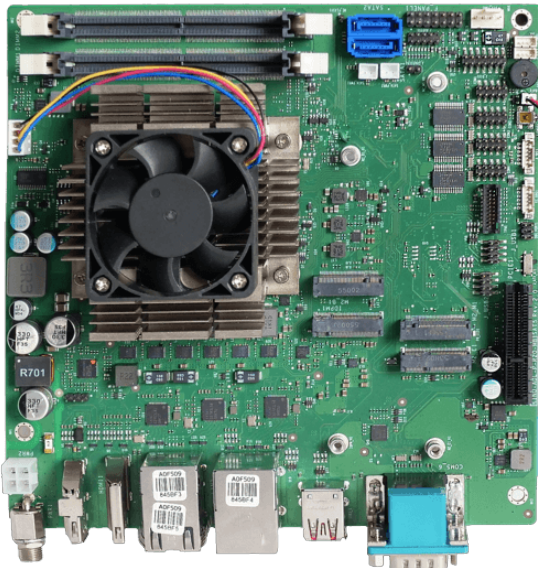


# KINO-RPLH

12th/13th Gen. Intel® Alder Lake-P/Raptor Lake on board SoC



## Features

- » 12th/13th Gen. Intel® Alder Lake-P/Raptor Lake on board SoC
- » 2 x 262-pin 4800 MHz DDR5 SO-DIMM, system up to 64G
- » Triple independent display via HDMI, DP and iDPM
- » Support triple Intel® I226V and I226LM 2.5GbE controller
- » Support PCIe x4, M.2 M key, M.2 B key and M.2 E key expansion

## Specifications

|                             |   |
|-----------------------------|---|
| Form Factor                 |   |
| Form Factor                 | Mini-ITX SBC  |
| System                      |   |
| CPU                         | Support 12/13th Intel® mobile Alder Lake-P/Raptor Lake on-board processor   |
| Memory                      | 2 x 262-pin 4800 MHz DDR5 SO-DIMM   |
| Memory Max.                 | up to 64G   |
| Cooling method / System Fan | 1 x CPU fan connector (1x4 pin)<br>1 x System fan connector (1x4 pin)   |
| Physical Characteristics    |   |
| Dimensions (LxWxH) (mm)     | 170mm x 170mm   |
| Net Weight                  | GW: 900g / NW: 450g   |
| Storage                     |   |
| Storage                     | 2 x SATA : 6Gb/s  |
| I/O Interface               |   |
| Display Output              | 1 x Display Port : DP 1.4 (up to 4096 x 2160 @60Hz)<br>1 x HDMI™ : 1.4 (up to 4096 x 2160 @30Hz)<br>1 x iDPM : IEI iDPM 3040 slot (only for IEI eDP/ LVDS/ VGA module)  |
| Ethernet                    | 3 x LAN -<br>LAN1: Intel® I226LM 2.5GbE controller<br>LAN2: Intel® I226V 2.5GbE controller<br>LAN3: Intel® I226V 2.5GbE controller  |
| Audio                       | 1 x HD Audio : iAUDIO, support IEI AC-KIT-888S Audio Module (2x5 pin)   |
| I/O Interface               | 1 x DIO : 12-bit digital I/O (2x7 pin)<br>2 x External RS-232/422/485<br>4 x External USB 3.2 Gen2x1 : Type-A, 10Gb/s<br>1 x I²C : 1x4 pin<br>4 x Internal RS-232 : 2x5 pin, P=2.0<br>4 x Internal USB 2.0 : 2x4 pin, P=2.0 |
| Expansion                   | 1 x PCIe x4 : PCIe Gen3 x4 Slot Open-ended  |
| Other Features              |   |

|                            |   |
|----------------------------|---|
| TPM                        | 1 x TPM 2 x10 pin ,support Intel PTT  |
| <b>Power</b>               |   |
| Power Consumption          | 12V@1.52A, 19V@1.06A, 24V@0.81A, 28V@0.709A   |
|                            | (12th Gen Intel® Core™ i7-1270PE CPU with 32 GB 4800 MHz DDR5 memory, max. loading, EuP mode enabled) |
| Power Supply               | inputvoltage range, 12~28V  |
|                            | 1 x internal power connector (2x2 pin)  |
|                            | 1 x external DC power jack (Ø2.6mm)   |
|                            | ErP/EuP Compliant   |
| <b>Environment</b>         |   |
| Operating Temperature      | -10°C ~ 60°C  |
| Storage Temperature        | -30°C ~ 70°C  |
| Humidity                   | 5% ~95%, non-condensing   |
| <b>Card Slot Interface</b> |   |
| M.2                        | 1 x M.2 E Key for WIFI & BT 2230 (PCIe Gen3 x1 & USB 2.0)   |
|                            | 1 x M.2 B key 3042 (PCIe Gen3 x2 / USB2.0)  |
|                            | 1 x M.2 M key 2280 (PCIe Gen3 x4)   |

## Ordering Information

|                   |  |
|-------------------|--|
| KINO-RPLH-i7E-R20 | Mini-ITX SBC with Intel® Alder Lake-P/Raptor Lake-H Core™ i7-1370PE SoC Processor,DDR5 SO-DIMM, 12~28V DC input, Triple Display,SATA,Triple Intel 2.5GbE,USB3.2,M.2,SoC,RoHS |
| KINO-RPLH-i5E-R20 | Mini-ITX SBC with Intel® Alder Lake-P/Raptor Lake-H Core™ i5-1340PE SoC Processor,DDR5 SO-DIMM, 12~28V DC input, Triple Display,SATA,Triple Intel 2.5GbE,USB3.2,M.2,SoC,RoHS |
| KINO-RPLH-i3E-R20 | Mini-ITX SBC with Intel® Alder Lake-P/Raptor Lake-H Core™ i3-1320PE SoC Processor,DDR5 SO-DIMM, 12~28V DC input, Triple Display,SATA,Triple Intel 2.5GbE,USB3.2,M.2,SoC,RoHS |
| KINO-RPLH-CE-R20  | Mini-ITX SBC with Intel® Alder Lake-P/Raptor Lake-H Celeron® 7305E SoC Processor,DDR5 SO-DIMM, 12~28V DC input, Triple Display,SATA,Triple Intel 2.5GbE,USB3.2,M.2,SoC,RoHS  |

## Packing List

|                                     |                   |
|-------------------------------------|-------------------|
| 1 x KINO-RPLH single board computer | 1 x I/O Shielding |
| 1 x SATA cable                      | 1 x QIG           |