

KINO-RPLH

Mini-ITX SBC with Intel® Raptor lake & Alder Lake-P SoC Processor, DDR5 SO-DIMM, 12~28V DC input, Triple Display, Triple Intel 2.5GbE

- Dual-Channel DDR5 4800MHz SO-DIMMs
- Rich Expansion with PCIe & Multiple M.2 Interfaces
- Triple Intel® 2.5GbE for High-Bandwidth Networking
- Triple Independent DP1.4, HDMI1.4 & iDPM for Multi-Screen Applications

**High Performance Capability
with multi-tasking function**



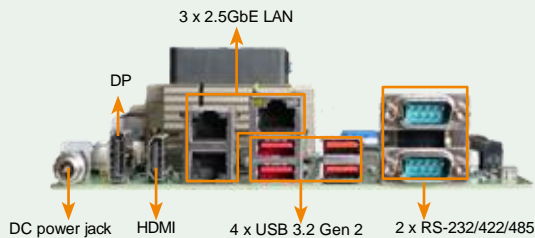
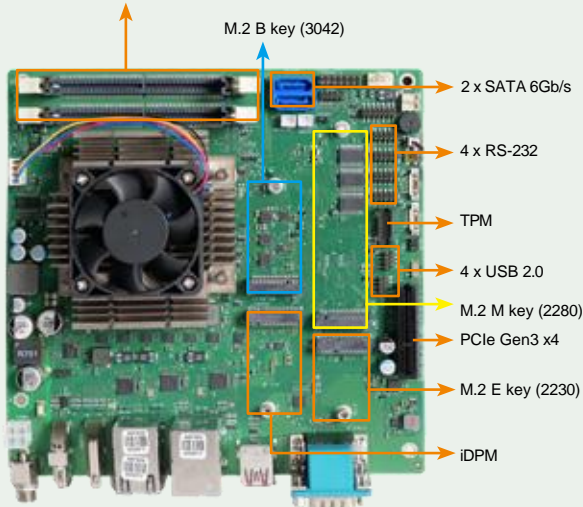
www.ieiworld.com

KINO-RPLH

Mini-ITX SBC with Intel® Raptor lake & Alder Lake-P SoC Processor, DDR5 SO-DIMM, 12~28V DC input, Triple Display, Triple Intel 2.5GbE



Two 262-pin 4800 MHz Dual-Channel DDR5 SDRAM Unbuffered DIMMs



Accelerated Edge Computing Performance

Built with Intel® Raptor lake & Alder Lake-P architecture, the KINO-RPLH delivers outstanding computing performance with optimized power efficiency.



Triple 2.5GbE for High-Bandwidth Connectivity

Three Gigabit RJ45 network ports are provided via Intel® I226V/I226LM 2.5GbE network controller to achieve up to 2.5GbE network transmission rate.



