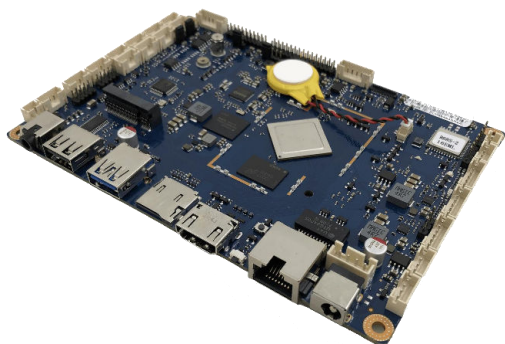


# JES-R68S

## Rockchip RK3568 General Purpose SBC

JWIPC's JES-R68S is an Arm-based 3.5" Single Board Computer powered by Rockchip RK3568 SoC, which includes 4x Arm Cortex-A55 cores, 1 TOPS NPU and Arm Mali-G52 3D graphics engine. It supports HDMI, eDP, LVDS, MIPI-DSI display and provides rich I/O resources such as GbE, 9x USB, 6x COM, with additional features such as on-board WiFi+BT and M.2 5G/4G expansion. JES-R68S is ideal for entry level edge AI applications in healthcare, retail, robotics/AGV, smart city, etc.



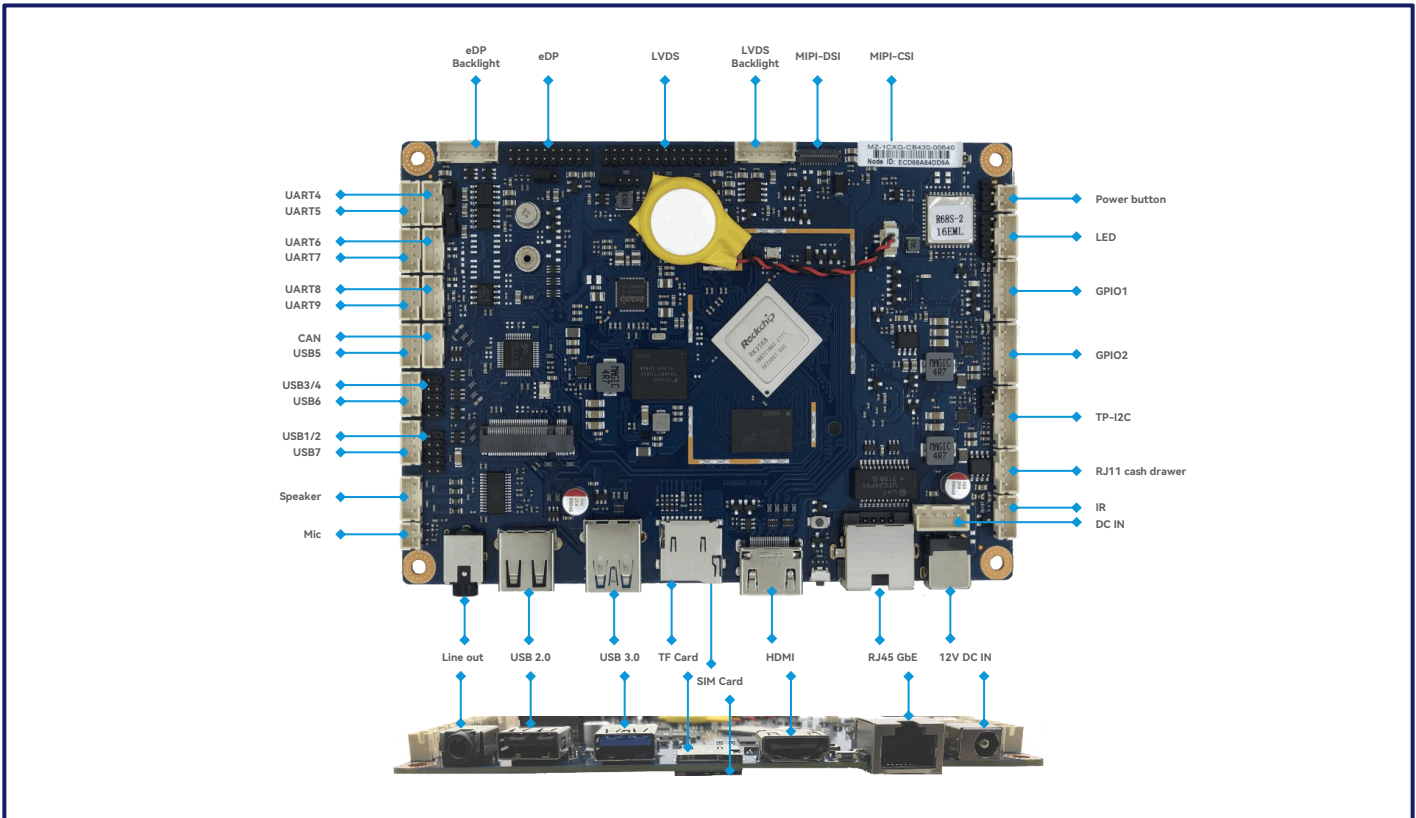
- Arm-based 3.5" Single Board Computer
- Rockchip RK3568 SoC up to 2.0 GHz
- 4x Cortex-A55 + 1 TOPS NPU + Mali-G52 3D GPU
- On-board 2/4GB LPDDR4/4X + 8/16/32GB eMMC 5.1
- On-board WiFi+BT module + M.2 Key B for 5G/4G
- Display: 1x HDMI, 1x eDP, 1x LVDS, 1x MIPI-DSI
- I/O: 1x GbE, 9x USB, 6x COM
- Supports Wake-on-LAN, Watchdog Timer, Auto On/Off
- Supports Android 11, Debian 10, Ubuntu 18.04

