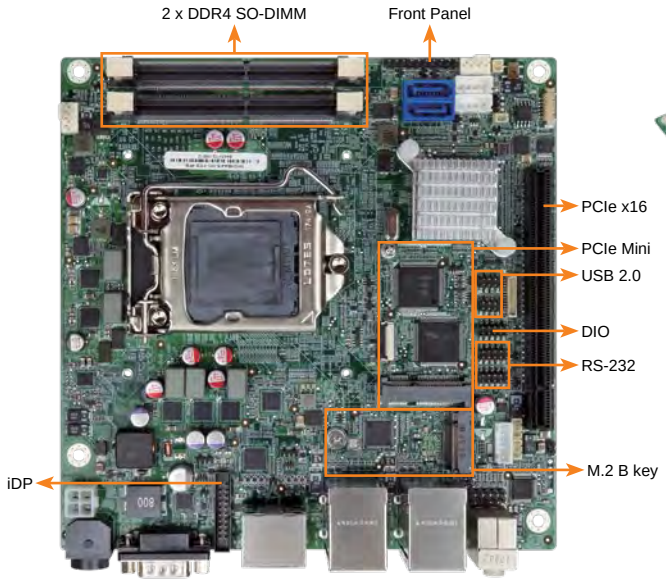
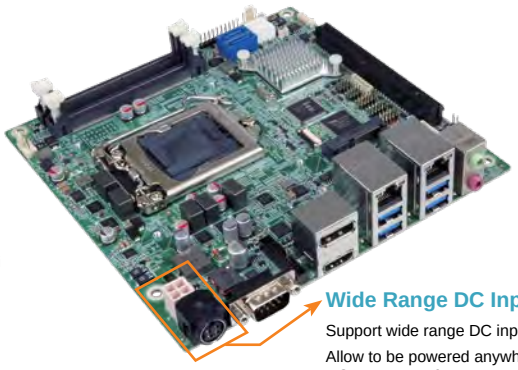
KINO-DH110

Mini-ITX SBC supports 14nm 6th/7th Generation LGA1151 Intel® Core™ i7/ i5/i3, Celeron® and Pemtium® Processor, DDR4, Dual Independent Display, Dual GbE LAN, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, M.2, HD Audio and RoHS

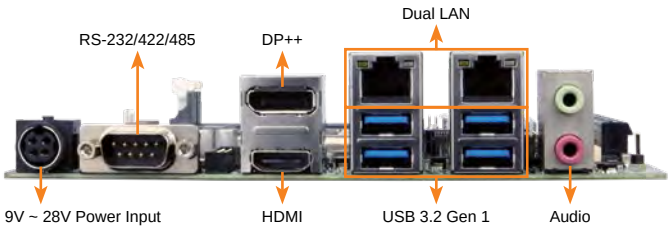




Wide Range DC Input Support

Support wide range DC input from 9V to 28V.

Allow to be powered anywhere, no matter if a 12V/24V DC source or 19V power adapter is available.



Specifications

- CPU
  LGA1151 socket supports 6th/7th generation Intel® Core™ i7/i5/i3, Celeron® and Pentium® processor
- System Chipset
  Intel® H110
- Memory
  Two 260-pin 2133MHz dual-channel DDR4 SDRAM unbuffered SO-DIMM support up to 32GB
- BIOS
  UEFI BIOS
- Graphic Engine
  Intel® HD Graphics Gen 9 engines with 16 low-power execution units, support DX2015, OpenGL 5.X, OpenCL2.x, ES 2.0
- Display Output
  Dual independent display
  1 x HDMI (up to 4096x2160@30Hz)
  1 x DP++ (up to 4096x2160@60Hz)
  1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 4096x2160@60Hz)
- Ethernet
  LAN1: Intel® I219LM PCIe controller
  LAN2: Intel® I211 PCIe controller
- External I/O Interface
  4 x USB USB 3.2 Gen 1 (5Gb/s)
  1 x RS-232/422/485
- Internal I/O Interface
  1 x KB/MS (1x6 pin)
  2 x RS-232 (2x5 pin, P=2.0)
  2 x SATA 6Gb/s
  4 x USB 2.0 (2x4 pin, P=2.0)
- SMBus: 1 x SMBus (1x4 pin)
- I²C: 1 x I²C (1x4 pin)
- Audio
  Realtek ALC888S HD Audio codec supports 7.1-channel
  2 x Audio jacks (line-out, mic-in) on rear IO
  1 x Front audio (2x5 pin)
- Front Panel
  1 x Front panel (1x10 pin, power LED, HDD LED, power button, reset button)
- LAN LED: 2 x LAN LED (1x2 pin)
- Expansion
  1 x Full-size PCIe Mini card slot (PCIe & USB)
  1 x M.2 B key (SATA)
  1 x PCIe x16 slot (Gen2)
- Watchdog Timer
  Software programmable, supports 1~255 sec. system reset
- Digital I/O: 8-bit digital I/O (2x5 pin)
- Fan Connector
  1 x CPU smart fan (1x4 pin)
  1 x System smart fan (1x4 pin)
- Power Supply
  9V ~ 28V DC input
  1 x External DC jack (4-pin DIN)
  Support ATX/AT mode
  1 x Internal power connector (2x2 pin)
- Power Consumption
  12V@12.16A (3.4GHz Intel® Core i7-6700 with two 2133MHz 16GB DDR4 memory)
- Operating Temperature: -20°C~60°C
- Storage Temperature: -30°C ~ 70°C
- Operating Humidity: 5% ~ 95%, non-condensing
- Dimensions: 170mm x 170mm
- Weight: GW: 900g / NW: 400g
- CE/FCC compliant

Features

- LGA1151 Intel® 6th/7th Generation Core™ i7/i5/i3, Celeron® and Pemtium® processor
- Dual-channel DDR4 2133MHz
- Support HDMI, DP++
- Support M.2 B key, PCIe Mini
- Support USB 3.2 Gen 1 (5Gb/s) and SATA 6Gb/s

Packing List

1 x KINO-DH110 single board computer	1 x SATA cable
1 x I/O shielding	1 x QIG

Ordering Information

Part No.	Description
KINO-DH110-R10	Mini-ITX Motherboard supports 14nm LGA1151 Intel® 6th/7th Generation Core™ i7/i5/i3, Celeron® and Pemtium® processor, DDR4, dual independent displays, dual GbE LAN, M.2, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio and RoHS
32000-070301-RS	Dual USB Cable
32200-000049-RS	RS232 cable, 200mm
CF-115XC-R10	LGA1155/1156 kit, 1U chassis compatible, 45W
CF-115XD-R10	LGA1155/1156 kit, 1U chassis compatible, 65W
CF-115XE-R10	High performance LGA1155/LGA1156 cooler kit, 95W
DP-DP-R10	DisplayPort to DP converter board (for IEI connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI connector)
DP-LVDS-R10	DisplayPort to 24 bit dual channel LVDS converter board (for IEI connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI connector)