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Radxa Rock2 Square Model A

Radxa Rock2 Square Model A: rk3288-based SoM with baseboard, supporting Android and Linux, featuring Gigabit Ethernet, Wi-Fi, SATA, and rich I/O.

SKU	UPDATED	PRICE
102110015	2025-09-02 05:58:33	$129.00(Excl. VAT)



Overview



The Radxa Rock2 Square Model A features a modular design with the Rock2 SoM (rk3288 CPU, up to 4GB RAM, 32GB eMMC) on a baseboard providing Gigabit Ethernet, dual-band Wi-Fi (ap6335), 2.5" SATA, and extensive I/O including LVDS, GPIO, and SPDIF. It ships with Android 4.4 and supports Android 5.0, along with Rabian Linux (Debian 8) offering package-based updates.

Key Features

The Rock2 series is made of the SoM and the base board. The reason why we make it SoM plus baseboard is answered in the Rock2 SoM compatibility thread at radxa talk.

Rock2 SoM (left) and the Rock2 Square baseboard(right).

The initial idea for us to make the SoM is that there are many requests from the customs that they want something similar to rock pro/lite but with some modification or extra/less components. We make the SoM because the baseboard is easier to modify and less time to make the PCB and verify the system. Also, SoM is actually easier to manufacture because it has less ports, thus will save cost for the customers. Your question is actually the seamless upgrade for the SoM. We did not consider that (Actually we did but a standard interface will drop some features of the CPU - rk3288, so we choose a custom interface with all features of rk3288). So the answer is no. We can make sure that the case can be compatible but not the base board.

On the software side, the both the Rock2 square and full support android 4.4 and soon android 5.0. The factory firmware is android 4.4 since the Rock2 stable enough for daily usage. Andriod 5.0 is already running with full features on Rock2 series, we just need more optimization for the audio/video etc. For the Linux distributions on Rock2 series, we customize a Linux distribution called Rabian base on Debian 8(jessie). Why customize distribution? Because nowadays there is still no standard ARM distribution. We want to provide easier updates for all users. We don't want to flash a new image just for a new feature of the kernel. So we setup Radxa package repository and provide the packages instead of images for upgrading. Why Debian? Because Debian is stable, has longer life cycle and support time. It's better for us to polish our own distribution. Current status of Rabian is we have every ports working as well as Wi-Fi/BT, hardware decoding and 3d acceleration is not implemented yet.

Features

The Rock2 SoM have the following spec:

- SIZE: 82mm x 60mm x 4mm
- CPU: rk3288
- RAM and STORAGE: two configurations, 2GB ram/16GB EMMC or 4GB ram/32GB EMMC
- PMIC: act8846
- Ethernet: 10M/100M/1000M rtl8211e Ethernet transceiver

The Rock2 Square base board has the following spec:

- Power is now 5v input only, need 5v/3a with SATA, same DC to USB cable as Rock Pro
- Support 1000M Ethernet port, USB host, Micro USB OTG
- 2.4Ghz/5Ghz Wi-Fi support 802.11 ac/b/g/n (ap6335 module)
- 2.5" SATA with power support, 3.5" disk need external power
- headphone with line in support, added SPDIF jack for digital audio
- 50 pin 2mm LVDS with touch signal header is at left, 40pin 2.54mm GPIO/UART/SPI header is at right
- Other MISC feature such as IR, UART debugging header, programmable leds, RTC battery still remains.

Part List

- 1 x Rock2 SoM
- 1 x Square base board

- 4 x M2.5 Screws
- 1 x Wifi antenna
- 1 x DC to USB cable
- 1 x SATA cable with 5v power

Documents

- Firmware
  - Android
  - Linux
- Code
  - Android
- More Information

Product Gallery





Part List

- 1 x Rock2 SoM
- 1 x Square base board
- 4 x M2.5 Screws
- 1 x Wifi antenna
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Compliance & Logistics

HSCODE	9032900090
ROHS	1

Resource Links

- https://www.seeedstudio.com/Radxa-Rock2-Square-Model-A-p-2654.html

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