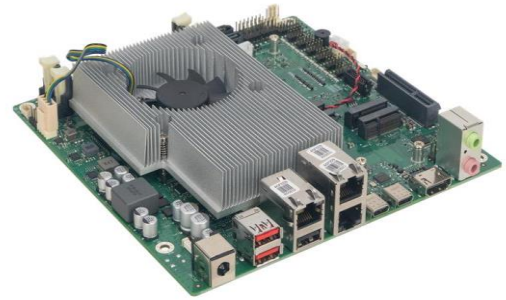


Features

- Dual DDR5 CSO-DIMM memory ensures data integrity and system stability
- Quad independent display via HDMI, USB4 and IEI iDPM expansion
- Triple Intel® 2.5GbE LAN for high-speed industrial networking
- Flexible expansion with PCIe Gen5 and multiple M.2 slots

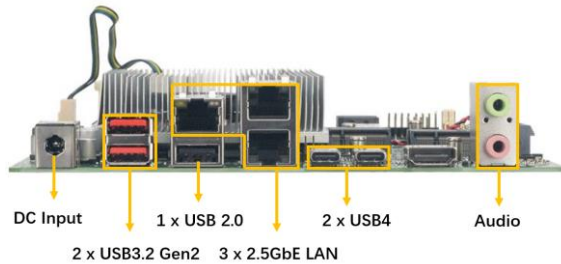
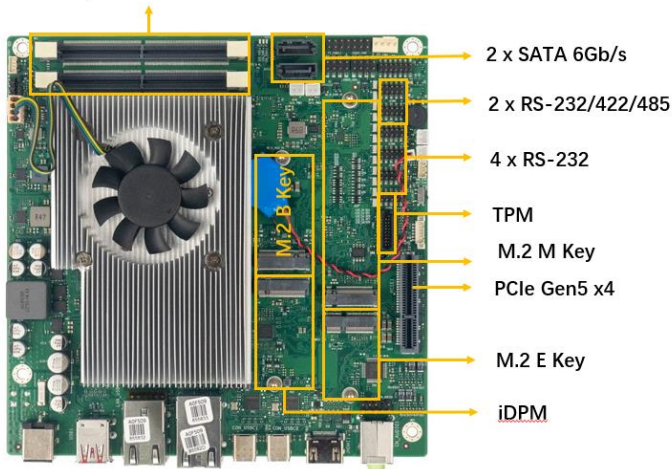


Specifications

MODEL NAME	KINO-PTL
CPU	Intel® Core Ultra Processor (Series 3)
BIOS	AMI UEFI BIOS
Memory	2 x 262-pin 6400 MHz DDR5 CSO-DIMM , system up to 128G
Graphics Engine	Intel® New GFX Xe3 Architecture Graphics
Display Output	Quad independent display 1 x HDMI 1.4 (up to 4096 x 2160 @30Hz) 2 x USB4 (up to 4096 x 2160 @60Hz) 1 x IEI iDPM 3040 slot (only for IEI module)
Ethernet	LAN1: Intel® I226LM 2.5GbE controller LAN2: Intel® I226V 2.5GbE controller LAN3: Intel® I226V 2.5GbE controller
External I/O Interface	2x USB 3.2 Gen 2 (10Gb/s) 1 x USB 2.0
Internal I/O Interface	4x USB 2.0 (2x4 pin, P=2.0) 2 x RS-232/422/485(2x5 pin, P=2.0) 4 x RS-232(2x5 pin, P=2.0)
SATA	2 X SATA 6Gb/s
SMBus	1 x SMBus (1x4 pin) {Colay I2C (1x4 pin)}
Audio	Realtek ALC888S HD Audio codec 2 x Audio Jack (Line-out, Mic-in) 1 x Analog audio (2x5 pin)
Front Panel	1 x Front Panel (2x7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
Expansion	1 x PCIe Gen5 x4 Slot 1 x M.2 E Key for WIFI & BT 2230(PCle Gen4 x1 & USB 2.0) 1 x M.2 B key 3042 (PCle Gen4 x1/USB2.0) 1 x M.2 M key 2280 (PCle Gen4 x2)
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
Chassis Open	1 x Chassis intrusion (1x2 pin)
TPM	1 x TPM2.0 (2 x 10pin)
Fan connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Power Supply	Input voltage range: 12~28V 1 x internal power connector (2x2 pin) 1 x external DC power jack (Ø2.6mm) ErP/EuP Compliant
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	TBD
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimension	170 mm x 170 mm
Weight	GW: 900g / NW: 400g
Certification	CE/FCC Compliant

Fully Integrated I/O

2 x 262-pin 6400 MHz DDR5 CSO-DIMM



Ordering Information

PART NO.	DESCRIPTION
KINO-PTL-U5A-R10	Mini-ITX SBC with Intel® Core Ultra Processor (Series 3) Core Ultra5 325 SoC Processor, DDR5, 12~28V DC input, Quad Display, SATA, Triple Intel 2.5GbE, USB4, M.2, TPM, RoHS
KINO-PTL-U5B-R10	Mini-ITX SBC with Intel® Core Ultra Processor (Series 3) Core Ultra5 338H SoC Processor, DDR5, 12~28V DC input, Quad Display, SATA, Triple Intel 2.5GbE, USB4, M.2, TPM, RoHS
KINO-PTL-U7A-R10	Mini-ITX SBC with Intel® Core Ultra Processor (Series 3) Core Ultra7 355 SoC Processor, DDR5, 12~28V DC input, Quad Display, SATA, Triple Intel 2.5GbE, USB4, M.2, TPM, RoHS
KINO-PTL-U7B-R10	Mini-ITX SBC with Intel® Core Ultra Processor (Series 3) Core Ultra7 358H SoC Processor, DDR5, 12~28V DC input, Quad Display, SATA, Triple Intel 2.5GbE, USB4, M.2, TPM, RoHS

Packing List

ITEM	DESCRIPTION
1 x KINO-PTL single board computer	2 x SATA cable
1 x I/O Shielding	1 x QIG

Options

ITEM	PART NO	DESCRIPTION
USB cable	CB-USB02A-RS	Dual port USB cable with bracket, 300mm, P=2.0
RS-232/422/485 cable	32205-000702-100-RS	RS-232/422/485 cable, 200 mm, p=2.0 mm
Converter board	iDPM-eDP-R10	eDP to eDP DisplayPort converter board (for IEI iDPM connector)
Converter board	iDPM-LVDS-R10	eDP to LVDS DisplayPort converter board (for IEI iDPM connector)
Converter board	iDPM-VGA-R10	eDP to VGA Connector converter board (For IEI Display Module)
Converter board	iDPM-DP-R10	DisplayPort extension board (For IEI Display Module)