

Raspberry Pi SD Cards Published October 2024



Overview



SD card quality is a critical factor in determining the overall user experience for a Raspberry Pi computer. Raspberry Pi's high-quality A2 microSD cards support higher bus speeds as well as the command queueing extension, which permits a degree of pipelining of random read operations; together these close some of the gap between SD card and NVMe SSD performance. Raspberry Pi SD Cards have been rigorously tested with Raspberry Pi computers to ensure optimal performance.

Raspberry Pi SD Cards are available in 32GB, 64GB, and 128GB variants, either unprogrammed or pre-programmed with Raspberry Pi OS. They are also available with Raspberry Pi-branded microSD-to-SD adapters and jewel cases.

Specification

Performance: Speed Class: C10, U3, V30, A2

Random 4KB read performance: 3,200 IOPS (Raspberry Pi 4, DDR50) 5,000 IOPS (Raspberry Pi 5, SDR104)

Random 4K write performance: 1,200 IOPS (Raspberry Pi 4, DDR50) 2,000 IOPS (Raspberry Pi 5, SDR104)

A2 microSD cards with support for DDR50 and SDR104 bus speeds and command queueing (CQ) extension

Capacity: 32GB, 64GB, or 128GB

Form factor/compatibility: microSDHC / microSDXC, compatible with microSDHC-

and microSDXC-supporting host devices

SD specification: SD6.1

Operating voltage: 2.7-3.6V

Operating temperature: -25°C to 85°C

Storage temperature: -40°C to 85°C

Dimensions: 15 × 11 × 1 mm

Compliance: For a full list of local and regional product approvals,

please visit <u>pip.raspberrypi.com</u>

Production lifetime: Raspberry Pi SD Cards will remain in production until

at least January 2028

WARNINGS

- This product should be operated in a well ventilated environment, and if used inside a case, the case should not be covered.
- The connection of Raspberry Pi SD Cards to incompatible devices may affect compliance, result in damage to the unit, and invalidate the warranty.
- All peripherals used with this product should comply with relevant standards for the country of use and be marked accordingly to ensure that safety and performance requirements are met.

SAFETY INSTRUCTIONS

To avoid malfunction or damage to this product, please observe the following:

- Important: Before connecting this device, shut down your Raspberry Pi computer and disconnect it from external power.
- This device should be operated in a dry environment at normal ambient temperatures.
- Do not expose to water or moisture, or place on a conductive surface whilst in operation.
- Do not expose to heat from any source; Raspberry Pi SD Cards are designed for reliable operation at normal ambient temperatures.
- · Store in a cool, dry location.
- Avoid rapid changes of temperature, which can cause moisture to build up in the device, affecting performance.
- · Take care whilst handling to avoid mechanical or electrical damage to the connectors.



