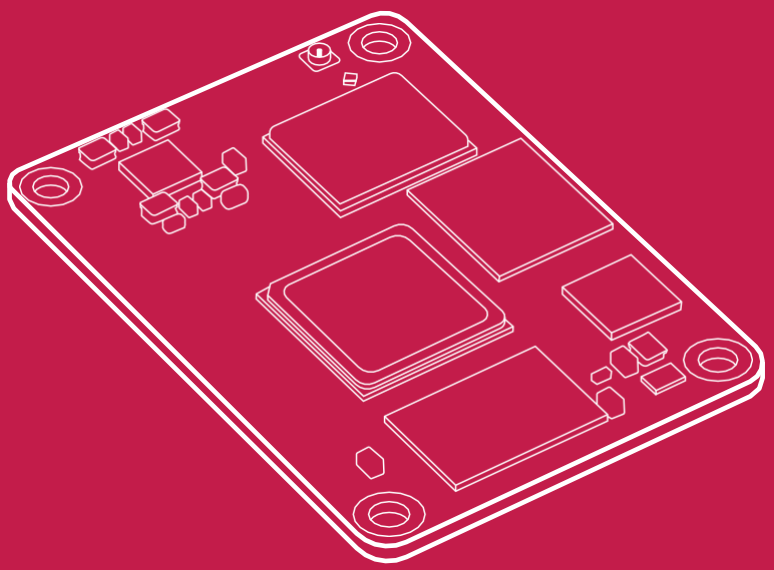
Raspberry Pi Compute Module 4



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Raspberry Pi

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.

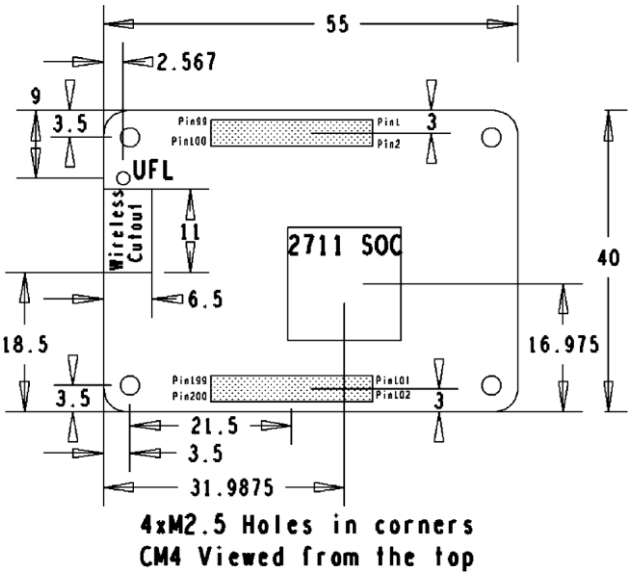
The optional dual-band 2.4/5.0GHz wireless LAN and Bluetooth 5.0 have modular compliance certification. This allows the board to be designed into end products with significantly reduced compliance testing, improving both cost and time to market. Either the onboard antenna or an external antenna kit can 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 interface • PCIe 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 2028
Compliance:	For a full list of local and regional product approvals, please visit www.raspberrypi.org/documentation/hardware/raspberrypi/conformity.md

Physical specifications



Note: all dimensions in mm

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.**


Raspberry Pi Compute Module 4
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IC: 20953-RPIRMOB
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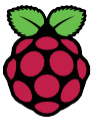

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