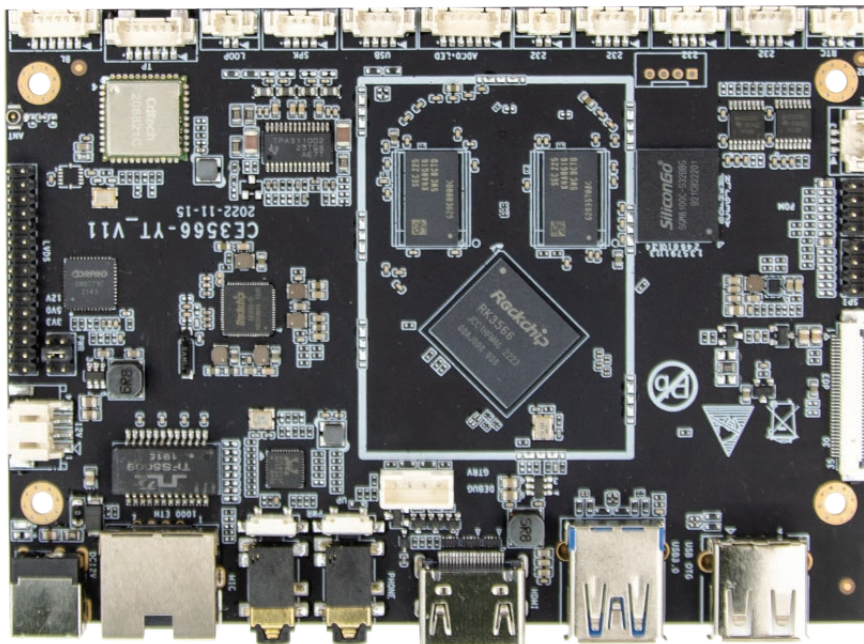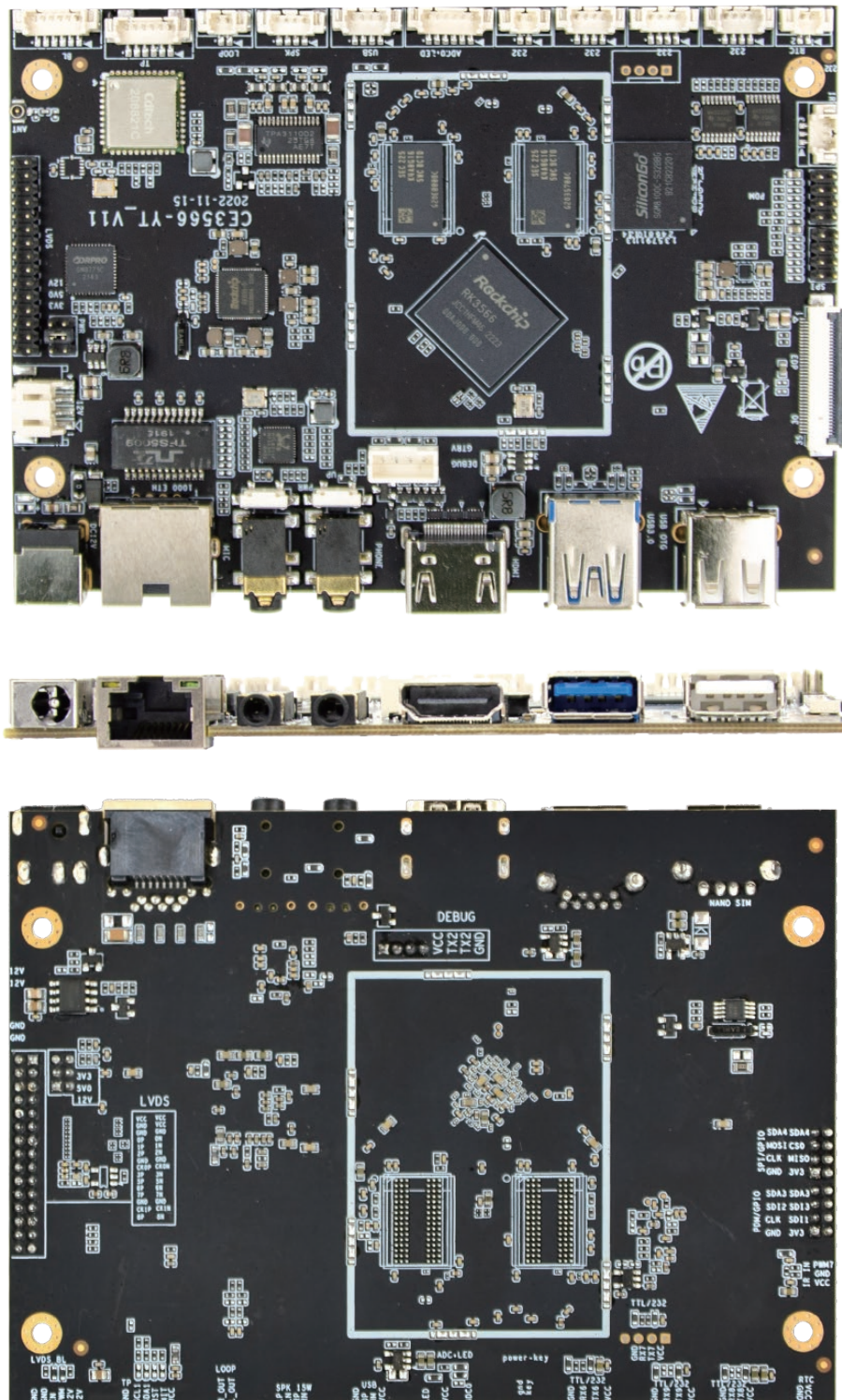# DEBIX R3566-01

