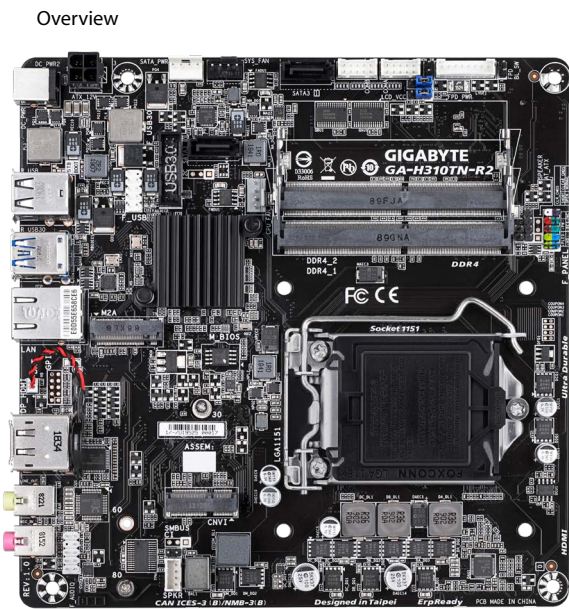


GIGABYTE™

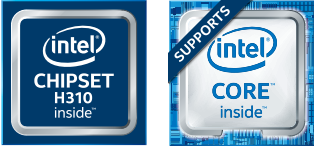
GA-H310N-R2

Intel® 8th/9th Core I Series
Embedded Thin Mini ITX MB



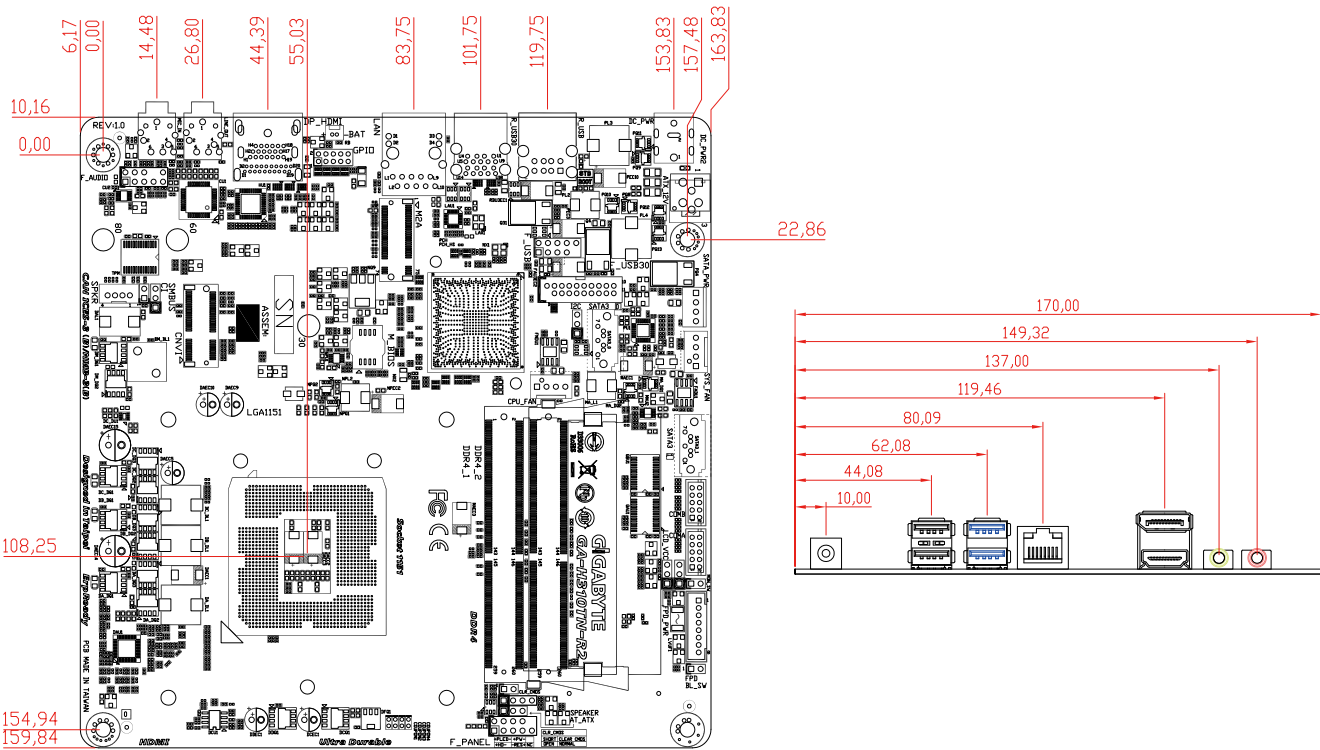
Product Feature

- Socket LGA1151 for Intel® Core 65W i7 / i5 / i3 Pentium / Celeron (Coffee lake-S)
- Intel® Gen 9.5 Intel® Graphics DX 11/12,OGL4.3 / 4.4
- Supports Dual Channel DDR4 2133 / 2400MHz, 2 x SO-DIMM, up to 32GB system memory
- 1 x HDMI1.4a,1 x Display port, 1 x Dual Channel 24-bit LVDS / eDP
- 4 x USB 3.0,4 x USB 2.0, 2 x SATA3
- 1 x M.2 wifi, 1 x M.2 SSD
- Gigabit LAN : 1 x Realtek 811H
- 1 x TPM Module IC (optional)
- 19V DC-in



SPEC		
Form Factor	PCB Size	Thin Mini-ITX (6.7in x 6.7-in) (170mm x 170 mm)
Processor System	CPU	Socket LGA1151 for Intel Core i7/i5/i3/Pentium/Celeron (Coffee lake-S support 65W)
		H310
Expansion Slot	PCI	0
	Mini-PCIe	0
	PCIe	0
	M.2	1 x M.2 2260 / 80 SATA / PCIe slot for storage 1 x M.2 Wifi slot
Memory	Technology	Daul Channel DDR4 2133/2400 MHz SDRAM
	Max.	32G
Graphics	Controller	Intel® Gen9.5 Intel Graphics DX 10*, OGL3.2
	VRAM	Shared Memory
	VGA	N/A
	LVDS	Dual channel LVDS max resolution 1920 x 1200
	HDMI	HDMI 1.4a, max resolution 3840 x 2160@30Hz
	DVI	No
	Display Port	Yes
Rear I/O	Multi Display	Yes (Dual Display)
	LAN	Controller 1 x Realtek Giga LAN
	SATA	Max DTR 2 x SATA3 (6.0Gb/s)
	VGA	0
	HDMI	1
	Display Port	1
	Ethernet	1
Internal Connector	USB	2 x USB 3.0, 2 x USB 3.0
	Audio	2 (Mic-in, Line-out)
	Serial	0
	USB	2 x USB 2.0, 2 x USB3.0
	LVDS/Inverter	1
	VGA	0
	Serial	2 x RS-232
