

KINO-BTL-DH610

Mini-ITX SBC with LGA1700 socket supports
12/13/14th generation Intel® Core™
i9/i7/i5/i3, Celeron®, Pentium® processor
and Intel Core Processors (Series 2)

Features

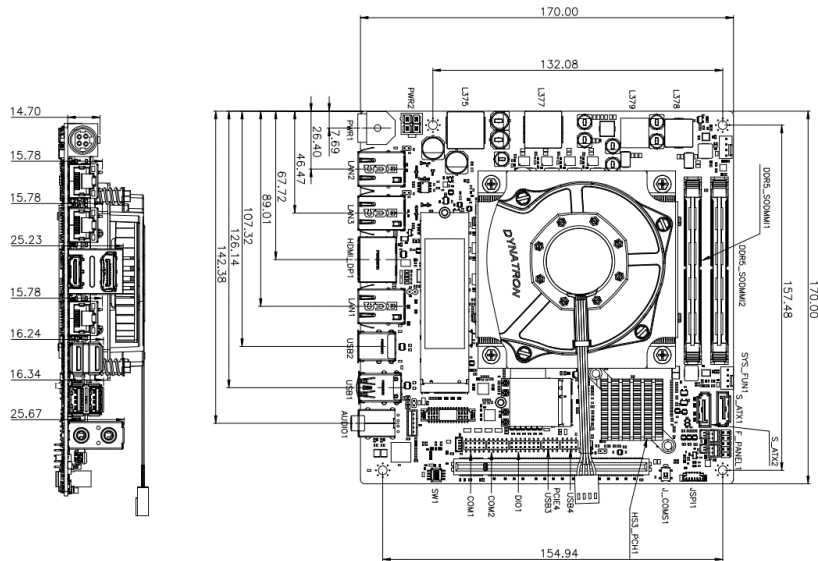
- High-bandwidth dual SO-DIMM DDR5 5600 memory
- Triple independent display outputs (HDMI / DP / LVDS) for applications
- Flexible expansion capability with PCIe x16 Gen4 slot and M.2
- Long product lifecycle for industrial deployment



Specifications

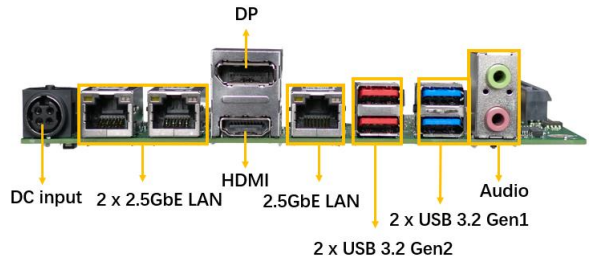
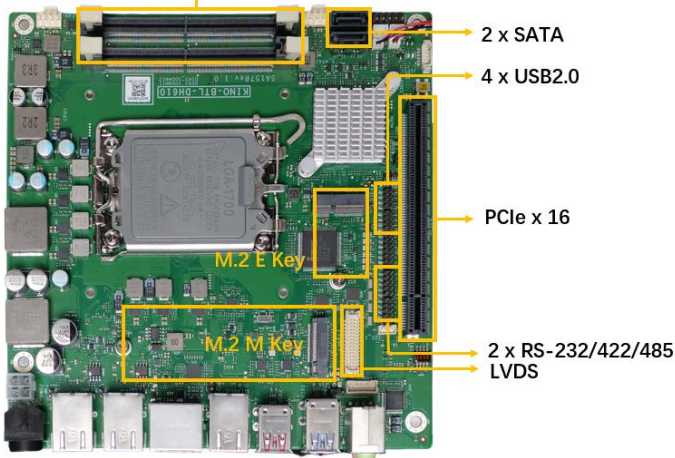
MODEL NAME	KINO-BTL-DH610
CPU	LGA1700 socket supports 12/13/14th generation Intel® Core™ i9/i7/i5/i3, Celeron® and Pentium® processor & Intel Core Processors (Series 2) (Bartlett Lake S) (up to 65W TDP CPU)
Chipset	Intel® H610/H610E
BIOS	AMI UEFI BIOS
Memory	2 x SO-DIMM DDR5 5600 up to 96GB
Graphics Engine	Intel® UHD Graphics
Display Output	Triple independent display 1 x DP 1.4a (up to 4K @60Hz) 1 x HDMI 2.0b (up to 4K @60Hz) 1 x LVDS (up to 1920x1200)
Ethernet	LAN1: Intel® I219LM 1GbE controller LAN2: Intel® I226-V 2.5GbE controller LAN3: Intel® I226-V 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen2 (Type-A) (10Gb/s) 2 x USB 3.2 Gen1 (Type-A) (5Gb/s) 2 x SATA 6Gb/s
Internal I/O Interface	4 x USB 2.0 (2x4 pin, P=2.0) 2 x RS-232/422/485 (2x5 pin, P=2.0)
I2C/SMBUS	1 x I2C/SMBUS (1x4 pin, p=1.25)
Audio	Realtek ALC888S HD codec 2 x Audio Jack (Line-out, Mic-in) on rear IO
Front Panel	1 x Front Panel (2 x 5 pin, p=2.54, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	2 x LAN LED (1x2 pin)
Expansion	1 x PCIe x16 (Slot1) with x16 Signal Gen4 1 x M.2 M key (2280, PCIe Gen3 X 4) 1 x M.2 E key (2230, PCIe Gen3 x1 & USB 2.0)
Digital I/O	1 x 12-bit digital I/O (2x7 pin, p=2.0)
TPM	1 x Intel TPM 1 x Onboard TPM (Infineon SPI TPM 2.0 with SLB9670VQ2.0)
FAN connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Power supply	12-28V DC
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	12V@10.9A, 19V@6.8A, 24V@5.3A, 28V@4.6A, (Intel® Core 14900 with 16 GB 4800 MHz DDR5 memory, EuP mode disabled)
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

Dimensions (Unit: mm)



Fully Integrated I/O

Two 262-pin 5600 MHz Dual-Channel DDR5 SO-DIMM



Ordering Information

PART NO.	DESCRIPTION
KINO-BTL-DH610-R10	Mini-ITX SBC supports LGA1700 Intel® 12th/13th/14th Generation Core™ i9/i7/ i5/i3, Pentium® and Celeron® processor & Intel Core Processors (Series 2) (Bartlett Lake S), DDR5, Triple independent displays, quad LAN, USB 3.2, SATA 6Gb/s and RoHS

Packing List

ITEM	PART NO
1 x KINO-BTL-DH610 single board computer	1 x I/O Shielding
1 x SATA cable	1 x QIG

Options

ITEM	PART NO	DESCRIPTION
USB cable	CB-USB02A-RS	Dual-port USB cable with bracket, 300mm, p=2.0
RS-232/422/485 cable	32205-002700-200-RS	RS-232/422/485 cable, 200 mm, 2*5pin, p=2.0 mm
Cooler	19100-000323-00-RS	High-performance LGA1700 cooler, 65W (72 x 70 x 25.5 mm)
Cooler	19100-000319-00-RS	High-performance LGA1700 cooler, 65W (95 x 90 x 27.45 mm)