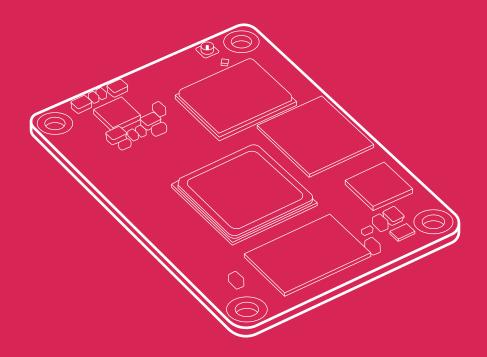


Raspberry Pi Compute Module 4

Published April 2024





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Overview



Raspberry Pi Compute Module 4 harnesses the compute power of the popular Raspberry Pi 4 Model B, bringing it to a smaller form factor suitable for integration into products.

Key features include a high-performance 64-bit quad-core processor, dual-display support at resolutions up to 4K, hardware video decode at up to 4Kp60, up to 8GB of RAM, Gigabit Ethernet, USB 2.0, dual camera interfaces, and PCIe Gen 2 x1 interface.

The optional dual-band 2.4/5.0GHz wireless LAN and Bluetooth 5.0 have modular compliance certification. This allows the board to be designed into end products with significantly reduced compliance testing, improving both cost and time to market. Either the onboard antenna or an external antenna kit can be used.

Compute Module 4 has optional onboard eMMC of 8GB, 16GB or 32GB.

Specification

Form factor: 55 mm × 40 mm

Processor: Broadcom BCM2711 quad-core Cortex-A72 (ARM v8) 64-bit

SoC @ 1.5GHz

Memory: 1GB, 2GB, 4GB or 8GB LPDDR4 (depending on variant)

Connectivity: • Optional wireless LAN, 2.4GHz and 5.0GHz IEEE 802.11b/g/n/

ac wireless, Bluetooth 5.0, BLE with onboard and external

antenna options

Onboard Gigabit Ethernet PHY supporting IEEE1588

1 × USB 2.0 interfacePCle Gen 2 x1 interface

• 28 GPIO signals

• SD card interface for SD card or external eMMC (for use only

with Compute Module 4 variants without eMMC)

Video: • Dual HDMI interface (up to 4Kp60 supported)

2-lane MIPI DSI display interface
2-lane MIPI CSI camera interface
4-lane MIPI DSI display interface
4-lane MIPI CSI camera interface

Multimedia: H.265 (4Kp60 decode); H.264 (1080p60 decode, 1080p30

encode); OpenGL ES 3.0 graphics

Input power: 5V DC

Operating temperature: -20°C to +85°C

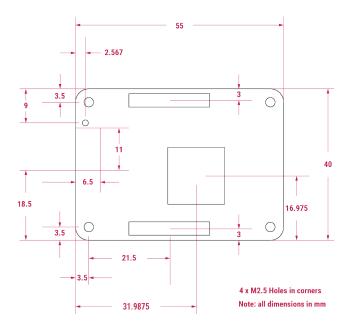
Production lifetime: Raspberry Pi Compute Module 4 will remain in production

until at least January 2034

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

visit pip.raspberrypi.com

Physical Specification



WARNINGS

- Any external power supply used with Raspberry Pi Compute Module 4 shall comply with relevant regulations and standards applicable in the country of intended use.
- This product should be operated in a well-ventilated environment, and if used inside a case, the case should not be covered.
- Whilst in use, this product should be placed on a stable, flat, non-conductive surface, and should not be contacted by conductive items.
- The connection of incompatible devices to Compute Module 4 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. These articles include but are not limited to keyboards, monitors, and mice when used in conjunction with the Compute Module.
- The cables and connectors of all peripherals used with this product must have adequate insulation so that relevant safety requirements are met.

SAFETY INSTRUCTIONS

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

- 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 Compute Module 4 is designed for reliable operation at normal ambient temperatures.
- Take care whilst handling to avoid mechanical or electrical damage to the printed circuit board and connectors.
- Whilst it is powered, avoid handling the printed circuit board, or only handle it by the edges to minimise the risk of electrostatic discharge damage.

Part Number	Wireless	RAM	еММС	Price*
CM4 001000	No	1GB	0GB (Lite)	\$30
CM4 001008			8GB	\$35
CM4 001016			16GB	\$40
CM4 001032			32GB	\$45
CM4 002000		2GB	0GB (Lite)	\$35
CM4 002008			8GB	\$40
CM4 002016			16GB	\$45
CM4 002032			32GB	\$50
CM4 004000		4GB	0GB (Lite)	\$50
CM4 004008			8GB	\$55
CM4 004016			16GB	\$60
CM4 004032			32GB	\$65
CM4 008000		8GB	0GB (Lite)	\$75
CM4 008008			8GB	\$80
CM4 008016			16GB	\$85
CM4 008032			32GB	\$90

