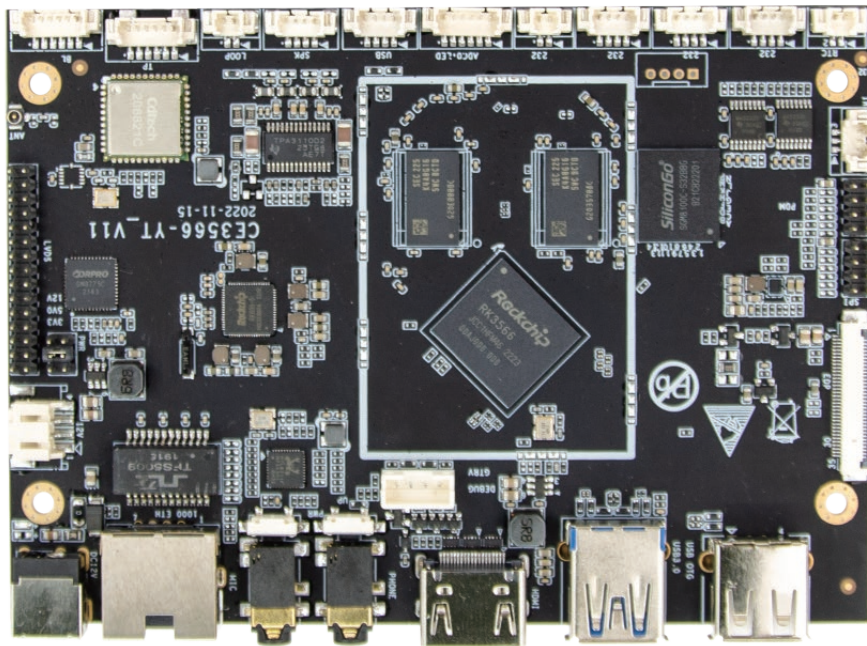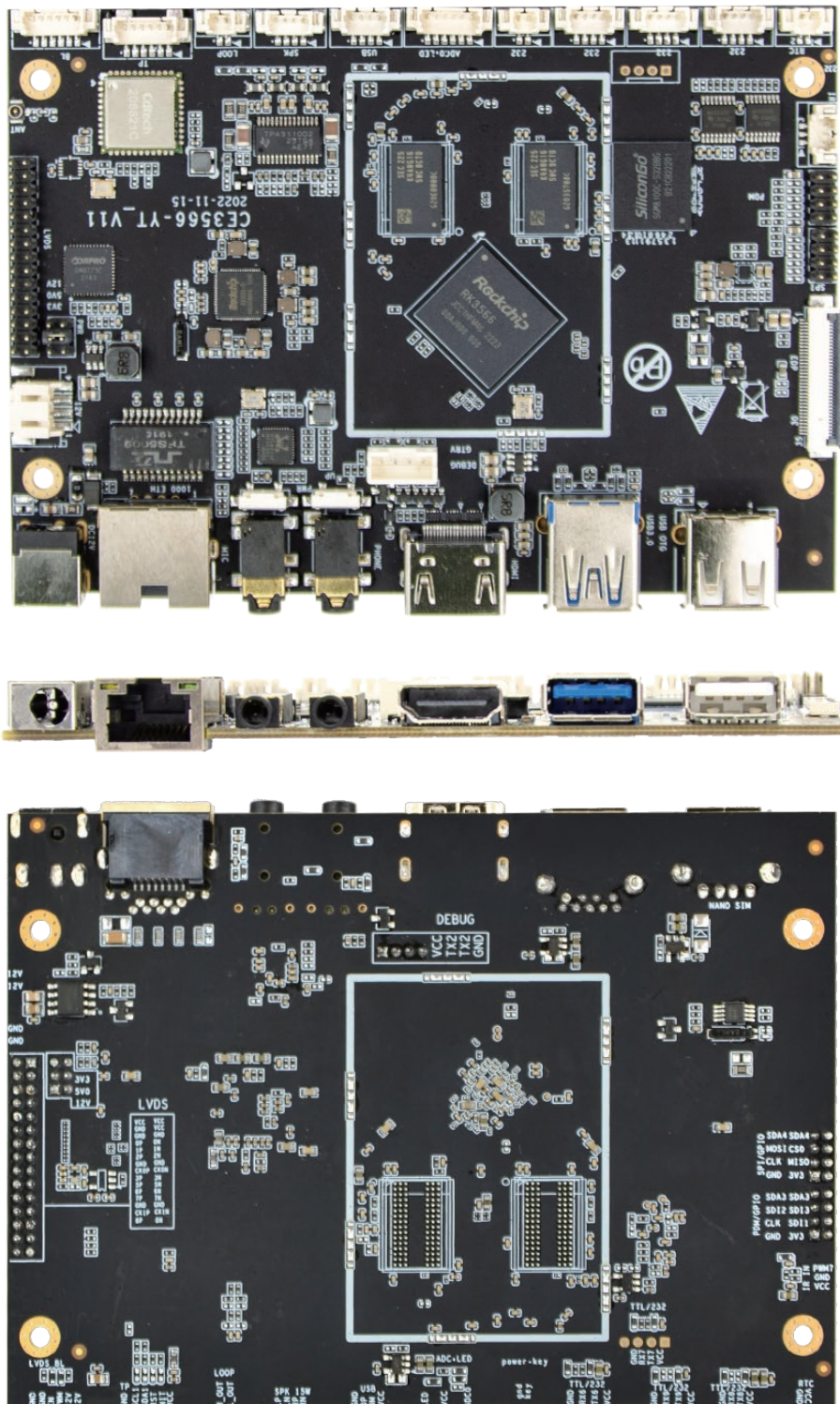