

# OpenWRT

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- [NanoPi R4S](#)

# NanoPi R4S

## URLs

### Hardware

- [https://www.friendlyelec.com/index.php?route=product/product&product\\_id=284](https://www.friendlyelec.com/index.php?route=product/product&product_id=284)
- [https://wiki.friendlyelec.com/wiki/index.php/NanoPi\\_R4S#Essentials\\_You\\_Need](https://wiki.friendlyelec.com/wiki/index.php/NanoPi_R4S#Essentials_You_Need)

### FriendlyWRT

- <https://wiki.friendlyelec.com/wiki/index.php/FriendlyWrt>

## Install OS

- Download: <http://download.friendlyelec.com/NanoPiR4S>
- File: rk3399-sd-friendlywrt-23.05-docker-20231031.img.gz

## Flash Utility

- dd
- win32diskimager
- [balenaEtcher](#)

## First Boot

- Account: root / password (empty password in some versions)
- Web:
  - <http://friendlywrt/>
  - <http://192.168.2.1/>

## Hardware SPEC.

- SoC: Rockchip RK3399

- CPU: big.LITTLE?Dual-Core Cortex-A72(up to 2.0GHz) + Quad-Core Cortex-A53(up to 1.5GHz)
- GPU: Mali-T864 GPU?supports OpenGL ES1.1/2.0/3.0/3.1, OpenCL, DX11, and AFBC
- VPU: 4K VP9 and 4K 10bits H265/H264 60fps decoding, Dual VOP, etc
- PMU: RK808-D PMIC, cooperated with independent DC/DC, enabling DVFS, software power-down, RTC wake-up, system sleep mode
- RAM: 1GB DDR3/4GB LPDDR4
- Flash: no Onboard eMMC
- Ethernet: one Native Gigabit Ethernet, and one PCIe Gigabit Ethernet
- USB: two USB 3.0 Type-A ports
- Pin header extension interface
  - 2x5-pin header: SPI x 1, I2C x 1
  - 4-pin header: USB 2.0
- microSD Slot x 1
- Debug: one Debug UART, 3 Pin 2.54mm header, 3V level, 1500000bps
- LEDs: 1 x power LED and 3 x GPIO Controlled LED (SYS, LAN, WAN)
- others:
  - 2 Pin 1.27/1.25mm RTC battery input connector
  - one User Button
  - one 5V Fan connector
- Power supply: DC 5V/3A, via USB-C connector or Pin header
- PCB: 8 Layer, 66 mm x 66 mm
- Temperature measuring range: 0? to 80?