

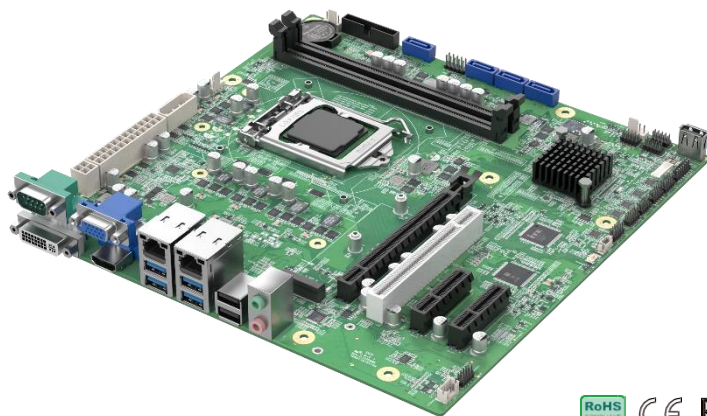
# MATX-I964

Intel 8/9th LGA1151 CPU, Dual-channel DDR4, VGA/HDMI/DVI-D,  
Dual LAN, 4\*USB 3.1, 6\*USB 2.0, 6\*COM, 4\*PCIe/PCI, ATX power

**JHCTECH**

IoT Computer  
Connecting the Data

Single Board Computer-SBC



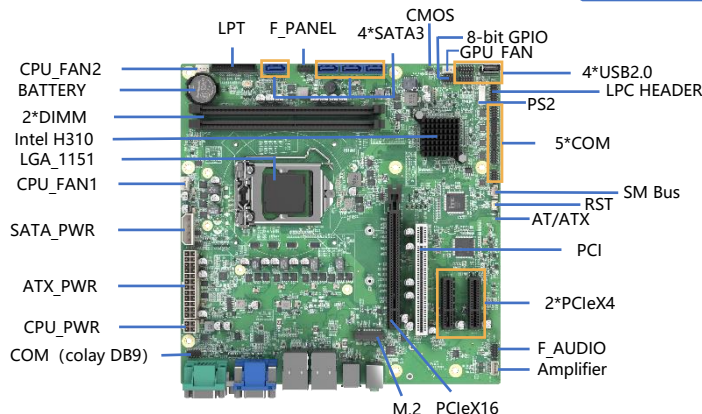
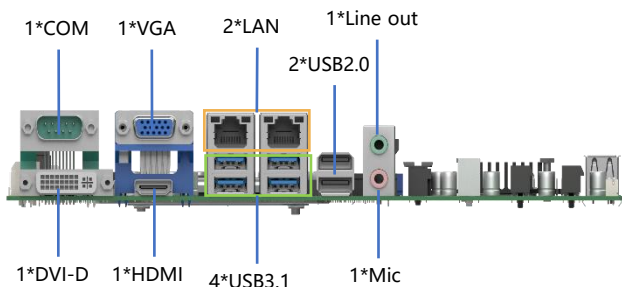
## Key Features

- Intel H310 PCH, supports Intel 8/9th Gen. Coffee lake-S Core i9 / i7 / i5 / i3 / Pentium/Celeron LGA1151 CPU
- Dual - channel DDR4 2666MHz UDIMM, up to 64GB
- VGA+HDMI/ VGA +DVI-D/ HDMI +DVI-D dual independent displays
- 1\*1219LM and 1\*I226V dual Gigabit network ports
- 4\*USB3.1, 6\*USB2.0, 6\*COM, 1\*8bit GPIO, 1\*LPT
- 1\*PCIe X16, 1\*PCI, 2\*PCIe X4, a total of four slots;
- 4\*SATA3.0 6.0Gbps, 1\*M.2 2242/2280 M-Key, Nvme
- Realtek ALC897 HD audio chip, support 5.1 channels, optional support amplifier
- 24pin ATX +4pin 12V ATX power

## Description

MATX-I964 is an industrial motherboard powered by Intel H310 chipset, supporting Intel 8/9th Gen Core i9 / i7 / i5 / i3 / Pentium/Celeron CPU, designed according to the standard Micro ATX motherboard specification. It is suitable for all 4U rack and wall-mounted rack on the market, very suitable for machine vision, data acquisition and other fields.

