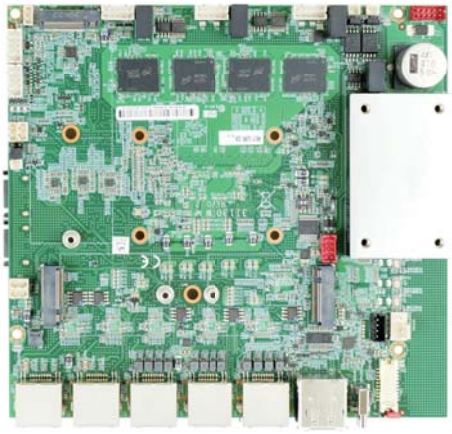
3I130TW

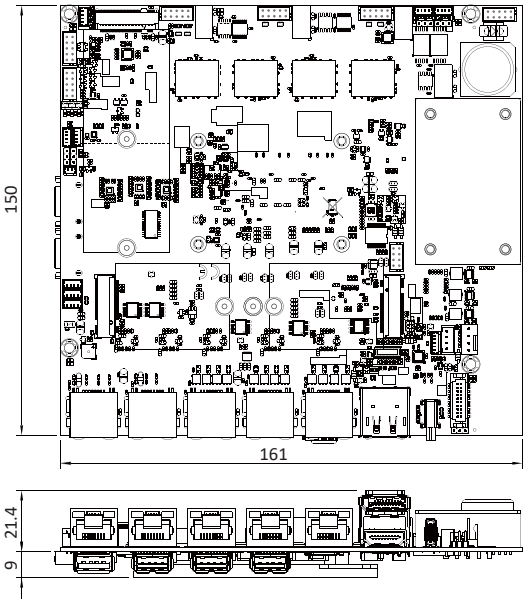
3.5" Plus Embedded SBC supports
13th Gen Intel® Core™ Raptor Lake U i7 / i5 / i3 CPU
12th Gen Intel® Core™ Alder Lake U i7 / i5 / i3 CPU
1 x HDMI®, 1 x DP, 1 x eDP, 1 x Type C, 5 x Intel 2.5Gb Ethernet,
3 x M.2, 1 x Nano SIM, 4DI / 4DO, 3 x USB 3.2, 4 x USB 2.0, 2 x COM,
2 x CABus, Isolated Wide Range DC-IN, CPC-Ignition on/off control



Features:

- 13th Gen Intel® Core™ Raptor Lake U i7 / i5 / i3 CPU
  12th Gen Intel® Core™ Alder Lake U i7 / i5 / i3 CPU
- Onboard LPDDR5, 16GB / 32GB
- Multiple Independent display:
  1 x HDMI®, 1 x DP, eDP, 1 x Type C DP ALT Mode
- 5 x Intel 2.5 GbE LAN
- 3 x USB 3.2, 4 x USB 2.0, 1 x Type C
- 1 x M.2 M Key, 2 x M.2 B Key, 1 x Nano SIM
- 2 x Isolated COM, 4DI / 4DO, TPM 2.0, SMBus, I²C, 2 X Isolated CANBus
- Isolated Wide Range DC-IN, CPC-Ignition on/off control

Dimensions: (Unit:mm)



Specifications :

- CPU
  13th Gen Intel® Core™ Raptor Lake U i7 / i5 / i3 CPU
  12th Gen Intel® Core™ Alder Lake U i7 / i5 / i3 CPU
- MB Chipset
  Intel® Raptor Lake-U SoC
  Intel® Alder Lake-U SoC
- Graphics
  Intel Iris Xe Graphics (i7, i5), Intel UHD Graphics (i3, Celeron)
- System Memory
  Onboard LPDDR5, 16GB / 32GB
- Storage
  2 x SATA port
  1 x M.2 M key Type 2280 (OEM to 2242), Support NVMe SSD
- BIOS
  AMI UEFI BIOS
- Display
  1 x HDMI®, 1 x DP, eDP, 1 x Type C DP ALT Mode
- TPM
  TPM 2.0
- LAN
  5 x Intel 2.5GbE I226-IT (external)
- Audio
  High Definition Audio Specification, Support Line-out / Mic-in / Line-in
  Two channel Class D Audio Amplifier
- Expansion Interface
  1 x M.2 B key Type 2242 / 3042 (PCIe x1 / USB 2.0)
  1 x M.2 M key Type 2242 / 3042 / 3080 (PCIe x 4), Support NVMe
  1 x M.2 B key Type 2242 / 3042 / 3052 (USB 3.2 Gen 1 x 1 / USB 2.0)
  1 x Nano SIM

Expansion Module	
CN064	M.2 B+M key 2242 to M.2 E Key 2230, WiFi 6 + BT
CN067	M.2 B key 2242 to M.2 B Key 2252, 4G / 5G (3.7V by BOM Control)
CN059	USB to Line-out / Mic-in
CC007	USB to 4 port COM
CIO116G	SMBus to 8DI + 8DO
PW351	1 port PoE PSE
PW352	2 port PoE PSE
PW353	4 port PoE out (RJ45)
PW354	4 port PoE out (M12)
PW301	802.3AF / AT PD module
PW206	12V / 24V DC to DC Redundant Power Board
PW022	Wide Range power board (24V / 48V)
DP001	eDP to VGA
eDP003	eDP to DVI
eDP004	eDP to HDMI®
eDP001	eDP to LVDS (OEM)

- USB
  3 x USB 3. 2 Gen 1 x 1 (external) ; 1 x Type C, USB 3.2 (external)
  1 x USB 2.0 (external) ; 3 x USB 2.0 (internal)
- Serial IO
  2 x Isolated RS232 / 422 / 485 (internal) ;
  2 x Isolated CANBus
- GPIO
  Hardware digital Input & Output, 4 x DI / 4 x DO
- SMBus
  1 x SMBus ; I²C
- WDT
  Hardware Watch Dog Timer, 0~255 sec programmable
- Power Input
  Isolated Wide Range DC IN +9~36V ; CPC-Ignition on/off control
  Wide Range DC IN +18~75V (option), 1.5KVDC I/O isolation
  power brick 1/4 CQB100W-24S12 9~36V IN / 12V Out 100W(SYS) (Standard SPEC)
  power brick 1/4 CQB100W-48S12 18~75V IN / 12V Out 100W(SYS) (OEM SPEC)
- Dimension
  161 x 150 mm ; Weight: 260g
- Operation Temperature (100 % CPU Usage)
  -20°C ~ +70°C (under specific environmental & CPU power consumption conditions)
  -40°C ~ +70°C (1315URE / 1345URE / 1365URE)
- Operation Humidity
  5~95%, non-condensing
- Chassis (OEM I/O Expansion by request)
  HAWK
- OS Support
  Windows 10/11 (64bit)
  Ubuntu 22.04.4 LTS, kernel 6.8.0-40-generic