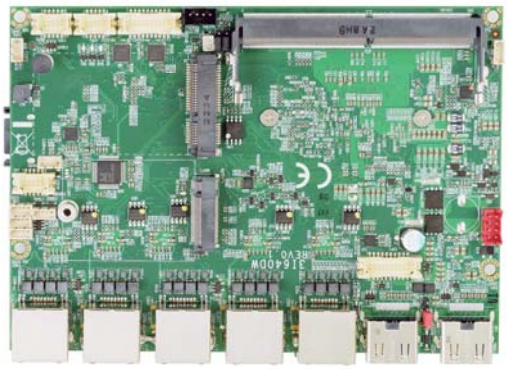
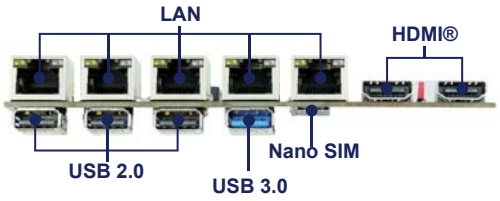
3I640DW

3.5" Embedded IPC Board supports Intel® Elkhart Lake ATOM® x6413E / J6412 CPU
2 x HDMI®, eDP, 5 x Intel 2.5 Gb Ethernet, 8 x USB,
2 x COM, 1 x M.2, 1 x Mini PCIe, 1 x Nano SIM, 4DI / 4DO

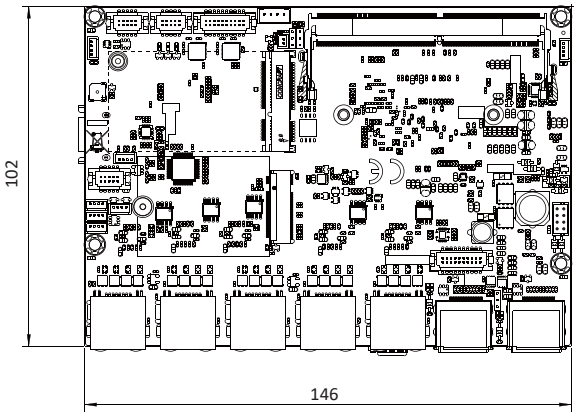


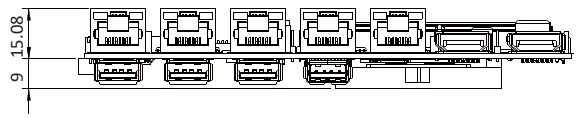


Features:

- Intel® Elkhart Lake ATOM® x6413E / J6412 CPU
- 1 x DDR4 SODIMM, Max. 32GB
- Independent display: 2 x HDMI®, eDP
- 5 x Intel 2.5 GbE LAN, 1 x USB 3.0, 7 x USB 2.0
- 2 x COM, 1 x Mini PCIe, 1 x M.2, 1 x Nano SIM
- 4DI / 4DO, TPM 2.0

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 SATA port
  1 x Mini Card Support mSATA (Option, Shared with SATA signal)
  1 x M.2 B key Type 2242 / 3042, Support SATA SSD
- BIOS
  Insyde UEFI BIOS
- Display
  2 x HDMI® (OEM to DP), eDP
- TPM
  TPM 2.0 (Firmware) ; OEM Optional to Hardware TPM 2.0
- LAN
  5 x Intel 2.5 GbE I226 (external)
- Audio (OEM)
  High Definition Audio Specification, Support Line-out / Mic-in / Line-in Two channel Class D Audio Amplifier (OEM)
- Expansion Interface
  1 x M.2 B Key Type 2242 / 3042 (SATA / USB 2.0 / USB 3.0)
  1 x Mini PCIe (USB 2.0 / PCIe-OEM to mSATA)
  1 x Nano SIM

Expansion Options	
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
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) for ATOM series MB
DP001	eDP to VGA
eDP003	eDP to DVI
eDP004	eDP to HDMI
eDP001	eDP to LVDS (OEM)

- USB
  1 x USB 3.0 (external) ; 3 x USB 2.0 (external) ; 4 x USB 2.0 (internal)
- Serial IO
  2 x RS232 / 422 / 485 (internal)
  *COM1, COM2 pin9 5V / 12V (option)
- GPIO
  Hardware digital Input & Output, 4 x DI / 4 x DO
- WDT
  Hardware Watch Dog Timer, 0~255 sec programmable
- SMBus
  1 x SMBus
- I^2C
  I^2C
- Power Input
  Wide Range +9~36V
- Dimension
  3.5" (146 x 102 mm) ; Weight: 165g
- Operation Temperature (100 % CPU Usage)
  -20°C~+70°C (100 % CPU Usage)
  -40°C by x6413E CPU
- 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 22.04.2 LTS, Kernel 5.19.0-41-generic

Specification are subject to change without prior notice. ODM / OEM is available.