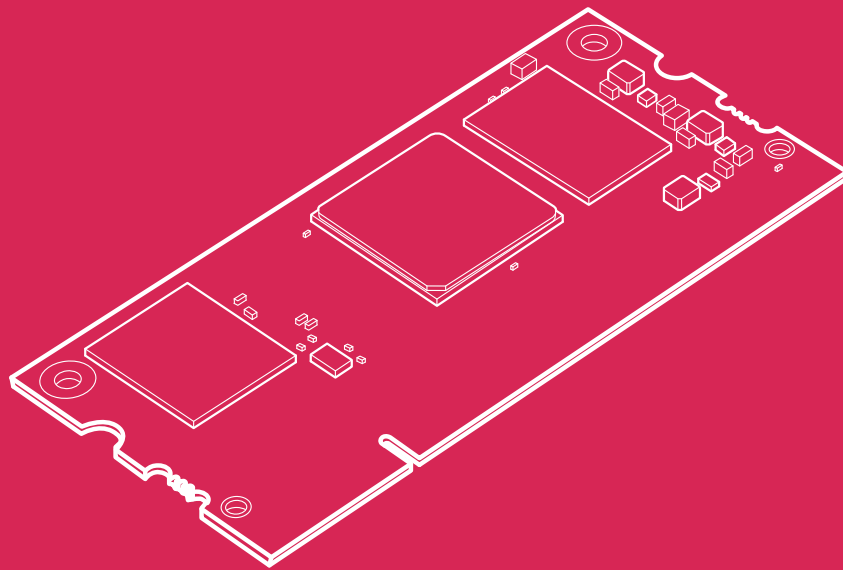




# Raspberry Pi Compute Module 4S

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## Overview



Raspberry Pi Compute Module 4 SODIMM (CM4S) is a System on Module (SoM) containing processor, memory, eMMC flash, and supporting power circuitry. These modules allow a designer to leverage the Raspberry Pi hardware and software stack in their own custom systems and form factors. The SODIMM form factor compute modules have 18 additional GPIO pins compared to the standard Raspberry Pi boards, for a total of 46, opening up more options for designers.

CM4S is loosely based on Raspberry Pi 4 Model B, and for cost-sensitive applications it can be supplied without the eMMC fitted; this version is called Raspberry Pi Compute Module 4 SODIMM Lite (CM4SLite).

CM4S is in the same form factor as the older Raspberry Pi Compute Module 3 and 3+, which are mechanically compatible with DDR2-SODIMM.

This device is intended for specific industrial customers migrating from Compute Module 3 or Compute Module 3+ and is not for general sale. For new customers who are designing products, we recommend using Raspberry Pi Compute Module 4. (<https://www.raspberrypi.com/products/compute-module-4>).

## Specification

**Form factor:** 67.6mm × 31.0mm  
(compatible with JEDEC MO-224 mechanical specification for 200-pin DDR2)

**NOTE**

The pinout of Compute Module 4S is not the same as that of a DDR2 SODIMM module; they are not electrically compatible.

**Processor:** Broadcom BCM2711 quad-core 64-bit Cortex-A72 (Arm v8) at 1.5GHz

**Memory:**

- 1GB LPDDR4-3200 SDRAM with ECC
- 0GB (CM4SLite only), 8GB, 16GB, or 32GB eMMC flash

**Connectivity:**

- 1 × USB 2.0 port (high speed)
- 46 × GPIO signals
- 1 × SDIO 2.0 (CM4SLite only)