## Specifications

<b>CPU</b>	Rockchip RK3568, Quad core Cortex-A55 processors up to 2.0 GHz, 64-bit Arm® v8.2-A architecture
<b>NPU</b>	1 TOPS Neural Network performance
<b>GPU</b>	Arm Mali-G52 1-Core-2EE, supports OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0 FP
<b>H/W Video Codec</b>	Decoder: H.265, H.264, VP9 up to 4K60; Encoder: H.265, H264 up to 1080p60
<b>Memory</b>	On-board 2/4GB LPDDR4/4X
<b>Flash Memory</b>	On-board 8/16/32GB eMMC 5.1 for OS
<b>Ethernet</b>	1x 10/100/1000 Mbps
<b>WiFi</b>	On-board Single or Dual band WiFi with Bluetooth 4.2
<b>5G/4G</b>	1x M.2 Key B for 4G/5G, 1x Micro SIM slot
<b>Display</b>	1x HDMI 2.0a Type-A 1x eDP 1.3, 20 pin 2.0mm Dupont header 1x Dual channel LVDS, 30 pin 2.0mm Dupont header 1x 4-lane MIPI-DSI, 31 pin FPC
<b>Camera Input</b>	1x 4-lane MIPI-CSI, 40 pin FPC
<b>Audio</b>	1x 3.5mm Line out, 1x Speaker (5W/8Ω amplifier), 1x Mic in
<b>USB</b>	1x USB 3.0 Type-A, 1x USB 2.0 Type-A, 7x USB 2.0 pin header
<b>COM</b>	2x RS-232/RS-485/TTL pin header, 2x RS-232/TTL pin header, 2x RS-232 pin header
<b>CAN</b>	1
<b>TF Card</b>	1
<b>I2C</b>	1x TP-I2C
<b>GPIO</b>	7x GPIO, 1x ADC
<b>Expansion</b>	1x IR, 1x LED, 1x RJ11 cash drawer, 1x Power button
<b>Power Supply</b>	12V DC IN (DC Jack or pin header), RK-809 PMIC
<b>Form Factor</b>	3.5 inch, 146mm x 102mm
<b>Operating System</b>	Android 11, Debian 10, Ubuntu 18.04
<b>Boot Options</b>	eMMC
<b>Operating Conditions</b>	-5~50°C, 10%~90% RH non-condensing

