

Product Change Notice (PCN)

Subject: Alternate Bump Location and Assembly Location on Select Device from FCCSP-240

Publication Date: 6/26/2025

Effective Date: 9/25/2025

Revision Description:

Initial Release

Description of Change:

Renesas is adding Amkor, Korea as an alternate Bump location and Assembly location in creating dual sources in the supply chain on select devices from FCCSP-240. The alternate location is the current qualified location for Renesas. The material sets of the current and the alternate assembly location are as shown in the table below. There will be changes in the material sets, equipment models, inspection items and sampling at the alternate location.

There will be no change in the moisture sensitive level.

| Material Sets | Existing Bump & Assembly ASEC, Taiwan | Alternate Bump & Assembly Amkor, Korea |
|--------------------|--|---|
| Die Bump | Copper Pillar 37Cu/3Ni/25SnAg | Copper Pillar 37Cu/3Ni/25SnAg |
| Mold Compound | EME-G311AC | EME-G355 |
| Substrate/Supplier | GHPL830NS+SR1 (UMTC Taiwan) | GHPL830NS+SR1 (LGIT Korea) |
| Solder Balls | 0.305mm LF35 | 0.305mm LF35 |

Affected Product List: RG5R364B0C0GBY#BC0, RG5R364B0C0GBY#HC0.

Reason for Change:

The change is to create dual source to secure business continuity.

Impact on Fit, Form, Function, Quality & Reliability:

The change will have no impact on the form, fit, function, quality, reliability and environmental compliance of the products.

Product Identification:

Assembly lot# prefix denote Assembly Location

| Prefix | Assembly Location |
|--------|-------------------|
| RC | ASEC Taiwan |
| D | Amkor Korea |

Qualification Status: Completed. Refer Appendix A

Sample Availability Date: Eight weeks from customer request

Device Material Declaration: Available upon request

Note:

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.
2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.
3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

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| For additional information regarding this notice, please contact idt-pcn@lm.renesas.com |
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Appendix A - Qualification Results

Affected Package: FCCSP-240

Qual Vehicle: FCCSP-240

Assembly Material: As shown on page 1

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests.

| Test Descriptions | Test Method | Test Results (Rej/SS) | | |
|---|-----------------------------|-----------------------|-------|-------|
| | | Lot 1 | Lot 2 | Lot 3 |
| * Temperature Cycling (-55 °C to 125 °C, 700 cycles) | JESD22-A104 | 0/25 | 0/25 | 0/25 |
| * HAST - biased (130 °C/85% RH, 96 Hrs) | JESD22-A110 | 0/25 | 0/25 | 0/25 |
| * HAST - unbiased (130 °C/85% RH, 96 Hrs) | JESD22-A118 | 0/25 | 0/25 | 0/25 |
| High Temperature Storage Bake (150 °C, 1000 Hrs) | JESD22-A103 | 0/25 | 0/25 | 0/25 |
| Physical Dimensions | JESD22-B100 | 0/30 | 0/30 | 0/30 |
| Solder Ball Shear Test (1000 Hrs) | JESD22-B117 | 0/5 | 0/5 | 0/5 |
| Moisture Sensitivity Level, MSL | J-STD-20 / MSL 3, 260 °C | 0/25 | 0/25 | 0/25 |

*Tests were subjected to Preconditioning per JESD22-A113 prior to stress test