## I/O View



## SPEC.

|                |                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU            | Intel 8/9th Gen. Core i9 / i7 / i5 / i3 / Pentium/Celeron CPU, LGA 1151 Socket, maximum power consumption 95W                                                                                                                                                                                                                                                                                                  |
| Chipset        | Intel H310 PCH                                                                                                                                                                                                                                                                                                                                                                                                 |
| Memory         | 2*288-pin Non-ECC UDIMM, dual channel DDR4 2666MHz, up to 64GB                                                                                                                                                                                                                                                                                                                                                 |
| Expansion      | 1*PCIe X16 (Gen3.0 X16 signal), 2*PCIe X4 (Gen2.0 X1 signal), 1*32-bit PCI, 1* M.2 2242/2280 M-Key (Gen2.0 PCIe X2 signal)                                                                                                                                                                                                                                                                                     |
| Graphics       | Intel 9th HD Graphic, AVC/ VC1 / MPEG2 / HEVC/VP8 / JPEG. HW HD codec, support Direct3D 11.2, OpenGL 5.0, OpenCL 2.1, VGA+HDMI/ VGA +DVI-D/ HDMI+ DVI-D dual independent displays; the highest resolution: HDMI is 4096*2304@24Hz, VGA is 1920*1200@60Hz, DVI-D is 1920*1200@60Hz                                                                                                                              |
| Audio          | Realtek ALC897 HD audio chip, support 5.1 channels, optional support 2*3W amplifier                                                                                                                                                                                                                                                                                                                            |
| LAN            | 1*Intel® I226V, 10M/100M/1000M adaptive, support WOL<br>1*Intel® I219LM, 10/100/1000Mbps adaptive, support WOL                                                                                                                                                                                                                                                                                                 |
| Storage        | 4*SATA3, 6.0Gbps HDD/SSD (with a 5V independent power supply interface and supports SATA DOM); M.2 2242/2280 M-Key (PCIeX2 signal, Nvme)                                                                                                                                                                                                                                                                       |
| Rear I/O       | 2*LAN (RJ45 w/LED), 1*COM (RS232/422/485, DB9 male needle, colay 2*5pin dupont pin), 4*USB3.1 Gen2 (Type A, 5.0 Gbps), 2*USB2.0 (Type A), both support USB Power jumper switching Power supply mode 5V System or 5VSB, 1*HDMI+1*VGA+1*DVI-D, 1*Line out+1*Mic, 3.5mm phone Jack                                                                                                                                |
| Internal I/O   | 4*USB2.0 (one Type A, three 2*5pin dupont pins), 6*COM (1*colay DB9, 1*RS232/422/485 2*5pin dupont pin, 4*RS232 2*5pin dupont pin), 1*LPT (2*13pin simple horn), 1*8bit GPIO (2*5pin dupont pin), 4*SATA3, 1*F_AUDIO (2*5pin dupont pin), 1*PS2 (1*6pin 2.0mm wafer), 1*Amplifier (1*4pin 2.0mm wafer), 1*LPC (2*7pin header), 2*CPU_FAN, 1*GPU_FAN, 1*SM bus (1*4pin wafer), 1*ATX_PWR, 1*CPU_PWR, 1*SATA_PWR |
| Switch & LED   | F_PANEL (Power SW, Reset, Power LED, HDD LED), Clear CMOS jumper, AT/ATX jumper, USB Power jumper                                                                                                                                                                                                                                                                                                              |
| Power Supply   | 24-pin ATX +4-pin 12V, TDP: 224W (i9-9900K CPU/16G DDR4/128G SSD, without accelerator card or function card)                                                                                                                                                                                                                                                                                                   |
| Watchdog Timer | Programmable timeout interrupt or system reset, 1 to 255 seconds                                                                                                                                                                                                                                                                                                                                               |
| OS Support     | Windows7、Windows* 10 Enterprise & IOT Enterprise (64 bit) (CFL-R); Windows* Server 2016 (Intel® Xeon® E) Ubuntu*、SuSe*、Redhat Enterprise* 1,2 (Kernel 4.14) (CFL-R) Wind River* ;VxWorks* 7 (CFL-R)                                                                                                                                                                                                            |

