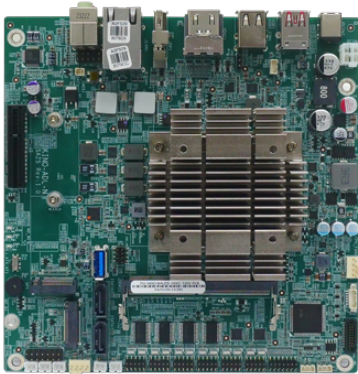


# KINO-ADL-N

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                         | <ul style="list-style-type: none"> <li>» Onboard Intel® Atom™ / Pentium® / Celeron® processor (Alder Lake N platform)</li> <li>» Intel® Alder Lake-N N97 SoC Processor (up to 2.9GHz, quad-core, TDP=12W)</li> <li>» Intel® Alder Lake-N N200 SoC Processor (up to 3.2GHz, quad-core, TDP=6W)</li> <li>» Onboard Intel® Atom™ x7000 series / Pentium® / Celeron® processor (Amston Lake platform)</li> <li>» Intel® Amston Lake x7835RE SoC Processor (up to 3.0GHz, 8-core, TDP=12W)</li> <li>» Intel® Amston Lake x7405C SoC Processor (up to 2.7GHz, quad-core, TDP=12W)</li> </ul> |
| 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)<br>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<br>2 x HDMI™ : 1.4 4K@30  |
| Ethernet                    | 2 x LAN -<br>LAN1: Intel® I226V 2.5GbE controller<br>LAN2: Intel® I226V 2.5GbE controller  |
| Audio                       | HD Audio : Realtek ALC888S HD Audio codec<br>1 x Audio jacks (line-out/MIC-in) on rear IO<br>1 x Front audio (2x5 pin)   |
| I/O Interface               | 1 x DIO : 12-bit digital I/O (2x7 pin)<br>2 x External USB 2.0<br>2 x External USB 3.2 Gen2x1 : 10Gb/s<br>1 x I²C : 1x4 pin<br>4 x Internal RS-232 : 2x5 pin, P=2.0<br>2 x Internal RS-232/422/485 : 2x5 pin, P=2.0<br>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,<br>(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           |