Product Change Notice (PCN)

Subject: Add Alternate Bump and Assembly Location on Select Device from FCCSP-78
Publication Date: 8/19/2024
Effective Date: 11/18/2024

Revision Description:
Initial Release

Description of Change:
Renesas is adding ATK, Korea as an alternate Bump and Assembly location on select device from FCCSP-78. 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 below table. There will be changes in the material sets at the alternate location.

There will be no change in the moisture sensitive level.

Material Sets	Existing Assembly ASEC, Taiwan	Alternate Assembly ATK, 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	0.3mm LF35

Affected Product List: RG5D188C1AIGBX#BC0, RG5D188C1AIGBX#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	ATK 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.

For additional information regarding this notice, please contact idt-pcn@lm.renesas.com

Appendix A - Qualification Results

Affected Package: FCCSP-78
Qual Vehicle: FCCSP-78
Assembly Material: As shown in 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, 264 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
External Visual Inspection	JESD22-B101	0/25	0/25	0/25
Internal Visual Inspection	MIL-STD-883 (Method 2010)	0/5	0/5	0/5
Physical Dimensions	JESD22-B100	0/30	0/30	0/30
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*