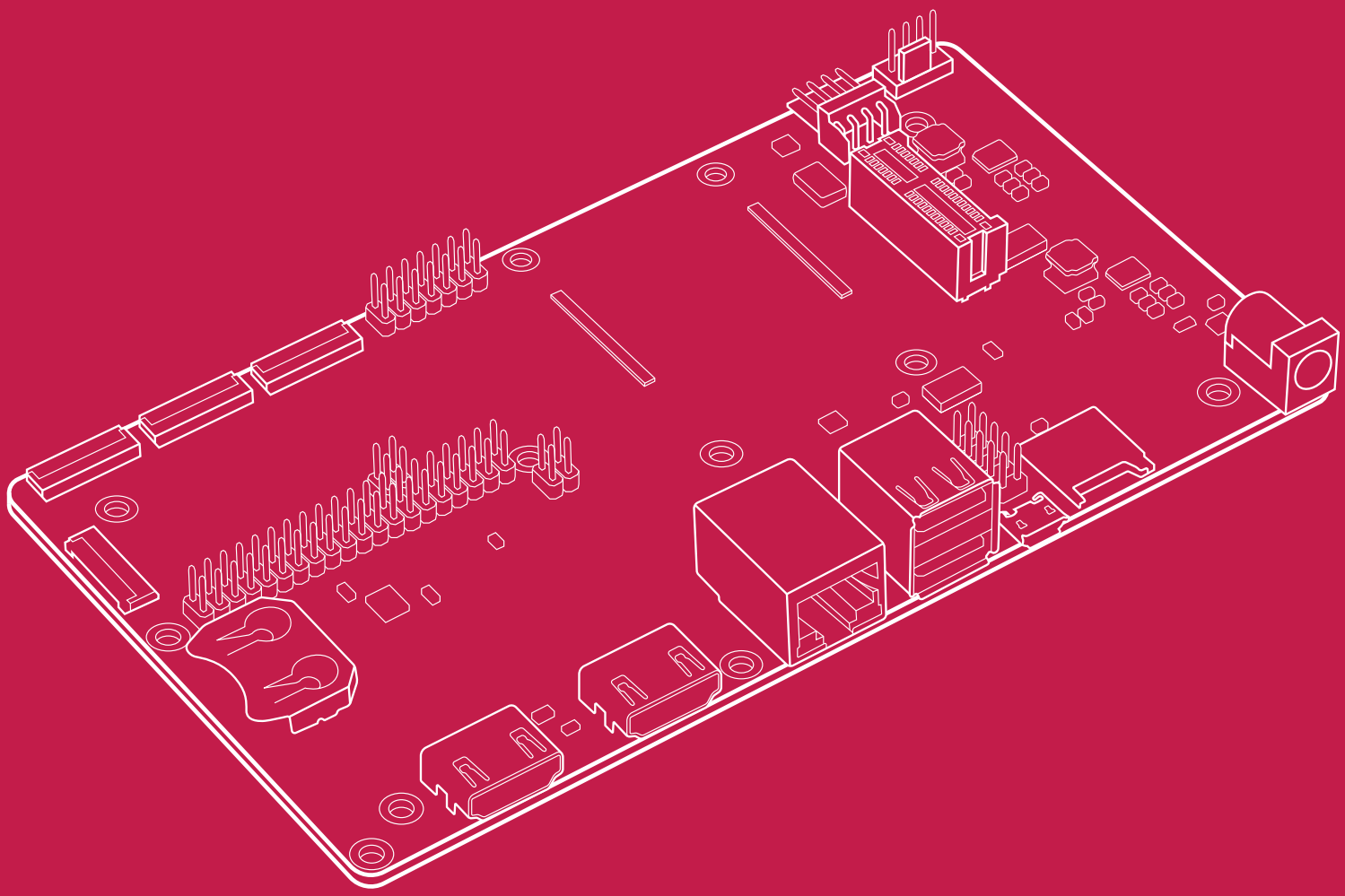
Raspberry Pi Compute Module 4
IO Board

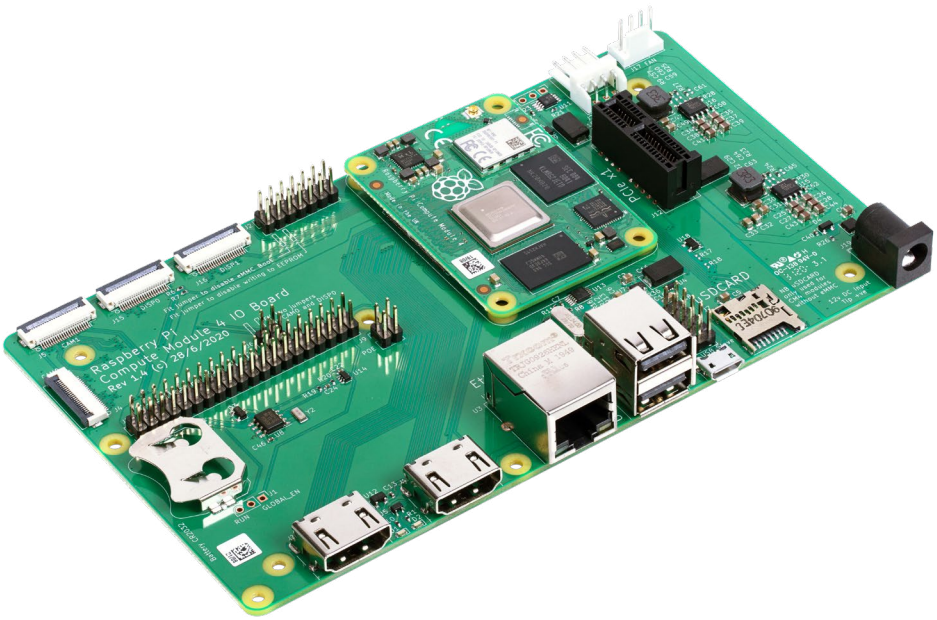


Published in October 2020
by Raspberry Pi Trading Ltd.

www.raspberrypi.org

Raspberry Pi

Overview



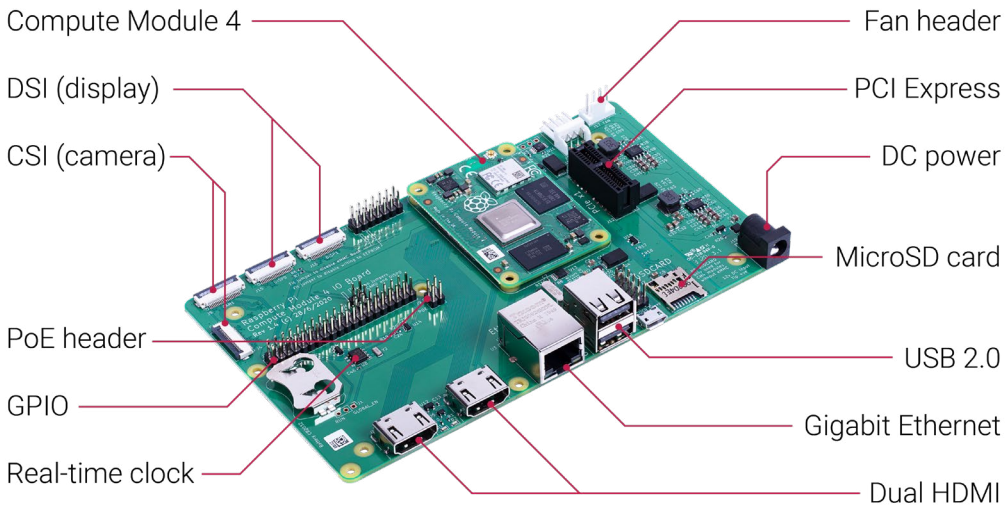
The Compute Module 4 IO Board is a companion board for Raspberry Pi Compute Module 4 (supplied separately). It is designed for use both as a development system for Compute Module 4 and as an embedded board integrated into end products.

The IO board is designed to allow you to create systems quickly using off-the-shelf parts such as HATs and PCIe cards, which might include NVMe, SATA, networking, or USB. The major user connectors are located along one side to make enclosures simple.

The Compute Module 4 IO Board also provides an excellent way to prototype systems using Compute Module 4.

