



## Features

- Intel® Celeron® J6412 quad-core 2.0 GHz processor
- 1 x DDR4 3200MHz SODIMM, MAX 32GB
- 1 x 2.5 SATA HDD, 1 x M.2 2280 SATA SSD
- 1 x M.2.0 (2230, Wifi+BT), 1 x M.2.0 (3042/3052, 4G/5G)
- Supports dual independent display: 1 x HDMI, 1 x DP
- 3 x Intel® 226-V 2.5GbE Ethernet, support WoL and PXE
- 6 x COM (4x RS232/RS422/RS485), ESD and Surge Protection
- Support TPM2.0 hardware security
- Wide Operating Temperature -30°C to 70°C
- 9V to 36VDC Wide Range Power Input, Supporting OVP / OCP / RPP

## Specifications

System		
CPU	Intel® Elkhart Lake Celeron J6412 2.0GHz	Intel® Elkhart Lake Atom X6425E 2.0GHz
L2 Cache	1.5MB	1.5MB
TDP	10W	10W
System Chipset	Integrated with Intel® SoC	
Memory	DDR4L 3200MHz 4GB, MAX 32GB	
Harddisk	1 x M.2 120G SSD ( 250G / 500G / 2TB SSD) / 1 x 2.5" SATA	
Graphics	Intel® UHD Graphics for 10th Gen Intel® Processors	
Network	Intel® 226-V GbE LAN	
Audio	Realtek ACL897 Audio controller	
TPM	TPM 2.0	
Watchdog Timer	Software Programmable Supports 1~255 sec. System Reset	
Operation System	Windows 10 / 11, Linux, Ubuntu	
I/O		
VIDEO	1 x DP / 1 x H-DMI	
Ethernet	3 x LAN 10/100/1000/2500 Mbps	
USB	6 x USB2.0 / 4 x USB3.0	
COM	2 x RS-232 / 4 x RS-232 / 422 / 485 ( Adjustable through BIOS )	
Audio	1x Audio_out & Mic_in	
Wireless Network	Optional (WiFi / Bluetooth / 4G / 5G )	
Expansion		
M.2	1*M.2 ( Key-E, 2230, PCIe+USB, Wifi+BT)	
	1*M.2 ( Key-B, 3042/3052, PCIe/ USB 3.0+USB2.0, 4G/5G )	
	1*M.2 ( Key-M, 2280 SATA, SSD )	
Expansion	1*mPCe	
SIM Socket	1x SIM Socket	
Power		
Power Adapter	1 x Optional AC/DC 12V/5A , 60W	
Power Mode	Support AT, ATX Mode	
Power Input	2-pin Terminal Block Connector with Power Input 9~36VDC	
Power Protection	OVP (Over Voltage Protection)   OCP (Over Current Protection)   RPP (Reverse Polarity Protection)	
Power Consumption	≤30W	

Physical	
Material	Aluminum Alloy Shell
Color	Grey / Silver / Black ( optional )
Mounting	208 x 100 mm / 208 x 60 mm
Product Dimension	220 x 145 x 62 mm
Packing Size	360 x 180 x 320 mm
Weight (Net)	1.5 KG
Environment	
Operating Temperature	-30~70°C ( -22~158°F )
Storage Temperature	-40~85°C (-40~185°F)
Relative Humidity	5%~95%@40°C, non-condensing
Vibration Protection	1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
EMC	CE, FCC, Class A, ROHS

## Dimension & I/O

**I/O Definition:**

- I: COM3 / COM4
- J: COM5 / COM6
- K: 2 x USB
- L: 2 x USB
- M: AUDIO
- N: AT/ATX
- O: Extension Switch
- P: Power Button

**I/O Definition:**

- A: COM1 / COM2
- B: 2 x USB3.0 / LAN
- C: 2 x USB3.0 / LAN
- D: 2 x USB2.0 / LAN
- E: H-DMI
- F: DP
- G: DC 9V-36V
- H: GND

## Ordering info

Available models	Description
EFIC-2000CA	Embedded Fanless Industrial Computer Intel® Elkhart Lake Celeron J6412 2.0GHz Processor
EFIC-2000XA	Embedded Fanless Industrial Computer Intel® Elkhart Lake Atom X6425E 2.0GHz Processor

## Packing list

1 x Standard product
1 x 60W PSU (Power Supply)
1 x CD-ROM