

KINO-MPHX

Mini-ITX SBC with AMD Ryzen™ 7040&8040 Series mobile Processors

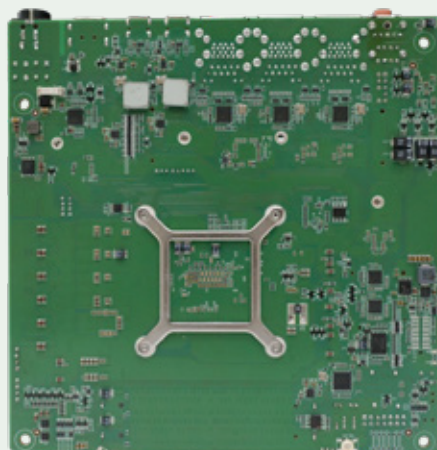
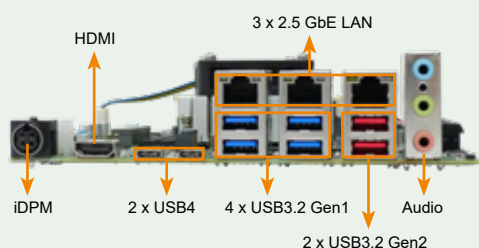
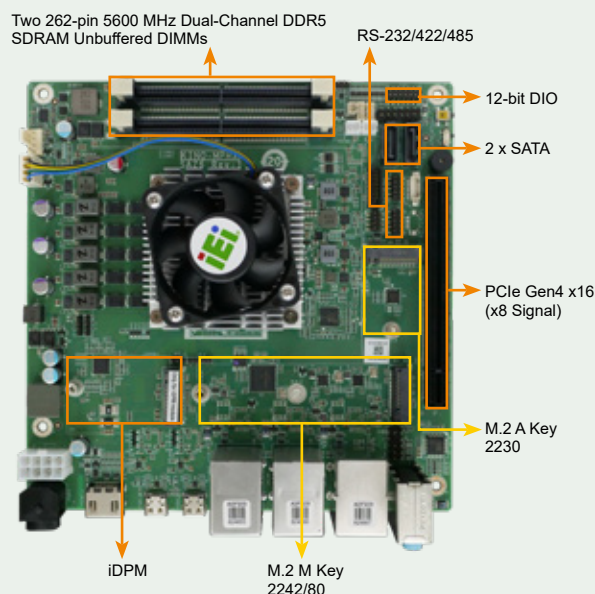
- Support 5600MHz DDR5 SO-DIMM
- Quad independent displays with iDPM, USB4 and HDMI
- High speed I/O interface for USB 3.2 Gen 2, SATA 6Gb/s
- Support 1 x PCIe Gen4 x16, 1 x M.2 A key and 1 x M.2 M key slot



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KINO-MPHX

Mini-ITX SBC with AMD Ryzen™ 7040&8040 Series mobile Processors,DDR5 SO-DIMM, Quadra Display, Triple Realtek 2.5GbE, USB3.2, M.2, RoHS



Support AMD Ryzen™ 7040&8040 Series Mobile Processors

AMD Ryzen™ 7040&8040 Series Mobile Processors deliver exceptional performance



Support Dual-Channel DDR5 SO-DIMM

IEI design the KINO-MPHX support 2x 262-pin 5600 MHz Dual-Channel DDR5 SO-DIMM supported up to 64GB