Watchdog Timer	SATA	2 x SATA3 (6.0Gb/s)
	Mini-PCIe	0
	Parallel	0
	Digital I/O	0
	I2C/SMBUS	0
	SATA PWR Output	1
	Output	From Super I/O to drag RESETCON#
Power Requirements	Interval	256 segments, 0,1,2...255sec/min
	Input PWR	DC in 19V (4 pin ATX PWR connector)
	Power On	AT/ATX Supported AT: Directly PWR on as Power input ready ATX: Press Button to PWR on after Power input ready
Power consumption	Typical	GT4900T, DDR4 16G, SSD ,2A@19V
Certification	EMC	CE/FCC
Environment	Operating Temperature	0°C – 50°C

Mechanism Drawing



Ordering Information

Model Name	Ordering Information
GA-H310TN-R2	Socket 1151, HDMI, Display Port, LVDS, One LAN, 2x SATA3, 4 x USB3.0 / 4 x USB2.0, 2 x RS232, M.2 WIFI / M.2 SSD slot , DC in 19V

Optional Accessories

Part Number	Cable Usage	Description
12CF1-1CM011-01R	COM	1IN1 CB/JST 2*5P/PH2/KIMWELL COM 9MA(PC99)/200mm+SCREW*2
12CF1-1SATPW-01R	SATA Power	1IN1 CB FOR SATA POWER/KIMWELLS4P/15P*2/300mm Y cable
12CF1-2SAT1B-01R	SATA	2IN1 CB/SATA(S)/BLACK/CODE CPU90*180*1/180*180*1/2H*8P/50 CM
24TSE-621PET-01R	Cooler	Low profile CPU cooler

Chassis Information

Part Number	Usage	Description
24EC5-1TM10A-01R	Chassis	Thin mini ITX chassis Size :204.6 x 205 x 45 mm



* The entire materials provided herein are for reference only. GIGABYTE reserves the right to modify or revise the content at anytime without prior notice.* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.* All trademarks and logos are the properties of their respective holders.* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.