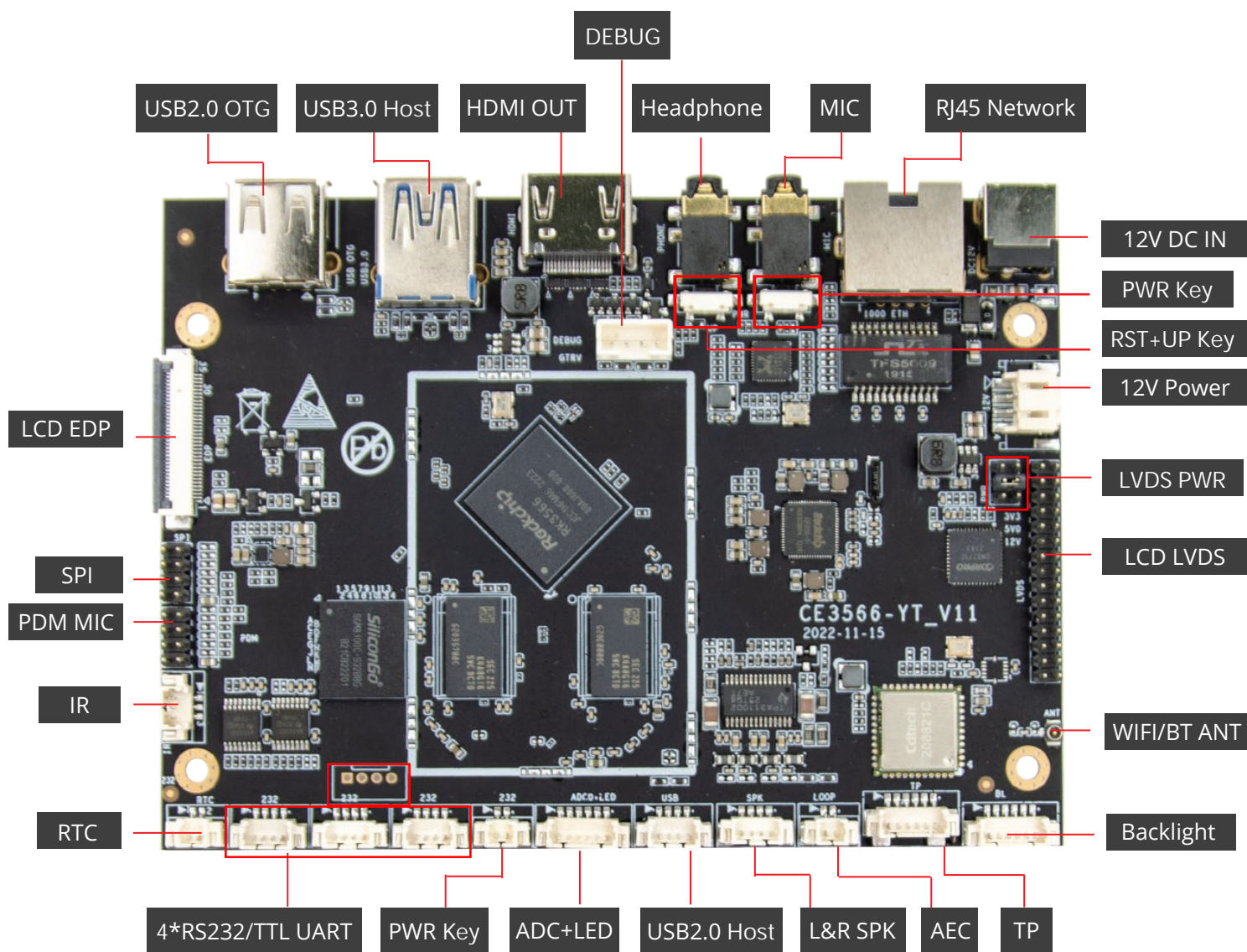## DEBIX R3566-01 Single Board Computer

Overview：

The DEBIX R3566-01 is a cost-effective, commercial-grade, single-board computer based on the Rockchip RK3566, which focuses on power consumption control and cost-effectiveness. It provides rich I/O interfaces for flexible application in various fields such as AIoT devices, smart home products, and electronic ink screen devices.

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
WIFI & BT	2.4GHz & 5GHz Wi-Fi4/5, BT 5.0 (optional)
Video & Audio	
LVDS	1 x LVDS, supports single and dual 8bit 1 x LVDS backlight, supports backlight control adjustment 1 x LVDS Power
TP	1 x TP, supports I2C or USB protocol
eDP	1 x eDP
HDMI	1 x HDMI output
SPK	1 x L&R SPK, 4Ω/2W
Headphone	1 x Headphone
MIC	1 x MIC
PDM	1 x PDM MIC
AEC	1 x AEC loopback
Other Interfaces	
UART	3 x UART (RS232/TTL) 1 x UART (RS232/TTL) (reserved)
USB 2.0	1 x USB 2.0 OTG 1 x USB 2.0 Host
USB 3.0	1 x USB 3.0 Host
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
RTC	1 x RTC battery interface
Key	1 x PWR key connector 1 x PWR Key 1 x RST+UP Key
Power Supply	
Power Input	DC 12V-24V/2A input
Mechanical	
Dimensions	123.00mm x 88.00mm x 1.20mm
Net Weight	69g (±0.5g)
Operating Temp.	Commercial grade: 0℃~70℃

I/O Interface:

DEBUG

USB2.0 OTG | USB3.0 Host | HDMI OUT | Headphone | MIC | RJ45 Network

12V DC IN
PWR Key
RST+UP Key
12V Power

LCD EDP

LVDS PWR

LCD LVDS

SPI
PDM MIC

IR

WIFI/BT ANT

RTC

Backlight

4*RS232/TTL UART | PWR Key | ADC+LED | USB2.0 Host | L&R SPK | AEC | TP

Compatible with DEBIX's Accessories:

Product	Model
DEBIX Display Screen	DEBIX TD050A
	DEBIX TD070A
	DEBIX TD101A
	DEBIX TD050H
	DEBIX TD070H
	DEBIX TD101H

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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