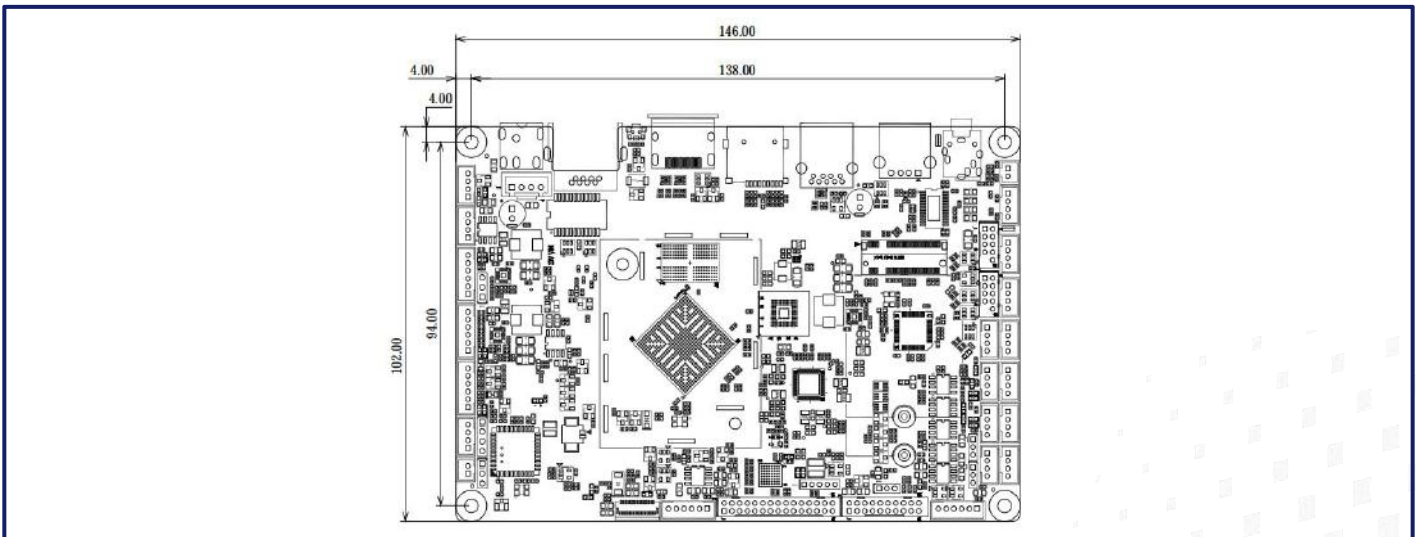
# 02

## I/O View



# 03

## Dimensions



# 04

## Order Information

Part No.	SoC	Memory	Flash	LAN	WiFi	5G/4G	Display	USB	COM	CAN	I2C	GPIO	Operating Temperature
JES-R68S-BQH43	RK3568 Quad core	4GB	32GB	1x 1000M	2.4/5GHz	USB 3.0	1x HDMI 1x eDP 1x LVDS 1x MIPI-DSI	9	2x RS-485 4x RS-232	1	1	7	-5~50°C
JES-R68S-BQM43	RK3568 Quad core	2GB	16GB	1x 1000M	2.4/5GHz	USB 3.0		9	2x RS-485 4x RS-232	-	1	7	-5~50°C
JES-R68S-BQM23	RK3568 Quad core	2GB	16GB	1x 1000M	2.4GHz	USB 3.0		9	6x RS-232	-	1	7	-5~50°C