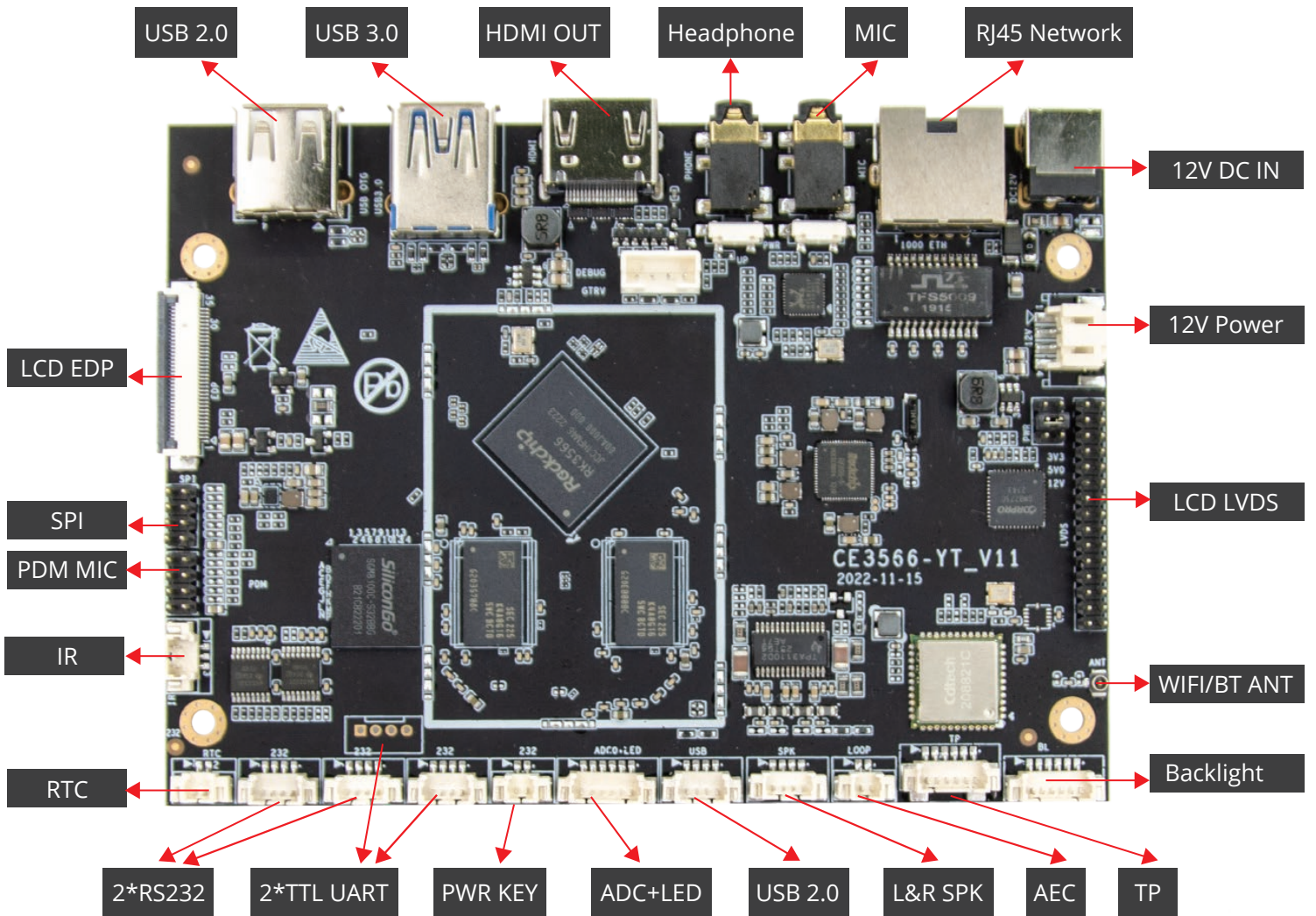# R3566-01

