



• Specifications

CPU SUPPORT	Intel Elkhart Lake Processor
MEMORY	2 x DDR4 SO-DIMM Slot
EXPANSION SLOT	1 x Full size Mini-PCIe slot 1 x M.2 M key 2242/2280 slot for NVME 1 x M.2 3042/3052 B Key
GRAPHICS	1 x VGA 1 x LVDS or eDP 1 x HDMI
AUDIO	Realtek ALC897 HD Audio
LAN	2x I226V (opt I226-IT wide range temperature)
SUPER I/O CHIP	ITE IT8786
REAR I/O	2 x USB 2.0 1 x HDMI 2 x LAN 2 x USB 3.0 1 x VGA
INTERNAL I/O	2 x Serial Header for RS232/422/485 1 x USB 2.0 Header (each support 2 devices) 2 x Serial Header for RS232 1 x Front Panel Header 1 x DIO(GPIO) 8 bit (4-In, 4-Out) Header 1 x System DC-FAN Header 1 x Buzzer 1 x Clear CMOS header 1 x Audio header (Line-in/Line-out/Mic-in) 1 x SATA 6Gb/s with power connector 1 x 1*4-pin wafer for Speaker 1 x 1*3 pin header for AT/ATX power select jumper 1 x 0/5V/12V Jumper for serial port use 1 x Power LED 1 x phoenix connector 1 x Amplifier Header 1 x LVDS/eDP (share the same connector, switch mode by BIOS setting)
DIMENSION	148 x 102 x 1.6 mm
ENVIRONMENT	Working Temperature 0°C ~ 60°C Relative Humidity 5% ~ 90% Wide Range Temperature -40°C ~ 85°C by Function Option
OS SUPPORT	Support Windows 10 Support Linux Support Ubuntu

• Features

- Onboard Intel® Elkhart Lake Processor J6412/X6413E (X6413E Support Wide Range Temperature)
- Supports display output : LVDS or eDP, 1xHDMI, 1x VGA
- Support 2 x DDR4 3200 MHz SO-DIMM, up to 32GB
- 2 x Intel I226 GbE LAN
- 2 x USB3.2 Gen1 & 4 x USB2.0
- 2 x RS232/422/485, 2 x RS232
- 1 x SATAIII
- 1x M.2 KEY B slot support USB3.2+PCIEx1 w/ SIM card holder(3042/3052) for 4G/5G
- 1x M.2 KEY M slot support PCIex2 (2242/2280) Support SSD storage
- 1x Mini PCIe, support PCIEx1 +USB2.0 for wireless module
- Support wide range temperature -40 ~ 85 degree C
- Typical 9~24V DC input