

KINO-ADL-H610

mini-ITX SBC supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual 2.5GbE LAN, USB 3.2, SATA 6Gb/s and RoHS



Features

- » Support Intel® H610/H610E chipset
- » Support two Intel® I225V 2.5GbE Ethernet controllers
- » Support triple independent display via HDMI™, DP and iDPM
- » Support one PCIe x16, one M.2 A Key, one M.2 M Key expansions
- » Support two USB 3.2 Gen 2, two USB 3.2 Gen 1, four USB 2.0, with up to 10Gb/s transfer speed
- » Support two RS-232/422/485, four RS-232 and two SATA ports

Specifications

| | |
|-----------------------------|---|
| Form Factor | |
| Form Factor | Mini-ITX Motherboard |
| System | |
| CPU | LGA1700 socket supports 12th/13th generation Alder Lake-S/Raptor Lake-S Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor (up to 65W TDP CPU) |
| Chipset | Intel® H610/H610E |
| Memory | Two 260-pin Dual-Channel DDR4 (up to 3200 MHz) SDRAM Unbuffered DIMMs supported up to 64GB |
| Memory Max. | 64GB |
| 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 | 700g |
| Storage | |
| Storage | 2 x SATA 1 x M.2(NGFF) : 1 x M.2 M key (2242/2280, PCIe Gen3 x 4) |
| I/O Interface | |
| Display Output | 1 x HDMI™ : up to 4096 x 2304 @60Hz 1 x Display Port : up to 4096 x 2304 @60Hz 1 x iDPM : support iEi eDP/ LVDS/ VGA module |
| Ethernet | 2 x LAN - LAN1: Intel® I225V 2.5GbE controller LAN2: Intel® I225V 2.5GbE controller |
| Audio | 1 x HD Audio : 1 x iAUDIO supports IEI AC-KIT-888S Audio Kit (2x5 pin) |
| I/O Interface | 2 x External RS-232/422/485 : RS-485 support AFC 4 x Internal RS-232 : 2x5 pin, P=2.0 2 x External USB 2.0 2 x External USB 3.2 Gen1x1 : 5Gb/s (Type A) 2 x Internal USB 2.0 : 2x4 pin, P=2.0 |

| | |
|-----------------------|---|
| | 2 x External USB 3.2 Gen2x1 : 10Gb/s (Type A) |
| Expansion | 1 x PCIe x16 : Gen4 slot with x16 Signal |
| | **Intel® recommends that Alder Lake-S CPU PCIe ports are only used for discrete graphics and storage devices |
| | 2 x M.2(NGFF) - 1 x M.2 M key (2242/2280, PCIe Gen3 x 4) 1 x M.2 A key (2230, PCIe Gen3 x1 & USB 2.0) for wifi/BT |
| Power | |
| Power Consumption | 3.3V@0.96A, 5V@6.49A, 12V@5.95A, 5VSB@1.05A |
| | (Intel® Core™ i9-12900E CPU with two 16 GB 3200 MHz DDR4 memory, max. loading, EuP mode enabled) |
| Power Supply | ATX/AT power supply |
| | Support AT/ATX mode |
| | ErP/EuP Compliant |
| Environment | |
| Operating Temperature | 0°C~60°C |
| Storage Temperature | -30°C~70°C |
| Humidity | 5% ~95%, non-condensing |

Ordering Information

| | |
|-------------------|--|
| KINO-ADL-H610-R10 | mini-ITX SBC supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual 2.5GbE LAN, USB 3.2, SATA 6Gb/s and RoHS |
|-------------------|--|

Packing List

| | |
|---|----------------|
| 1 x KINO-ADL-H610 single board computer | 2 x SATA cable |
| 1 x I/O shielding | 1 x QIG |