Specification

- CM4 socket: suitable for all variants of Compute Module 4
- Standard Raspberry Pi HAT connectors with PoE support
- Standard PCIe Gen 2 x1 socket
- Real-time clock (RTC) with battery backup
- Dual HDMI connectors
- Dual MIPI camera connectors
- Dual MIPI display connectors
- Gigabit Ethernet socket supporting PoE HAT
- On-board USB 2.0 hub with 2 USB 2.0 connectors
- SD card socket for Compute Module 4 variants without eMMC
- Support for programming eMMC variants of Compute Module 4
- PWM fan controller with tachometer feedback



Input power: 12V input, +5V input with reduced functionality (power supply not supplied)

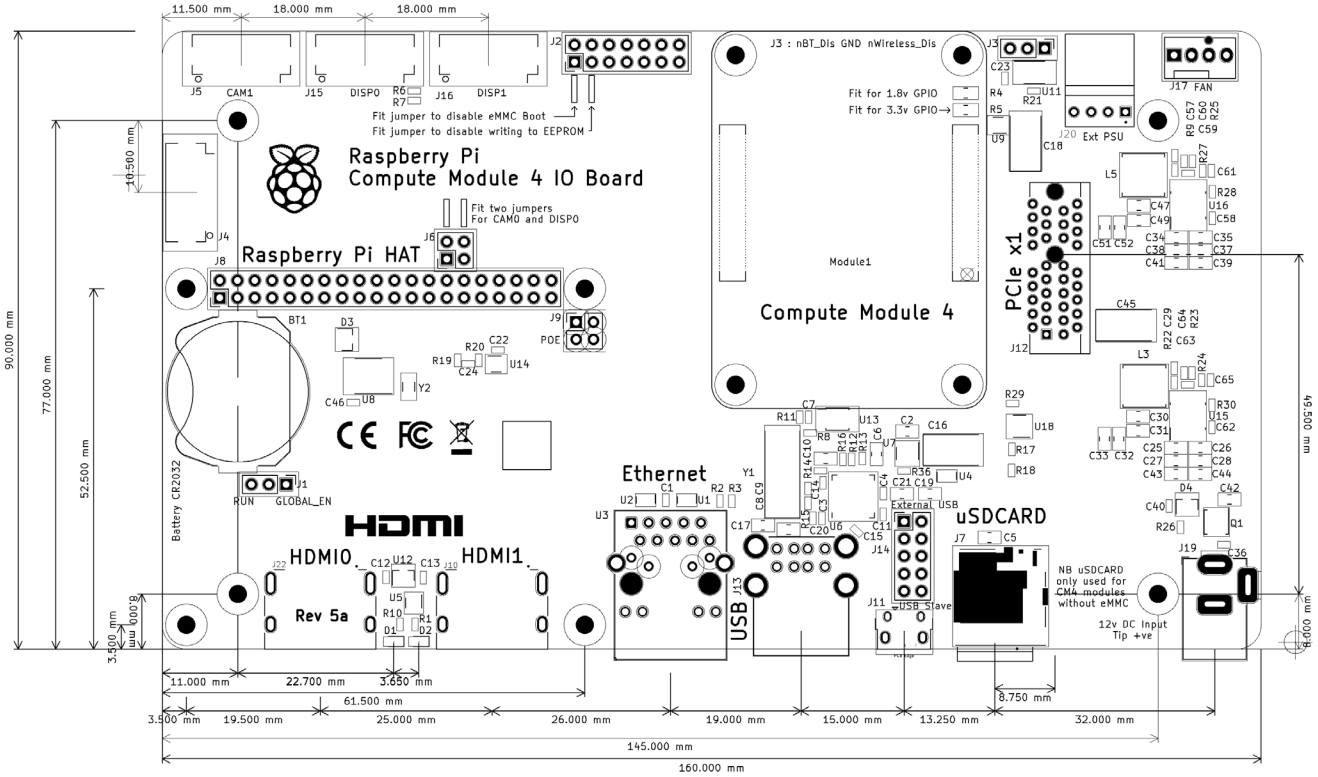
Dimensions: 160 mm × 90 mm

Production lifetime: The Raspberry Pi Compute Module 4 IO Board 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

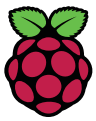
WARNINGS

- Any external power supply used with the Raspberry Pi Compute Module 4 IO Board 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 the Compute Module 4 IO Board 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 4 IO Board.
- 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; the Raspberry Pi Compute Module 4 IO Board 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