PCN 25

Raspberry Pi CM5 IO board revision 2

Raspberry Pi Ltd

2025-03-19: githash: 8939aa8-clean

Colophon

© 2020-2025 Raspberry Pi Ltd

build-date: 2025-03-19

build-version: githash: 8939aa8-clean

Legal Disclaimer Notice

TECHNICAL AND RELIABILITY DATA FOR RASPBERRY PI PRODUCTS (INCLUDING DATASHEETS) AS MODIFIED FROM TIME TO TIME ("RESOURCES") ARE PROVIDED BY RASPBERRY PI LTD ("RPL") "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN NO EVENT SHALL RPL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THE RESOURCES, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

RPL reserves the right to make any enhancements, improvements, corrections or any other modifications to the RESOURCES or any products described in them at any time and without further notice.

The RESOURCES are intended for skilled users with suitable levels of design knowledge. Users are solely responsible for their selection and use of the RESOURCES and any application of the products described in them. User agrees to indemnify and hold RPL harmless against all liabilities, costs, damages or other losses arising out of their use of the RESOURCES.

RPL grants users permission to use the RESOURCES solely in conjunction with the Raspberry Pi products. All other use of the RESOURCES is prohibited. No licence is granted to any other RPL or other third party intellectual property right.

HIGH RISK ACTIVITIES. Raspberry Pi products are not designed, manufactured or intended for use in hazardous environments requiring fail safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, weapons systems or safety-critical applications (including life support systems and other medical devices), in which the failure of the products could lead directly to death, personal injury or severe physical or environmental damage ("High Risk Activities"). RPL specifically disclaims any express or implied warranty of fitness for High Risk Activities and accepts no liability for use or inclusions of Raspberry Pi products in High Risk Activities.

Raspberry Pi products are provided subject to RPL's Standard Terms. RPL's provision of the RESOURCES does not expand or otherwise modify RPL's Standard Terms including but not limited to the disclaimers and warranties expressed in them.

Legal Disclaimer Notice

Document version history

Release	Date	Description
1.0	1 Mar 2025	Initial release

Document version history 2

Product Change Notification

Notification ID

25

Notification date

25th March 2025

Title

Change of Raspberry Pi CM5 IO board to revision 2

Products Affected

CM5 IO board

Reason for Change

Improved fan control, minor BOM improvments

Change Description

Old PCB revision: 1

Old software model number: N/A

New PCB revision: 2

New software model number: N/A

Raspberry Pi Ltd have extensively tested and qualified alternatives which closely match the original parts in terms of specification and performance.

Mechanical (Form, Fit, Function) Changes

No change

Electrical

Changes to the PCB to improve fan control in shutdown states.

Adds a pullup resistor to the FAN output to support fans that don't have an internal pullup. This also ensure the fan is turned off during power down as CM5_3.3v will be low.

Simplify the LED driving circuit to remove a superfluous buffer.

Notification ID

Silkscreen

Fixes silkscreen errors for the USB_OTG_ID pin and Sync_Out pin.

Software/Firmware Changes Required

None

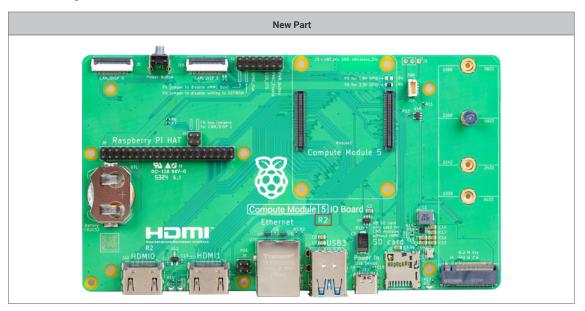
Transition Date(s)

April 2025

There will be a transition period where both old and new units are available in the distribution channel.

Identification Method to Distinguish Change

The new product can be distinguished by visual inspection of the top surface of the PCB. The silkscreen now has R2 indicated just below the Compute Module 5 IO board graphic, which is in turn below the Raspberry Pi Logo. See the red box in the image below.



Contact Details for more information

Please contact applications@raspberrypi.com if you have any queries about this PCN.

Web: www.raspberrypi.com

Silkscreen

