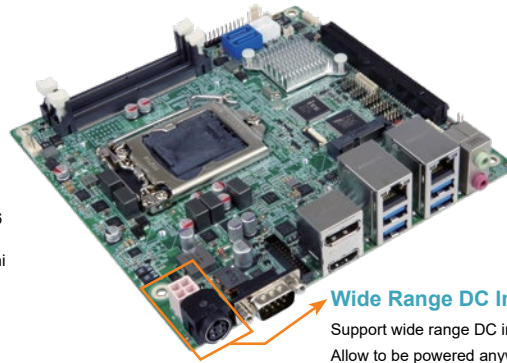
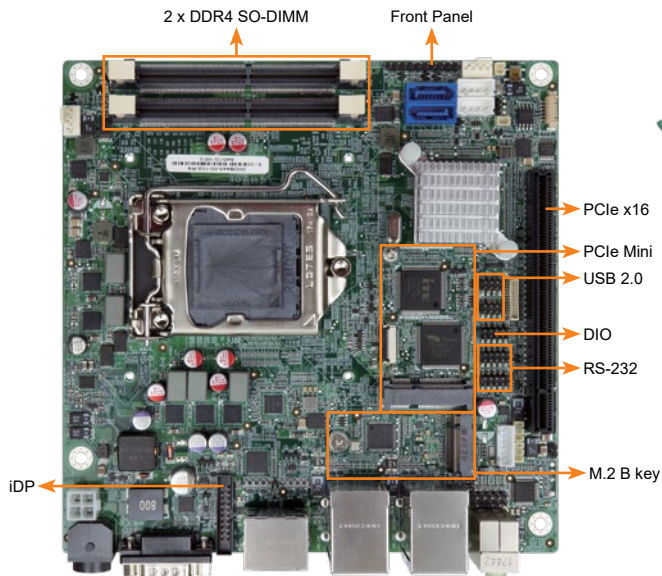


KINO-DH110

Mini-ITX SBC supports 14nm 6th/7th Generation LGA1151 Intel® Core™ i7/i5/i3, Celeron® and Pentium® 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

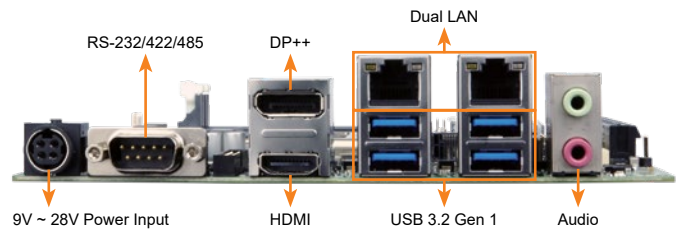
Support wide range DC input from 9V to 28V.

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 SATA 6Gb/s
2 x RS-232 (2x5 pin, P=2.0) 4 x USB 2.0 (2x4 pin, P=2.0)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ I²C: 1 x I²C (1x4 pin)
- ◆ Audio
Realtek ALC662 HD codec supports 5.1-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 Support ATX/AT mode
1 x External DC jack (4-pin DIN) 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 Pentium® 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 Pentium® 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) |