Support REALTEK RTL8125BG-CG Network Controller

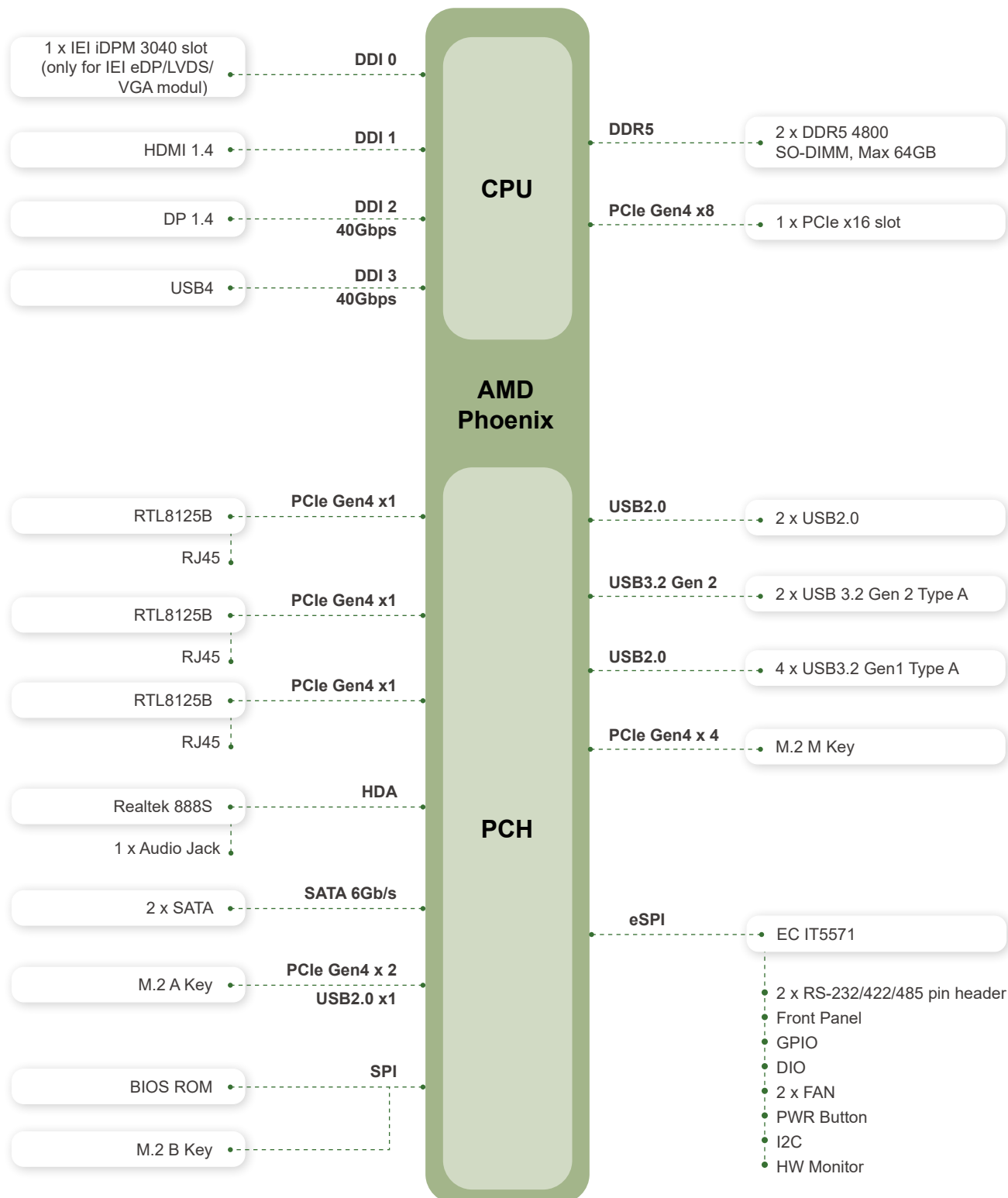
Three RJ45 network ports are provided via REALTEK RTL8125BG-CG controller to achieve up to 2.5GbE network transmission rate



Abundant Expansion Slots

The KINO-MPHX provides PCIe x16 (x8 Signal Gen4) for expansion,M.2 A key for Bluetooth and Wi-Fi modules, M.2 M key for NVME storage

Block Diagram



Dimensions

Specifications

Model	KINO-MPHX
CPU	AMD Ryzen™ 7040&8040 Series Mobile Processors
BIOS	UEFI AMI BIOS
Memory	Two 262-pin 5600 MHz Dual-Channel DDR5 SO-DIMM supported up to 64GB
Graphics Engine	Radeon Navi3
Display Output	2 x USB4 (40Gb/s speed,support DP 4096 x 2304 @60Hz,up to 15W per port power for accessories) 1 x HDMI 1.4(up to 4096 x 2304 @30Hz) 1 x iDPM 3040 slot (only for IEI iDPM module)
Ethernet	LAN1: REALTEK RTL8125BG-CG 2.5GbE controller LAN2: REALTEK RTL8125BG-CG 2.5GbE controller LAN3: REALTEK RTL8125BG-CG 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen2 (Type-A) (10Gb/s) 4 x USB 3.2 Gen1 (Type-A) (5Gb/s)From PCIE to USB Bridge EJ188
Internal I/O Interface	2 x SATA 6Gb/s 2 x RS-232/422/485 (2x5 pin, P=2.0) 2 x USB 2.0 (2x4 pin, P=2.0)
I2C	1 x I2C(1x4 pin,P=1.25)
Audio	Realtek ALC888S HD Audio codec 2 x Audio jack (Line-out, Mic-in) 1 x Front audio (2x5 pin)
Front Panel	1 x Front Panel (2 x 5 pin,P=2.54, Power LED, HDD LED, Speaker, Power Button, Reset Button)
Expansion	1 x PCIe x16 (Slot1) with x8 Signal Gen4 1 x M.2 M key (2242/80,PCIe Gen4 X 4) 1 x M.2 A key(2230 ,PCIe Gen4 x1 &USB 2.0)
Digital I/O	1 x 12-bit digital I/O (2x7 pin,P=2.0)
TPM	1 x TPM 2.0 pin header (2 x 10)
Fan connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Power Supply	Support AT/ATX mode 12VDC ErP/EuP Compliant
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	12V@11.599A (AMD Ryzen 9 8945HS CPU with 32GB DDR5 5600 memory)
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimension	170mm x 170mm
Weight	GW:900 / NW:700
Certification	CE/FCC Compliant

Optional Accessories



CB-USB02A-RS



32205-000702-100-RS



TPM-IN03-R10

Packing List

1 x KINO-MPHX single board computer	1 x SATA cable (PN: 32801-000100-300-RS)
1 x I/O Shielding (PN: 45014-0089C0-00-HF)	1 x QIG

Ordering Informaiton

KINO-MPHX-87A-R10	Mini-ITX SBC with AMD Ryzen™ 5 8845HS mobile Processors,DDR5 SO-DIMM, Triple Display,Triple Intel 2.5GbE,USB3.2,M.2, RoHS
KINO-MPHX-85A-R10	Mini-ITX SBC with AMD Ryzen™ 5 8645HS mobile Processors,DDR5 SO-DIMM, Triple Display,Triple Intel 2.5GbE,USB3.2,M.2, 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
TPM-IN03-R10	20-pin Infineon SPI TPM2.0 module, software mangement tool