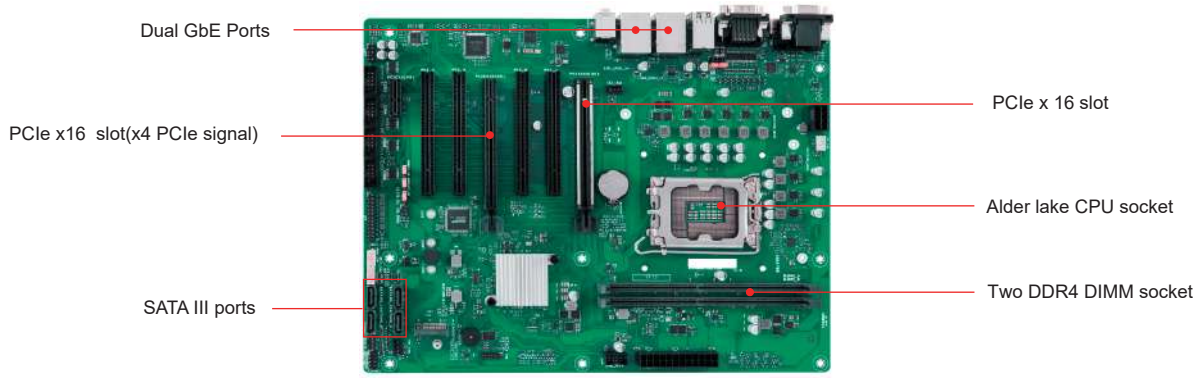
RUBY-D813-H610E

Support Desktop Intel® 12th Gen Core™ Processors
ATX with DDR4 Long- DIMM up to 64Gb , VGA
DP port , HDMI , Dual GbE LAN, Six COM Ports

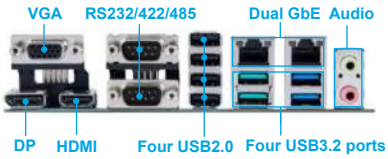


RUBY -D813 is based on Intel® H610E chipset and Desktop processors including Intel® 12 th Gen Core™ i3/i5/i7/i9 Sku. This board supports DDR4 ,PCIe, and SATAIII. Those features help you to build high performance and stabile system.

FEATURES

- Intel® 12 th Gen Core™ Processors support
- Two Long-DIMM support DDR4 Non-ECC DRAM up to 64GB
- Support dual Ethernet, 6x COM Ports, 4x USB 3.2 Ports , 4x SATA III Ports and Audio
- Two PCIe x16(1x PCIe x4 signal), one PCIe x1 , four PCI slot, one M.2 (Type M) type 2242/2260/2280

REAR I/O



ORDERING GUIDE

AB1-3P61	RUBY-D813-H610E (R).RUBY-D813-H610E.ATX IMB.LGA1700 H610E. w/ DDR4/VGA/ DP/HDMI Dual GbE/COM/Audio/USB

PACKING LIST

One R UBY-D813 motherboard
One I/O Shield
One SATA Cable

GENERAL

Processor	Intel® 12 th Gen Core™ Processors CPU in LGA1700 package
Chipset	Intel®H610E
BIOS	AMI uEFI BIOS (SPI ROM)
Memory	Support up to 64GB DDR4 Non-ECC on two Long-DIMM socket,up to 3200MHz
Storage Devices	4x SATAIII ports
Watchdog Timer	Programmable by embedded controller
Hardware Monitoring	System monitor(Voltage,Fan Speed and Temperature)
Expansion Interface	- 2x PCIe x16 slots(1x PCIe x4 signal) - 1x PCIe x1 slots , 4x PCI slots - 1x M.2 (Key M) type 2242/2260/2280(SATA/PCIe x1 mode)

I/O INTERFACE

Super I/O	NCT6126D
Audio	Audio Jack on rear I/O with Line-out /Mic-in with Realtek ALC897 Audio controller
Ethernet	- Intel® I219V and Intel® I210AT Ethernet controller - 2x RJ45 connectors on rear I/O
Serial Port	- 2x RS232/422/485 port one on REAR I/O , one on board header - 4x RS232 port on pin header
USB	- 4x USB3.2(Gen2) and 4x USB 2.0 ports on rear I/O - 2x USB2.0 on pin header
GPIO	8-bit configurable controlled by embedded controller

DISPLAY

Graphic Controller	- Intel® graphic UHD 630 supports DirectX 12, OpenGL 4.5
Display Interface	- DP:DP port on rear I/O, resolution up to 4096x2160 - VGA:One VGA port on rear I/O resolution up to 1920x1200 - HDMI:One HDMI connector on rear I/O, resolution up to 4096x2160

Mechanical & Environment

Dimension	304.8mm(L) x 243.8mm(W) x 1.6mm(H)
Power Supply	ATX
Environment	- Operation temperature:0~60˚C - Storage temperature: -20~80˚C - Relative humidity:5~95%,non-condensing
MTBF	Over 100,000 hours at 40°C