# A-RK3399

## Features:

■ Six-core (dual-core A72+quad-core A53) 64-bit CPU

■ Support Google Android 7.1 operating system GPU using the latest quad-core Mali-T860

■ Able to play various formats of ultra-high-definition 4K2K video

■ Using 8-layer high-density PCB board, integrated Gigabit Ethernet, 2.4G/5G dual-band WiFi/Bluetooth, RS485, built-in 4G module interface and other functions

■ Ultra-thin motherboard design

## Specifications:

### Hardware Specifications

| | | | |
|---|---|---|---|
| PCBA | 4GB LPDDR3+16GB EMMC+HD+LVD5+WIFI+BT+GP5+RJ45+USB+TF+SIM+DC，<br>8-layer HDI board immersion gold board, 146mm*105mm, height 13mm, black | Ram | RAM LPDDR3X2, 32GB or 4GB |
| | | Storage | EMMC8GB/16GB/32GB/64GB optional (default 16GB)<br>1* SATA port, support 5V power supply; (optional, reserved position) |
| CPU | Rockchip RK3399 (28nm HKMG process) ARM six-core 64-bit processor, clocked at 2.0GHz<br>Based on big. LITTLE size core architecture, Dual-core Cortex-A72 (large core) + quad-core Cor tex-A53 (small core)<br>Quad-core ARMMAli-T860, support OpenGLES1.1/2.0/3.0<br>GPU：OpenVG1. 1. OpenCL. Directx11 | Touch Screen | Support USB multi-point infrared touch, multi-point capacitive touch, resistive touch |
| | | Camera | 1*MIPI camera function, support 500W/1300W pixels (optional)<br>Support 800W-USB interface camera (optional) |
| | | RTC | built-in real-time clock power supply battery, Supports timing switch machine |
| | | LED | 1*power status ED (red),<br>1*system LED (blue, blinking by default) |
| Display Functionalities | Image rotation: support 0 degree, 90 degree, 180 degree, 270 degree manual rotation<br>Support gravity sensor automatic screen rotation function (optional)<br>Press the key: 1*reset button, 1*power button, 1*upgrade button | Panel Backlight Control | 12V backlight power supply |
| | | Power Input | DC12V/2A (with DC-JACK and 1*4 pinWaferco-lay) |

## I/O Ports

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|---|---|---|---|
| Display Interface | 1*eDP interface (eDP1.3, 4 laneswith 5.4Gbps) support 3.3V/5V/12V power supply, 1*LVDS interface (single channel/dual channel, 6 bit 8 bit), Supports 7"-108" display screen 1080P 60Hz output, support 3.3/5V/12V power supply, 1*HDMI 2.0 supports 4K60Hz output, supports dual-screen different display function | Infrared Serial Port | 1*Infrared receiver, support infrared control function, 4*RS232, 1*RS485, 1*TTL |
| | | USB | 6*USB-2.0HOST, 2*USB3.0HOST (support 1A output) |
| | | PCLE | 1*MiniPCIe is used for peripheral expansion 4GLTE |
| Audio | 1*Speaker output (D-class large built-in speaker, 3W*24R), 1*3.5 mm Jack (support headphone jack output, support microphone, reserved socket), 1* microphone input | SIM | 1*SIM card socket, used to extend 4GLTE module with MiniPCIe |
| | | TF | TF expansion card |
| | | Spare IO | Spare IO 6 groups of IO detection ports: 1*12C, 1*ADC, 4*GPIO |

## Network and communication

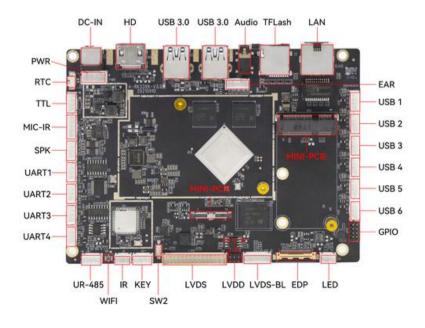| | |
|---|---|
| Network and communication | RJ45 Gigabit Ethernet port; Equipped with Bluetooth + WIFI module, support WiFi802.11a/b/g/n/ac protocol, 2.4G/5G Dual-band AP6255 (optional other modules); Supports Bluetooth 4.2 protocol; support 4G function , LTE-TDD/LTE-FDD/TD-SCDMA/EDGE/GPRS/ GSMMini. (optional) PCIeslot; SIMslot uses standard card 25mm*15mm; Supports USB, PCIe signal equipment expansion |

## OS

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|---|---|
| OS | Android 7.1/8.1 |

## Environmental specifications

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|---|---|---|---|
| Operating temp. | -10℃~60℃ | Storage temp. | -20℃~70℃, relative temperature 95% |

## Certification

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|---|---|
| Certification | 3C, FCC, CE |

# Interface Diagram: