PCN 13 RP2040 Second Source

Raspberry Pi Ltd

Colophon

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Document version history

Release	Date	Description
1.0	16 March 2023	Initial release
1.1	13 May 2024	Add clarification on marking appearance, fixed a typo on the HTSL specification
1.2	24 April 2025	Fixed typo

Document version history

Product Change Notification

Notification ID

13

Notification date

16 March 2023

Title

Notice of the complete qualification of a 2nd assembly source (UNISEM - Malaysia) for the RP2040 IC.

Products Affected

RP2040

Reason for Change

- · To meet product demand for RP2040.
- · To allow for increased flexibility and security of supply.

Change Description

Raspberry Pi Ltd has qualified an additional assembly source for RP2040 at UNISEM (Malaysia). Qualification has been successfully completed for this site. RP2040 units are sourced from either this or the originally qualified assembly house at ASE (Taiwan).

Mechanical (Form, Fit, Function) Changes

There may be differences in marking appearance but the marking text will be consistent with the product marking specification.

The 2nd source assembled product is built to the current package outline drawing so this has the same dimensions and tolerances as that from the current source.

Moisture Sensitivity Level (MSL), per J-STD-20, matches the current source (i.e. MSL1)

Raspberry Pi Ltd has conducted and completed a full Reliability Qualification of the 2nd source, based on the JEDEC 47 standard.

Test	Specification	Conditions	Intervals	Batch Results		
				#01	#02	#03
HAST	JESD22-A113	MSL1	Preconditioning (MSL1)	Pass	Pass	Pass
	JESD22-A110	110°C, continuous static bias	264h	Pass	Pass	Pass
TC	JESD22-A113	MSL1	Preconditioning (MSL1)	Pass	Pass	Pass
	JESD22-A104	-55°C <-> 125°C	700 cycles	Pass	Pass	Pass
HTSL	JESD22-A103	150°C	500 hours	Pass	Pass	Pass
			1000 hours	Pass	Pass	Pass

Electrical

None.

The product's electrical specification is unchanged.

Software/Firmware Changes Required

None

There are no software or firmware changes required for the product.

Transition Date(s)

The first shipping date of 2nd source product is from week starting 20th of November 2021.

After this introduction date RP2040 product may be sourced from either of the qualified assembly sources.

Identification Method to Distinguish Change

Raspberry Pi Ltd will maintain assembly source traceability at the silicon lot level. However, as units from the 2nd source will have an identical IC marking specification, assembly source will not be distinguishable to the end user at the IC level.

County of Origin (COO) indications on the shipping and packing material will indicate "Malaysia" for 2nd source product.

Contact Details for more information

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

Web: www.raspberrypi.com



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