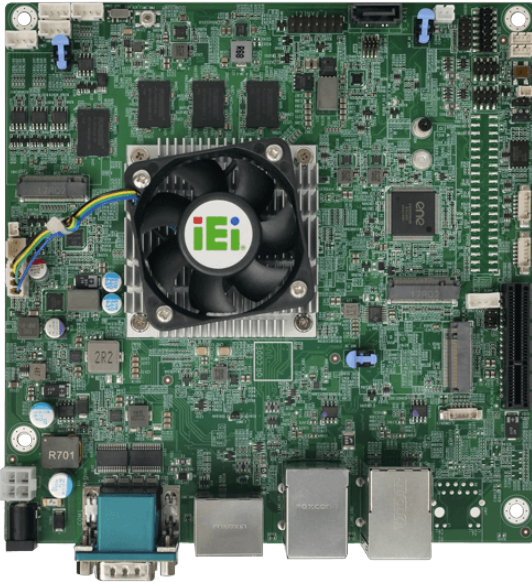


# KINO-EHL

Mini-ITX SBC supports Intel® Elkhart Lake Celeron® on-board SoC with 8GB LPDDR4x memory on board default, Triple Independent Display with HDMI, DP and iDPM, SATA 6Gb/s, Dual 2.5GbE, USB 3.2, M.2, 12V DC input and RoHS



## Features

1. Mini-ITX SBC supports Intel® Elkhart Lake Celeron® J6412
2. Support Triple independent displays via HDMI, DP, iDPM
3. Support dual Intel® i225V 2.5GbE ports
4. Support one PCIe Gen3 x4 slot, M.2 A key and M.2 B key expansions
5. Two USB 3.2 Gen2, six USB 2.0, two RS-232, four RS-422/485

## Specifications

System	
CPU	Intel® Elkhart Lake Processor Intel® Celeron® J6412 on-board SoC (up to 2.6GHz, quad-core, 1.5M Cache, TDP=10W)
Memory	Onboard LPDDR4x-3200MHz 8GB, system up to 16GB
Memory Max.	up to 16GB
Cooling method / System Fan	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x3 pin)
Storage	
Storage	1 x SATA : 6Gb/s with 5V SATA power connector
I/O Interface	
Display Output	1 x HDMI : up to 4096 x 2160@30Hz 1 x Display Port : up to 4096 x 2160@60Hz 1 x iDPM : 1 x IEI iDPM 3040 slot (only for IEI eDP/LVDS/VGA module)
Ethernet	2 x LAN - LAN1: Intel® I225V 2.5GbE controller LAN2: Intel® I225V 2.5GbE controller
Audio	1 x HD Audio : 1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2x5 pin)
I/O Interface	2 x External RS-232 4 x Internal RS-422/485 : 1x4 pin, P=2.00 2 x External USB 2.0 4 x Internal USB 2.0 : 2x4 pin, P=2.00 1 x DIO : 12-bit digital I/O (2x7 pin)
Expansion	2 x External USB 3.2 Gen2x1 : 10Gb/s 1 x PCIe x4 : PCIe Gen3 x1 signal 2 x M.2(NGFF) - 1 x M.2 A key (2230) (PCIex1 & USB 2.0) 1 x M.2 B key (3052/3042/2242/2280) w/ SIM holder (PCIe x2 / USB 2.0)

Other Features	
TPM	Intel® PTT (TPM 2.0)
Power	
Power Consumption	12V@2.78A (Intel® Celeron® J6412 2.0GHz with 8GB 3200MHz LPDDR4 memory and EUP enabled)
Power Supply	12V DC input
	1 x Internal power connector (2x2 pin)
	1 x External DC power Jackc (Ø2.5mm)
	ErP/EuP Compliant
Environment	
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~ 95%, non-condensing
Certifications	
Safety & EMC	CE/FCC compliant

## Ordering Information

KINO-EHL-J6412C-R10	Mini-ITX SBC supports Intel® quad-core Celeron® J6412 2.0GHz on-board SoC with 8GB LPDDR4x memory on board default, Triple Independent Display, HDMI, DP, SATA 6Gb/s, Triple GbE, USB 3.2, M.2 and RoHS
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## Packing List

1 x KINO-EHL single board computer	1 x SATA cable
1 x I/O shielding	1 x QIG