**Video:**

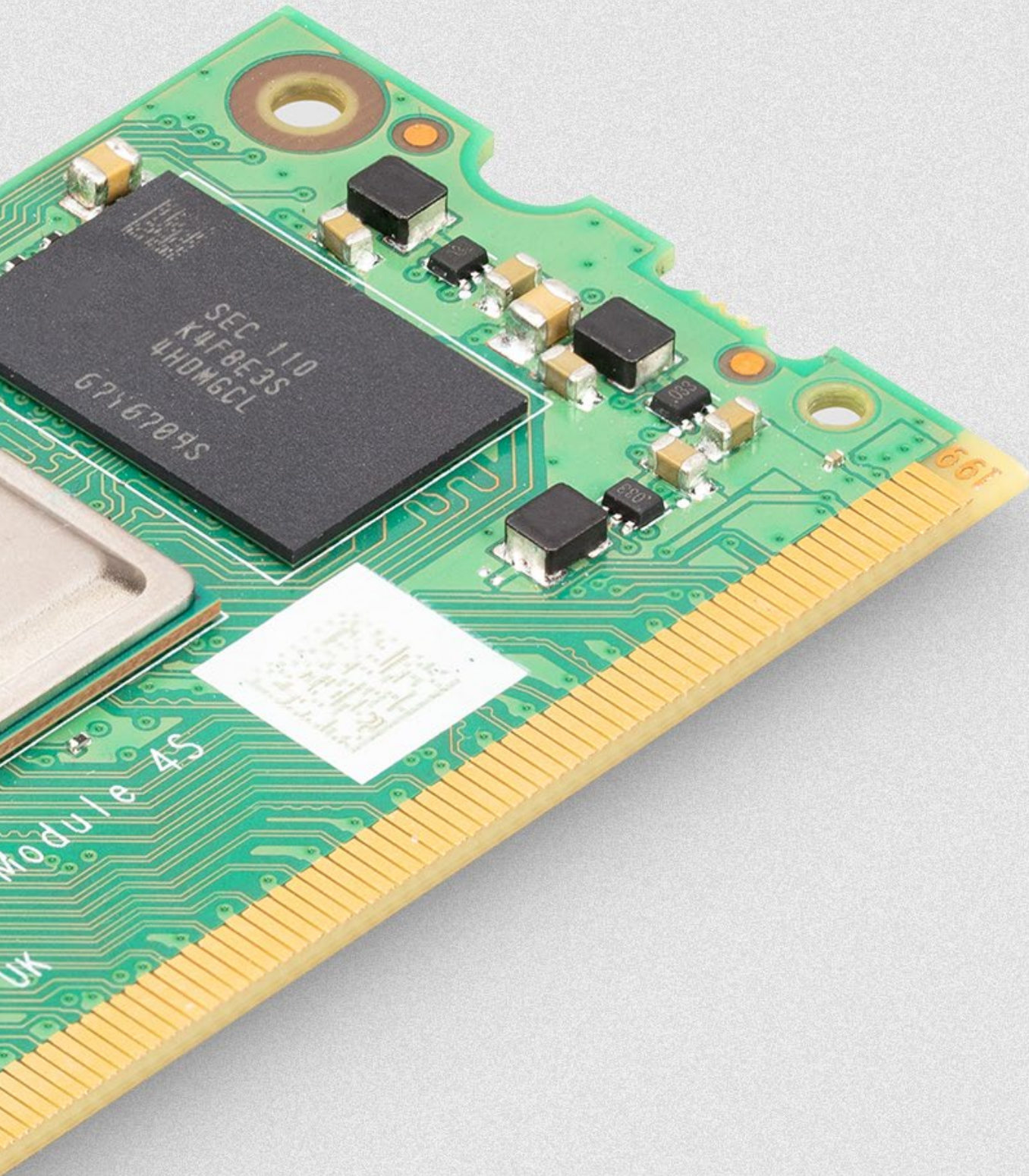
- 1 × HDMI 2.0 port (up to 4Kp60 supported)
- 1 × 2-lane MIPI DSI display interface
- 1 × 4-lane MIPI DSI display interface
- 1 × 2-lane MIPI CSI camera interface
- 1 × 4-lane MIPI CSI camera interface
- 1 × composite TV out (PAL or NTSC)

**Multimedia:**

- H.265 (HEVC) (up to 4Kp60 decode), H.264 (up to 1080p60 decode, 1080p30 encode)
- OpenGL ES 3.0 graphics

**Input voltage:** Requires VBAT (2.5V to 5V) and +3.3V supplies. Older Compute Modules also required +1.8V: +1.8V is no longer used but can be supplied for backward compatibility.







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