R3566-01 Single Board Computer

Overview：

The R3566-01 is a cost-effective, commercial-grade, single-board computer based on the Rockchip RK3566, which provides comprehensive system software development and rich I/O interfaces for rapid application in intelligent robotics, edge computing, Internet of Things and security.

Specification:

System	
CPU	Rockchip RK3566, 4 x Cortex-A55 1.8GHz, comes with an integrated neural processing unit (NPU) that delivers up to 1.0 TOPS.
Memory	1) Default: 2GB LPDDR4 (4GB/8GB optional) 2) 2GB/4GB/8GB LPDDR4X optional
Storage	16GB eMMC (8GB/32GB/64GB/128GB/256GB optional)
OS	Android, Yocto, Debian
Communication	
Ethernet	1 x Gigabit Ethernet controller RTL8211F-CG, RJ45 port
WIFI	AP6255 (optional)
Video & Audio	
TP	1 x TP, supports I2C or USB protocol
LVDS	1 x LCD LVDS, supports single and dual 8bit, double-row pin header
LVDS Backlight	1 x LVDS backlight, supports backlight adjustment
eDP	1 x LCD eDP
HDMI	1 x HDMI output
SPK	1 x L&R speaker, 4Ω/2W
Headphone	1 x Headphone
MIC	1 x MIC
PDM	1 x PDM MIC
AEC	1 x AEC loopback
Other Interfaces	
UART	2 x TTL UART
RS232	2 x RS232
USB 2.0	1 x USB 2.0 OTG, Type-A 1 x USB 2.0, 1*4Pin/1.25mm connector
USB 3.0	1 x USB 3.0, Type-A
SPI	1 x SPI
IR	1 x IR receiver interface
ADC & LED	1 x ADC signal acquisition and LED control interface
Debug	1 x Debug
Power	1 x DC IN, 1*4Pin/2.0mm jack
RTC	1 x RTC battery interface
Power Key	1 x Power key
Power Supply	
Power Input	DC 12V-24V/2A input
Mechanical	
Dimensions	123.00mm x 88.00mm x 1.20mm

I/O Interface:

USB 2.0   USB 3.0   HDMI OUT   Headphone   MIC   RJ45 Network

12V DC IN

12V Power

LCD EDP

LCD LVDS

SPI

PDM MIC

IR

WIFI/BT ANT

RTC

Backlight

2*RS232   2*TTL UART   PWR KEY   ADC+LED   USB 2.0   L&R SPK   AEC   TP

Safety Instruction and Warnings

General

· Avoid exposure to water, moisture, and conductive surfaces while operating.

· Handle with care to avoid mechanical or electrical damage to the circuit board and connectors.

· Only handle the board by the edges when powered on to minimize the risk of electrostatic discharge damage.

Power

· Use only a 12V/2A DC minimum external power supply that complies with relevant regulations and standards for your country.

Environment:

· Operate in a well-ventilated environment, even if using a case.

· Place on a stable, flat, non-conductive surface and avoid contact with conductive items.

Connections

· Use peripherals that comply with relevant standards for the country of use and ensure proper insulation and operation.

Additional notes

· This summary is not exhaustive, please refer to the full User Manual for details.

· If you are unsure about any aspect of safety or operation, consult a qualified professional.

Contact Us:

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