Flexible Expansion for Diverse Applications

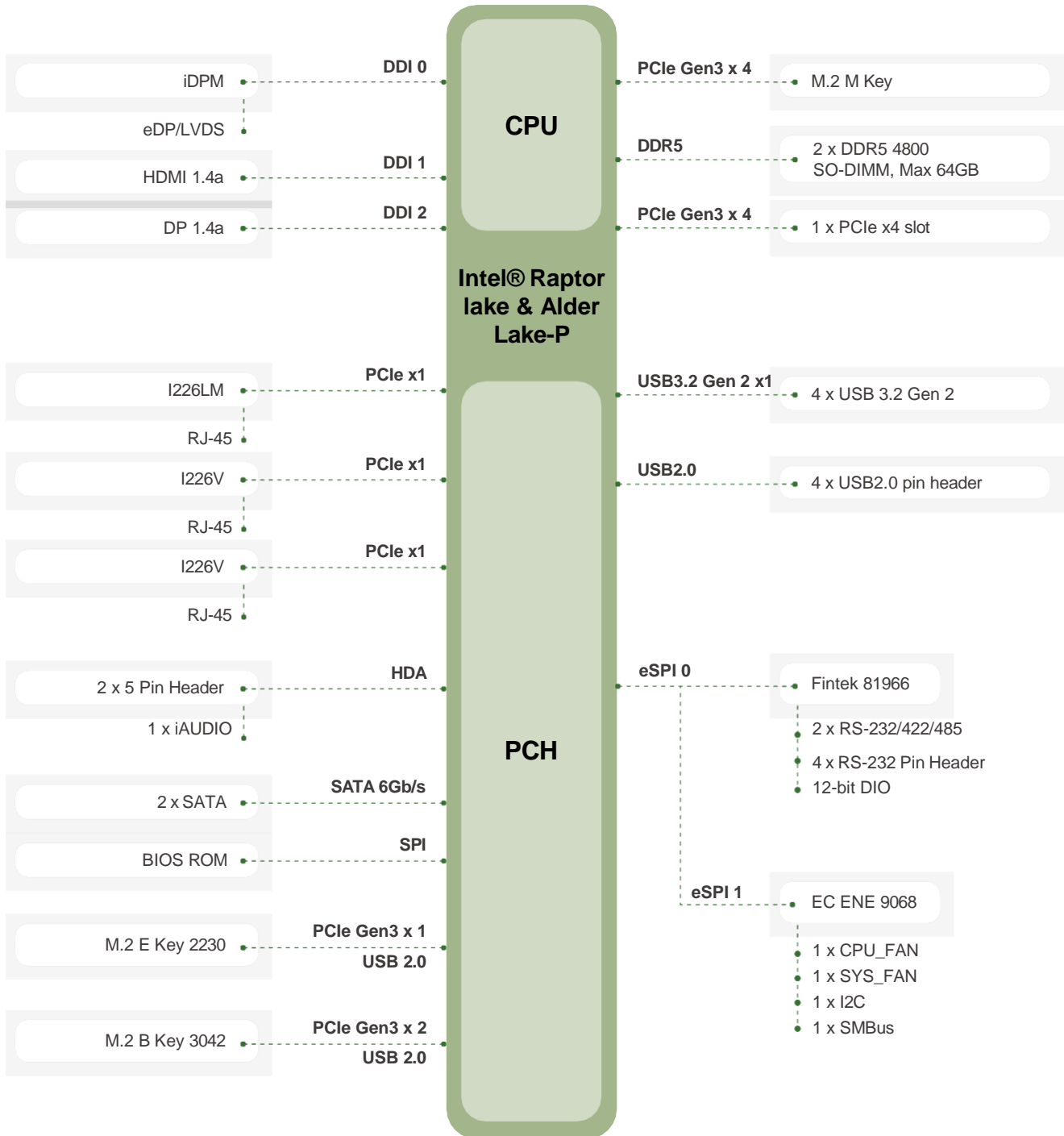
The KINO-RPLH provides PCIe x4 (Gen 3) for expansion, M.2 E key for Bluetooth and Wi-Fi modules, M.2 M key for NVME storage.



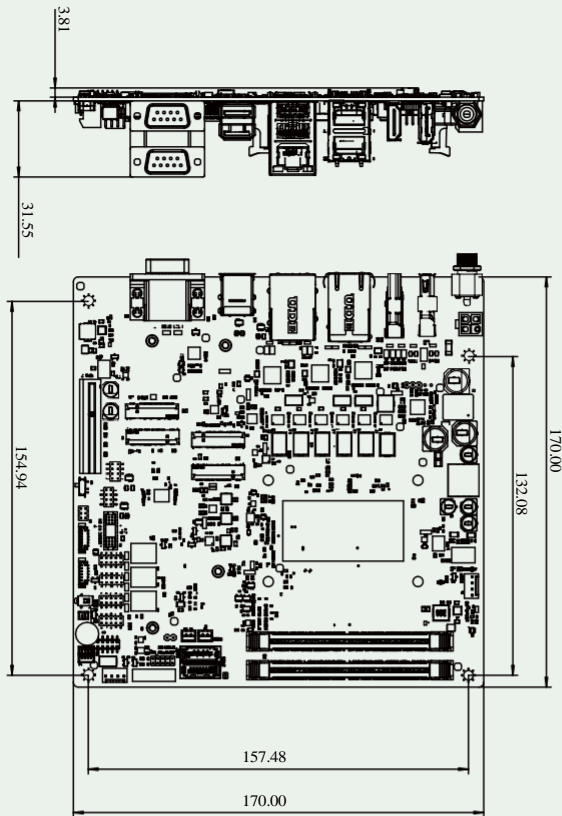
IEI-specific iDPM Interface

IEI uniquely designs a iDPM interface that can connect to display modules, enabling users to add LVDS/eDP/VGA display interface upon requirements.

