



ODROID

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Agenda

HW RPi4 vs Odroid

Výkon I/O

Stránky výrobce

Dostupnost SK/CZ



Porovnanie Rpi4 vs Odroid

Porovnanie Rpi vs Odroid

RPI 4

Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.8GHz

1GB, 2GB, 4GB or 8GB LPDDR4-3200 SDRAM (depending on model)

2.4 GHz and 5.0 GHz IEEE 802.11ac wireless, Bluetooth 5.0, BLE

Gigabit Ethernet

2 USB 3.0 ports; 2 USB 2.0 ports.

2 × micro-HDMI ports (up to 4k60 supported)

Micro-SD card slot for loading operating system and data storage

5V DC via USB-C connector (minimum 3A*)

5V DC via GPIO header (minimum 3A*)

Power over Ethernet (PoE) enabled (requires separate PoE HAT)

Operating temperature: 0 – 50 degrees C ambient

ODROID M1

Rockchip RK3568 Processor - Quad-Core Cortex-A55 (1.992GHz)

4 or 8GiB LPDDR4 with 32-bit bus width 3120 MT/s

USB Externé wifi Bluetooth

Gigabit Ethernet

2 × USB 2.0 host port + 2 × USB 3.0 host port (or 1 × USB 3.0 host + 1 × USB 2.0 OTG port)

1 × HDMI 2.0 (up to 4K@60Hz with HDR, EDID)

1 × SATA Connector / 1 × NVME M.2 SSD (PCIe 3.0 × 2) / 1 × eMMC slot / 1 × Micro SD slot

1 × DC jack : outer (negative) diameter 5.5mm, inner (positive) diameter 2.1mm
DC input : 7.5V ~ 15.5V

DC 12V/2A power adapter is recommended

IDLE : ≈ 1.25W

CPU Stress : ≈ 4.44W (Performance governor)

Porovnanie Rpi vs Odroid

POROVNANIE ČÍTANIA A ZÁPISU

Benchmark	ODROID-M1	RPI CM4
fio IM sequential read	1646 MB/s	416 MB/s
iozone IM random read	1049.13 MB/s	210.97 MB/s
iozone IM random write	1163.95 MB/s	188.70 MB/s
iozone 4K random read	43.73 MB/s	14.77 MB/s
iozone 4K random write	96.90 MB/s	25.38 MB/s

Výhody Odroid dosky

- Univerzálne napájanie 12V
- RTC – real time clock s batériou (nezabudne čas po odpojení napájania)
- M.2 karta vyššia rýchlosť čítania a zápisu
- SATA port – pripojenie ďalšieho disku

Stránky výrobcu a informácie

- Výrobca Hardkernel - <https://www.hardkernel.com>
- Wiki - <https://wiki.odroid.com/>
- OS image - https://wiki.odroid.com/odroid-m1/os_images/ubuntu/20220926
- OS install manuál -
- https://wiki.odroid.com/odroid-m1/getting_started/os_installation_guide?redirect=1

Dostupnost HW v US - SK - CZ

- US: <https://www.hardkernel.com/shop/odroid-m1-with-8gbyte-ram/>
- Cena \$90.00

- SK: <https://rlx.sk/sk/odroid/8684-odroid-m1-with-8gbyte-ram-rockchip-rk3568b2-cpu.html>
- Cena 134,40 €

- CZ: <https://rpishop.cz/odroid-m1/5299-odroid-m1-8-gb.html>
- Cena 122,92 €

Ďakujem

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