

RADXA ROCK PI 4

RK3399 Single Board Computer

■ **Quick Installation Guide**



Vendor

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■ 1. Product Content

1x ROCK PI 4

■ 2. Wireless Specifications

- IEEE 802.11a/b/g/n/ac dual-band radio with virtual-simultaneous dual-band operation
- Single-stream spatial multiplexing up to 433.3 Mbps data rate.
- Supports 20, 40, 80 MHz channels with optional SGI(256 QAM modulation)
- Supports Bluetooth V5.0+EDR with integrated PA for Class 1.5 and Low Energy (BLE).

■ Frequenzband

WLAN Standard	IEEE 802.11b/g/n/ac, WiFi compliant
Frequency Range	2.400 GHz ~ 2.4835 GHz (2.4 GHz ISM Band) 5.18 GHz ~ 5.845 GHz (5.0 GHz ISM Band)
Modulation	802.11b : DQPSK, DBPSK, CCK 802.11g/n : 64-QAM, 16-QAM, QPSK, BPSK 802.11ac : 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK 802.11a/n : 64-QAM, 16-QAM, QPSK, BPSK 802.11ac : 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK
Output Power	802.11b /CCK : 16 dBm ± 1.5 dB @ EVM -9dB
	802.11g /64-QAM(R=3/4) : 15 dBm ± 1.5 Output Power dB @ EVM -25dB
	802.11n /64-QAM(R=5/6) : 14 dBm ± 1.5 dB @ EVM @ -27dB
	802.11a /64-QAM(R=3/4) : 15 dBm ± 2 dB @ EVM @ -25dB 802.11n /64-QAM(R=5/6) : 14 dBm ± 2 dB @ EVM @ -27dB 802.11ac/256-QAM(R=3/4) : 12 dBm ± 2 dB @ EVM @ -30dB 802.11ac/256-QAM(R=5/6) : 10.5 dBm ± 2 dB @ EVM @ -32dB

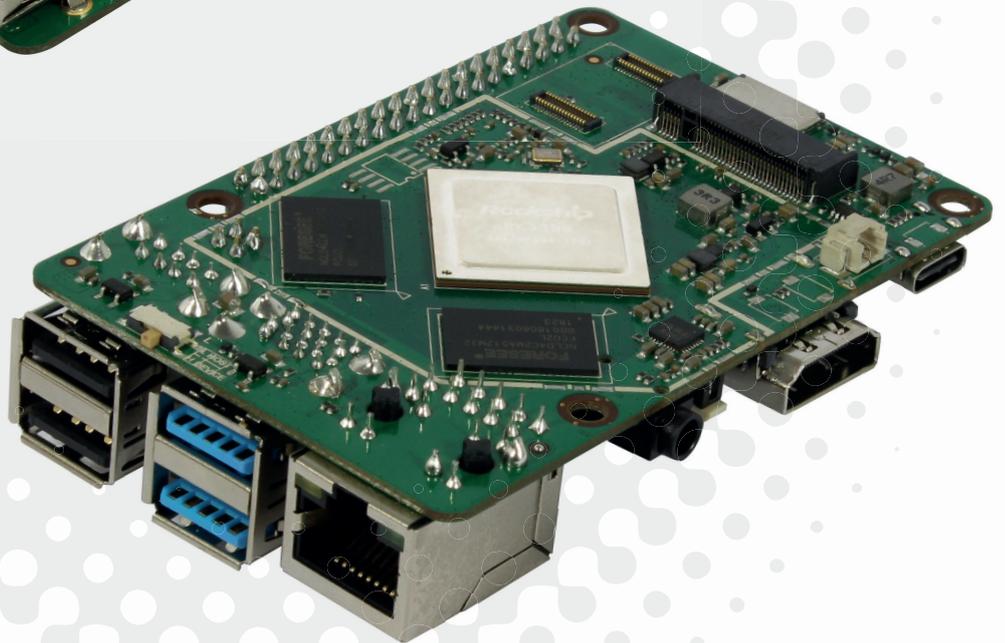
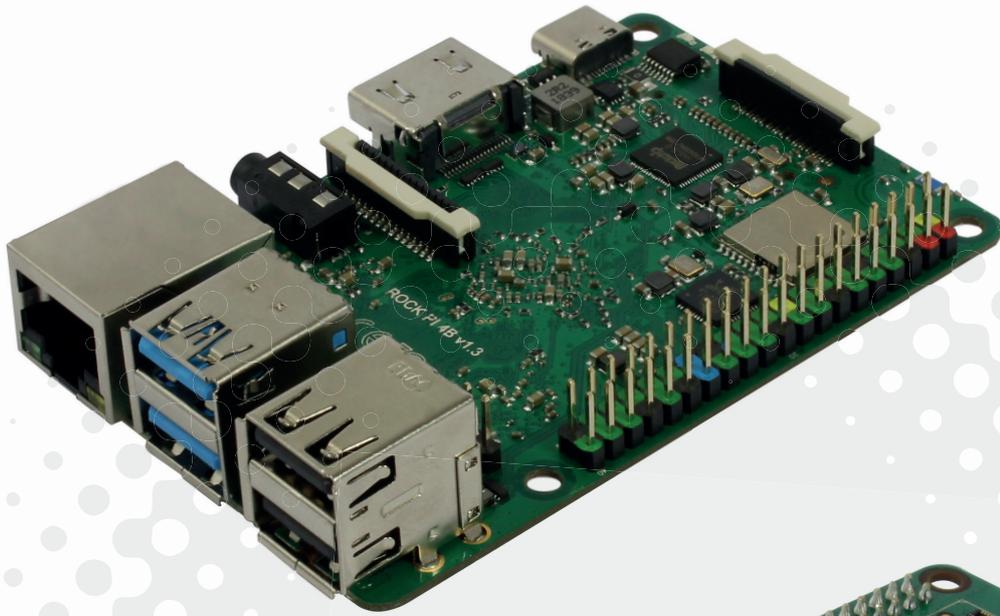
■ Bluetooth

