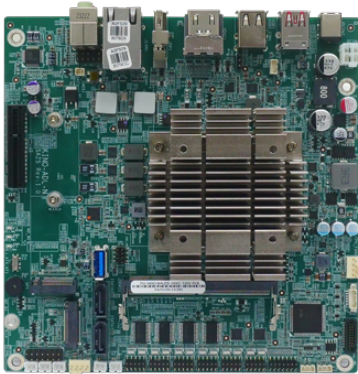


# KINO-ADL-N

Mini-ITX SBC with Intel® Alder Lake-N SoC Processor, DDR5 SO-DIMM, 12~28V DC input, Triple Display, Intel 2.5GbE, M.2, RoHS



## Features

- » Mini-ITX SBC support Intel® Alder Lake-N SoC Processor
- » Support one 4800 MHz DDR5 SO-DIMM
- » Triple independent display via dual HDMI, DP
- » Support Dual Intel® I226V 2.5GbE controller
- » Support PCIe Gen3 x4, M.2 M key, and M.2 A key expansion

## Specifications

Form Factor	
Form Factor	Mini-ITX SBC
System	
CPU	» Onboard Intel® Atom™ / Pentium® / Celeron® processor (Alder Lake N platform) » Intel® Alder Lake-N N97 SoC Processor (up to 2.9GHz, quad-core, TDP=12W) » Intel® Alder Lake-N N200 SoC Processor (up to 3.2GHz, quad-core, TDP=6W) » Onboard Intel® Atom™ x7000 series / Pentium® / Celeron® processor (Amston Lake platform) » Intel® Amston Lake x7835RE SoC Processor (up to 3.0GHz, 8-core, TDP=12W) » Intel® Amston Lake x7405C SoC Processor (up to 2.7GHz, quad-core, TDP=12W)
Memory	1 x 262-pin 4800 MHz DDR5 SO-DIMM (Support IBCECC)
Memory Max.	up to 16G
Cooling method / System Fan	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Physical Characteristics	
Dimensions (LxWxH) (mm)	170mm x 170mm
Net Weight	GW: 900g / NW: 400g
Storage	
Storage	2 x SATA : 6Gb/s
I/O Interface	
Display Output	1 x Display Port : 1.4 4K@60 2 x HDMI™ : 1.4 4K@30
Ethernet	2 x LAN - LAN1: Intel® I226V 2.5GbE controller LAN2: Intel® I226V 2.5GbE controller
Audio	HD Audio : Realtek ALC888S HD Audio codec 1 x Audio jacks (line-out/MIC-in) on rear IO 1 x Front audio (2x5 pin)
I/O Interface	1 x DIO : 12-bit digital I/O (2x7 pin) 2 x External USB 2.0 2 x External USB 3.2 Gen2x1 : 10Gb/s 1 x I²C : 1x4 pin 4 x Internal RS-232 : 2x5 pin, P=2.0 2 x Internal RS-232/422/485 : 2x5 pin, P=2.0 2 x Internal USB 2.0 : 2x4 pin, P=2.0

	1 x Internal USB 3.2 Gen1x1 : TypeA, 180° (Only embedded CPU)
Expansion	1 x PCIe x4 : PCIe Gen3 x1 signal
Other Features	
TPM	2x10 pin
Power	
Power Consumption	12V@4.304A, 19V@2.744A, 24V@2.241A, 28V@1.943A, (Intel® N97 @2.00GHz CPU with Innodisk M550-AGS2NCVP 4800 16GB memory, max. loading, EuP mode enabled)
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
Environment	
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~95%, non-condensing
Card Slot Interface	
M.2	1 x M.2 A Key 2230 for WIFI & BT (PCIe Gen3 x1 & USB 2.0)
	1 x M.2 M key 2242/2280 (PCIe Gen3 x1)

## Ordering Information

KINO-ADL-N97-R10	Mini-ITX SBC with Intel® Alder Lake-N N97 SoC Processor,DDR5 SO-DIMM, 12~28V DC input, Triple Display, dual Intel 2.5GbE, USB 3.2, M.2 ,SATA, RoHS
KINO-ADL-N200-R10	Mini-ITX SBC with Intel® Alder Lake-N N200 SoC Processor,DDR5 SO-DIMM, 12~28V DC input, Triple Display, dual Intel 2.5GbE, USB 3.2, M.2 ,SATA, RoHS

## Packing List

1 x KINO-ADL-N single board computer	1 x I/O Shielding
2 x SATA cable	1 x QIG