

# KINO-KX

Rich I/O Mini-ITX with Zhaoxin 16nm KX-6000 Series Processor



## Features

- » Mini-ITX SBC supports Zhaoxin 16nm KX-U6580/KX-U6780A(70W) on-board processor supports dual-channel DDR4 SO-DIMMs
- » Dual independent display(VGA & DVI-I) support
- » Up to 10 x RS-232 and 10 x USB 2.0 support
- » 4 x USB 3.2 Gen1 x 1 (5Gb/s), SATA 6Gb/s, Full-size PCIe Mini Card slot and PCIe x16 expansion slot
- » ATX power input

## Specifications

|                             |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| Form Factor                 |                                                                                 |
| Form Factor                 | Mini-ITX                                                                        |
| System                      |                                                                                 |
| CPU                         | Zhaoxin Kaixian KX-6000 series 8-core processor                                 |
|                             | Zhaoxin KX-U6580 on-board SoC (8-Core, 8MB Cache, 2.5GHz, 70W)                  |
|                             | Zhaoxin KX-U6780A on-board SoC (8-Core, 8MB Cache, 2.7GHz, 70W)                 |
| Chipset                     | Zhaoxin ZX-200                                                                  |
| Memory                      | 2 x 260-pin 2666MHz Dual-channel DDR4 SO-DIMM (system max. 64GB)                |
| Memory Max.                 | Up to 64GB                                                                      |
| Cooling method / System Fan | 1 x CPU smart fan connector (1x4 pin)                                           |
|                             | 1 x System smart fan connector (1x4 pin)                                        |
| Physical Characteristics    |                                                                                 |
| Dimensions (LxWxH) (mm)     | 170 mm x 170 mm                                                                 |
| Net Weight                  | GW:900g / NW:400g                                                               |
| Storage                     |                                                                                 |
| Storage                     | 4 x SATA                                                                        |
| I/O Interface               |                                                                                 |
| Display Output              | 1 x DVI-I(up to 1920x1080@60Hz)                                                 |
|                             | 1 x VGA(up to 1920x1080@60Hz)                                                   |
| Ethernet                    | 2 x LAN: Detail -                                                               |
|                             | LAN1: Realtek RTL8111H PCIe GbE controller                                      |
|                             | LAN2: Realtek RTL8111H PCIe GbE controller                                      |
| Audio                       | HD Audio: Realtek ALC888S                                                       |
|                             | 1 x Line in                                                                     |
|                             | 1 x Line out                                                                    |
|                             | 1 x Mic                                                                         |
| I/O Interface               | 10 x External USB 2.0                                                           |
|                             | 4 x External USB 3.2 Gen1x1                                                     |
|                             | 10 x Internal RS-232: 2 x RS-232 (2x5 pin, P=2.0), 8 x RS-232 (2x20 pin, P=2.0) |

|                       |                                                               |
|-----------------------|---------------------------------------------------------------|
|                       | 1 x PS/2: 1 x KB/MS(External)                                 |
| Expansion             | 1 x PCIe mini Card Slot: Full-size PCIe Mini card slot        |
|                       | 1 x PCIe x16(with PCIe x8 Gen 3.0 signal)                     |
| Other Features        |                                                               |
| TPM                   | 1 x TPM 2.0 connector (2x10 pin)                              |
| Power                 |                                                               |
| Power Consumption     | 12V @ 3.38A, 3.3V @ 0.62A, 5V @ 9.81A, 5VSB @ 0.03A           |
|                       | (Zhaoxin KX-U6580 2.5 GHz CPU with 8 GB 2400 MHz DDR4 memory) |
| Power Supply          | ATX power supply                                              |
|                       | ErP/EuP Compliant                                             |
| Environment           |                                                               |
| Operating Temperature | -10°C ~ 60°C                                                  |
| Storage Temperature   | -20°C ~ 60°C                                                  |
| Humidity              | 20% ~ 95%, non-condensing                                     |
| Certifications        |                                                               |
| Safety & EMC          | CE/FCC compliant                                              |

## Ordering Information

|                   |                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KINO-KX-U6580-R10 | Mini-ITX SBC supports Zhaoxin 16nm KX-U6580 (70W) on-board processor with PCIe Mini, VGA, DVI, Dual GbE LAN, USB 3.2 Gen1, SATA 6Gb/s, COM, Audio and RoHS |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Packing List

|                                                   |                   |
|---------------------------------------------------|-------------------|
| 1 x KINO-KX single board computer with CPU Cooler | 1 x I/O Shielding |
| 1 x SATA cable                                    | 1 x QIG           |