Bluetooth Standard Bluetooth	V5.0 of 1, 2 and 3 Mbps.
Host Interface	UART
Antenna Reference	Small antennas with 0~2 dBi peak gain
Frequency Band	2402 MHz ~ 2480 MHz
Number of Channels	79 channels
Modulation	FHSS, GFSK, DPSK, DQPSK

■ RF-Specification

Sensitivity @ BER=0.1% for GFSK (1Mbps) -86 dBm
Sensitivity @ BER=0.01% for $\pi/4$ -DQPSK (2Mbps) -87 dBm
Sensitivity @ BER=0.01% for 8DPSK (3Mbps) -83 dBm

■ 3. Pictures



■ 4. Safety instructions

Please observe the following instructions:

- *Never carry out an installation during a thunderstorm.*
- *Make sure that the cables are laid so that they cannot trip or slip.*
- *Never expose the device to direct sunlight during operation.*
- *Never operate the appliance near heat sources.*
- *Never place the device on surfaces that are sensitive to heat.*
- *Protect the device from moisture, dust, liquids and vapors.*
- *Do not use the device in damp rooms and never in potentially explosive atmospheres.*
- *Do not use cleaning agents containing solvents for cleaning, but only a soft, dry antistatic cloth.*
- *Repairs may only be carried out by trained, authorized personnel. Take care whilst handling to avoid mechanical or electrical damage to the printed circuit board and connectors.*
- *Avoid handling the ROCK Pi 4 while it is powered. Only handle by the edges to minimize the risk of electrostatic discharge damage.*
- *All peripherals used with the ROCK Pi 4 should comply with relevant standards for the country of use and be marked accordingly to ensure that safety and performance requirements are met.*
- *These articles include but are not limited to keyboards, monitors and mice used in conjunction with the ROCK Pi 4.*
- *Liability by ALLNET® is excluded in case of improper use.*

■ 5. Place of installation and assembly

The RADXA ROCK PI 4 may only be used in dry indoor areas. Ensure adequate ventilation. The installation must be carried out in such a way that the power or data cable between the board and the USB socket of the computer is not under tension, as this could loosen or damage the plugs.

■ 6. CE Information

*ALLNET GmbH Computersysteme hereby declares that the **RADXA ROCK PI** device complies with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity can be found at the following address: <http://ce.allnet.de>*



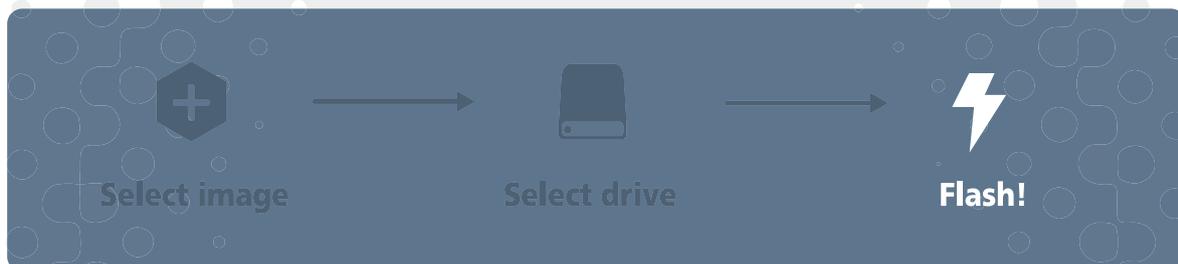
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■ Essentials You Need

- ROCK Pi 4, Model A or Model B
- Power adapter with USB type C port equal or larger than 15W
- MicroSD Card or eMMC module with eMMC-to-uSD adapter board
- Keyboard & Mouse
- Monitor with HDMI input Quick

Installation Guide

1. Download Image Writer tool Etcher and OS images from <http://rock.sh/pi4>
2. If you use eMMC module, put eMMC module to uSD adapter board, and inset uSD adapter board to card reader. If you use microSD card, just plug the microSD card to card reader.
3. Plug the card reader to PC.
4. Open Etcher, select the OS Image, select the card reader drive, and run FLASH.



5. Plug the eMMC module or microSD card to your ROCK Pi 4, connect HDMI to monitor, plug in mouse and keyboard, power on and enjoy!

■ Support

Forum: <http://forum.radxa.com>
Wiki: <http://wiki.radxa.com/Rockpi4>
Email: support@radxa.com

Design and made by Radxa with♥ in Shenzhen, China