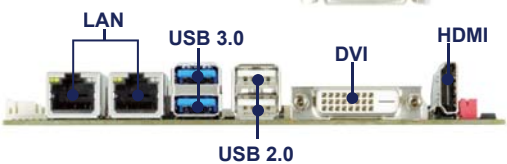


# 3I640A/CW

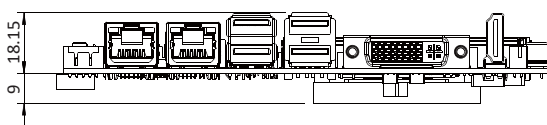
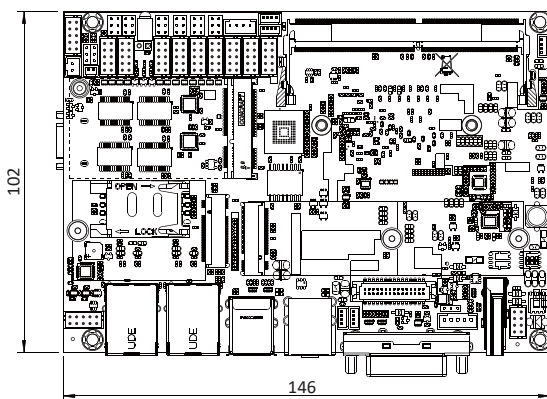
3.5" Embedded IPC Board supports Intel® Elkhart Lake ATOM® x6413E / J6412 CPU  
 HDMI, DVI, LVDS, 2 x Intel 2.5 Gb Ethernet, 6 x USB, Touch Screen,  
 6 x COM, 2 x M.2, 1 x Mini PCIe, 1 x Mini SIM, 8DI / 8DO



## Features:

- Intel® Elkhart Lake ATOM® x6413E / J6412 CPU
- 1 x DDR4 SODIMM, Max. 32GB
- Independent display: HDMI, DVI, LVDS
- 2 x Intel 2.5 GbE LAN, 2 x USB 3.0, 4 x USB 2.0
- 6 x COM, 1 x Mini PCIe, 2 x M.2, 1 x Mini SIM
- Touch Screen, 8DI / 8DO
- TPM 2.0 (option)

## Dimensions: (Unit:mm)



## Specifications :

- CPU  
Intel® Elkhart Lake ATOM® x6413E / J6412 CPU
- MB Chipset  
Intel® Elkhart Lake SoC
- Graphics  
Intel® HD Graphics, Support DirectX 12.1 & OpenGL 4.5
- System Memory  
1 x DDR4 SODIMM, Max. 32GB
- Storage  
1 x M.2 B Key Type 2242 PCIe-SSD, Support NVMe  
1 x SATA  
1 x M.2 SATA-SSD
- BIOS  
Insyde UEFI BIOS
- Display  
1 x HDMI, 1 x DVI, 24 / 48bits LVDS  
Touch USB interface Touch Screen controller
- TPM  
TPM 2.0 (Firmware) ; OEM Optional to Hardware TPM 2.0
- LAN  
2 x Intel 2.5 GbE I225 / I226 (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 3042 (SATA / USB 2.0 / USB 3.0)  
1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0), support NVMe  
1 x Mini PCIe (USB 2.0 / PCIe)  
1 x Mini SIM

### Expansion Options

CN064	M.2 B 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
PW301	802.3AF / AT PD module
PW205	Wide Range power board (9~36V) with power Ignition on/off delay
PW206	12V / 24V DC to DC Redundant Power Board
PW022	Wide Range power board (24V / 48V)

- USB  
2 x USB 3.0 (external) ; 2 x USB 2.0 (external) + 2 x USB 2.0 (internal)
- Serial IO  
2 x RS232 / 422 / 485 (internal)  
4 x RS232 (internal)  
\*COM1~COM4 pin9 5V / 12V (by Jumper) ; COM5 / 6 (OEM BOM)
- GPIO  
Hardware digital Input & Output, 8 x DI / 8 x DO
- WDT  
Hardware Watch Dog Timer, 0~255 sec programmable
- SMBus  
1 x SMBus
- PS2 KB/MS  
PS2 KB/MS (internal)
- Power Input  
DC-IN +12V or Wide Range +9~36V
- Dimension  
3.5" (146 x 102 mm)
- Operation Temperature (100 % CPU Usage)  
-20°C~70°C (100 % CPU Usage)
- Operation Humidity  
5~95%, non-condensing
- Chassis (OEM I/O Expansion by request)  
Box PC: SKY 3, TASK, TWITTER
- OS Support  
Windows® 10 IOT ; Windows® 11 IOT  
Ubuntu 22.04 above, Fedora 36 above