Connectors
	1 x Internal SATA power connector (SATA_PWR1)
	2 x Serial Port Header (COM1,COM2)
	1 x CPU FAN Header (4pin)
	1 x SYS FAN Header (4pin)
	2 x Front Panel Header (JFP1,JFP2)
	1 x Processor Power Supply Connector (4 pin) (ATX12V1)
	1 x ATX 5VSB CONN (ATX_5VSB1)
	1 x Debug Header (ESPI_P80)
	1 x Clear CMOS(JCMOS1)
	1 x AT/ATX mode(HW)(PSON1)
	1 x ME1(JME1)
1 x JSETCOM1_V1	
1 x JEDP1_LVDS1	
Mechanical & Environmental	
Operating Temperature	0~60°C (32~140°F)
Operating Humidity	10 ~ 95% @ 40 °C, non-condensing
Size (L x W)	Mini ITX Form Factor 6.7"x 6.7" (170mm x 170mm)

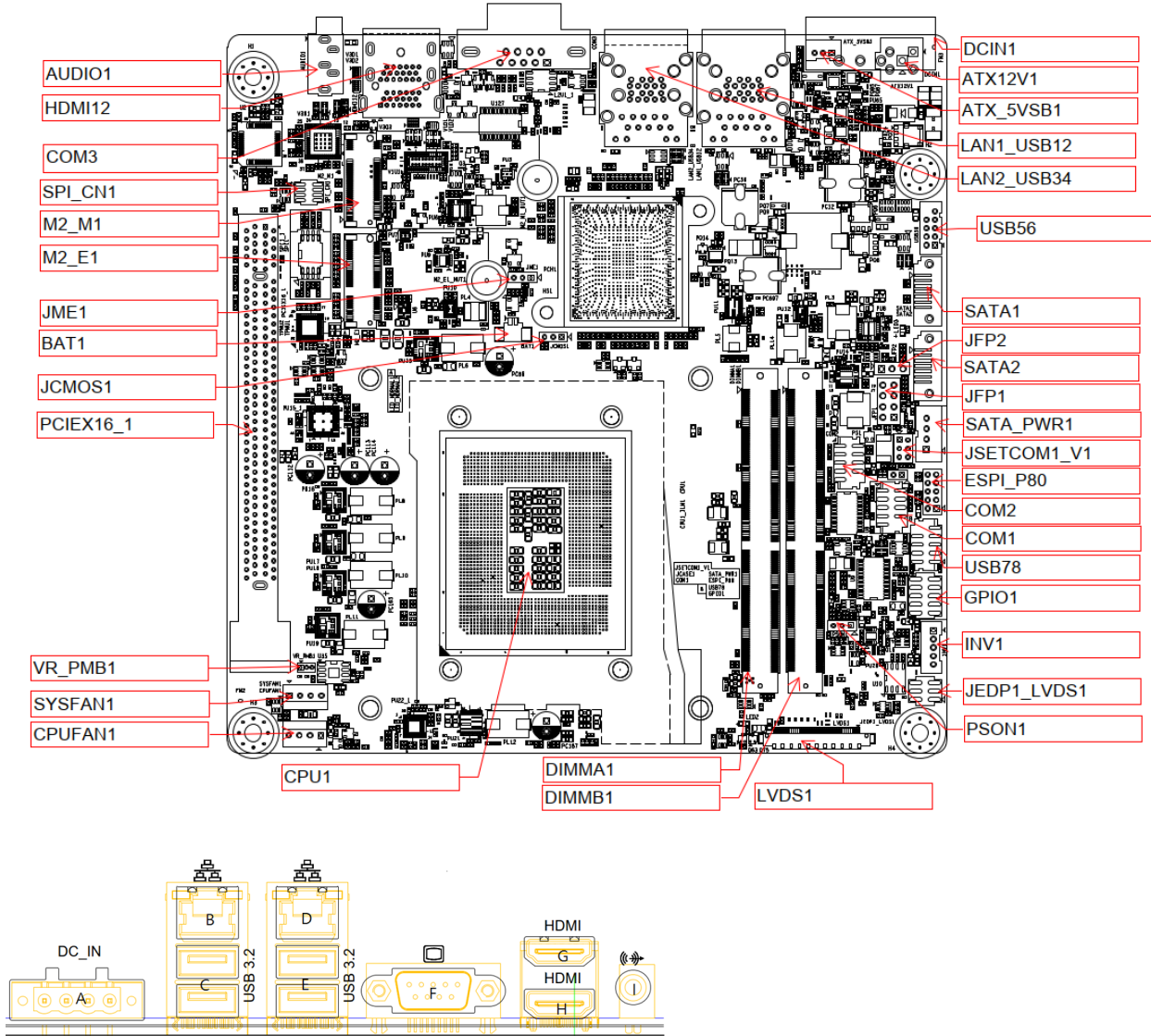
Block Diagram

GIMN13-2401



GIMN13-2401

Motherboard Layout



Ordering Information

P/N	Chipset	HDMI	LVDS	GbE	2.5GbE	COM	SATAIII	USB3.2	USB2.0	M.2 M key	M.2 E key	PCIex16	TPM
GIMN13-2401	H610E	2	1	1	1	3	2	4	4	1	1	1	(1)