Block Diagram



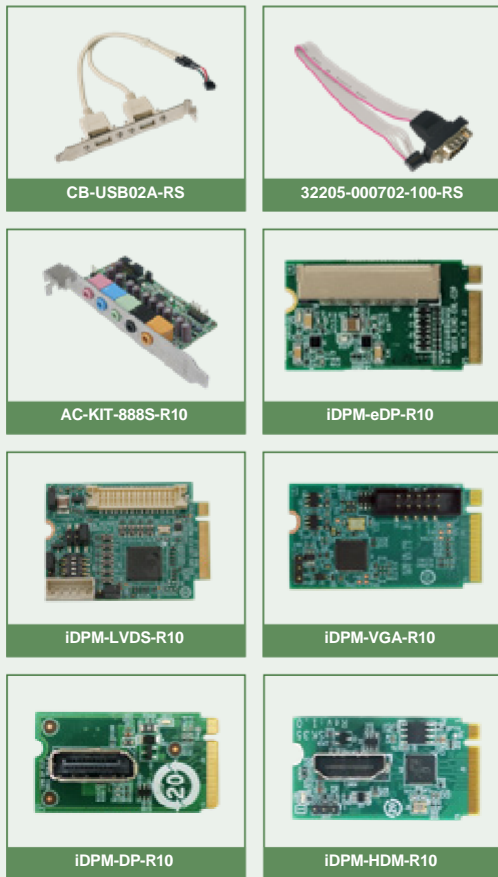
Dimensions



Specifications

Model	KINO-RPLH
CPU	12th/13th Gen Intel® mobile Raptor lake & Alder Lake-P on-board processor
BIOS	AMI UEFI BIOS
Memory	2 x 262-pin SO-DIMM DDR5 4800 MHz, system up to 64G
Graphics Engine	Intel® UHD Graphics for Celeron® 7305E and i3-12300HE Intel® Xe Graphics for i5-1250PE(i5-1340PE) and i7-1270PE(i7-1370PE)
Display Output	Triple independent display 1 x HDMI 1.4 (up to 4096 x 2160 @30Hz) 1 x DP 1.4 (up to 4096 x 2160 @60Hz) 1 x IEI iDPM 3040 slot (only for IEI eDP/ LVDS/ VGA module)
Ethernet	LAN1: Intel® I226LM 2.5GbE controller LAN2: Intel® I226V 2.5GbE controller LAN3: Intel® I226V 2.5GbE controller
External I/O Interface	4 x USB 3.2 Gen 2 (10Gb/s) 2 x RS-232/422/485
Internal I/O Interface	2 x SATA 6Gb/s 4 x USB 2.0 (2*2x4 pin, P=2.0) 4 x RS-232 (2x5 pin, P=2.0)
SMBus	1 x SMBus (1x4 pin)
I2C	1 x I ² C (1x4 pin)
Audio	1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2x5 pin)
Front Panel	1 x Front Panel (2x7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
Expansion	1 x PCIe Gen3 x4 Slot Open-ended 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 2242/2280 (Pcie Gen3 x4)
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
TPM	Intel® PTT(TPM 2.0) & dTPM connector*
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	12V@1.52A, 19V@1.06A, 24V@0.81A, 28V@0.709A, (12 th Gen Intel® Core™ i7-1270PE CPU with 32 GB 4800 MHz DDR5 memory, max. loading, EuP mode enabled)
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimension	170mm x 170mm
Weight	GW:900g / NW:450g
Certification	CE/FCC Compliant

Optional Accessories



Packing List

1 x KINO-RPLH single board computer	1 x SATA cable
1 x I/O Shielding (45014-0104C0-00-HF)	1 x QIG

Ordering Information

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

Optional Accessories

CB-USB02A-RS	Dual port USB cable with bracket, 300mm, P=2.0
32205-000702-100-RS	RS-232 cable, 200 mm, p=2.0 mm
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board, RoHS
iDPM-eDP-R10	eDP to eDP DisplayPort converter board (for IEI iDPM connector)
iDPM-LVDS-R10	eDP to LVDS DisplayPort converter board (for IEI iDPM connector)
iDPM-VGA-R10	eDP to VGA Connector converter board (For IEI Display Module)
iDPM-DP-R10	eDP to DP DisplayPort converter board (for IEI iDPM connector)
iDPM-HDM-R10	HDMI converter board (For iDPM connector), RoHS