

Product Change Notice (PCN)

Subject: Add Alternate Assembly Location on Select CABGA Package

Publication Date: 5/29/2023

Effective Date: 8/28/2023

Revision Description:

Initial Release

Description of Change:

Renesas is adding alternate Assembly location on select CABGA-144 package. The alternate assembly 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, equipment and inspection items and sampling at the alternate location. The process flows are identical at both the locations.

There will be no change in the moisture sensitive level as a result of this change.

	Current	Alternate
	ASEC Taiwan	Amkor Philippines
Die attach material	Ablebond 2025D	Ablebond 2300
Wire material	Copper wire	Copper wire
Mold compound	G700LA	G770FE

Affected Product List: Refer Appendix B.

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
P	Amkor Philippines

Qualification Status: Completed. Refer Appendix A

Sample Availability Date: 4 weeks from sample booking date

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: CABGA-144

Qual Vehicle: CABGA-144

Assembly Material: As shown in page 1

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

Assembly Location: Amkor Philippines

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
* uHAST - 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
Bond Shear Test	JESD22-B116	0/5	0/5	0/5
Bond Pull Test	MIL-STD-883 (Method 2011)	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	-

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

Appendix B – Affected Product List

8A34001E-000AJG	8A34041E-001AJG8	8A35001E-002AJG8	8A35030E-000AJG8
8A34001E-000AJG8	8A34041E-999AJG	8A35001E-003AJG	8A35030E AJG
8A34001E-001AJG	8A34041E-999AJG8	8A35001E-003AJG8	8A35030E AJG8
8A34001E-001AJG8	8A34041E AJG	8A35001E AJG	8A35032E-000AJG
8A34001E-002AJG	8A34041E AJG8	8A35001E AJG8	8A35032E-000AJG8
8A34001E-002AJG8	8A34041E-ENG AJG	8A35003E-000AJG	8A35032E-004AJG
8A34001E-003AJG	8A35000E-000AJG	8A35003E-000AJG8	8A35032E-004AJG8
8A34001E-003AJG8	8A35000E-000AJG8	8A35003E-001AJG	8A35036E-000AJG
8A34001E-004AJG	8A35000E-001AJG	8A35003E-001AJG8	8A35036E-000AJG8
8A34001E-004AJG8	8A35000E-001AJG8	8A35005E-000AJG	8A35036E-001AJG
8A34001E-005AJG	8A35000E AJG	8A35005E-000AJG8	8A35036E-001AJG8
8A34001E-005AJG8	8A35000E AJG8	8A35005E AJG	8A35036E-002AJG
8A34001E-006AJG	8A35001B-000AJG	8A35005E AJG8	8A35036E-002AJG8
8A34001E-006AJG8	8A35001B-000AJG8	8A35010B-000AJG	8A35036E-003AJG
8A34001E AJG	8A35001B-001AJG	8A35010B-000AJG8	8A35036E-003AJG8
8A34001E AJG8	8A35001B-001AJG8	8A35010B-001AJG	8A35036E-004AJG
8A34001E-ENG AJG	8A35001B AJG	8A35010B-001AJG8	8A35036E-004AJG8
8A34011E-000AJG	8A35001B AJG8	8A35010B AJG	8A35036E AJG
8A34011E-000AJG8	8A35001C-000AJG	8A35010B AJG8	8A35036E AJG8
8A34011E-002AJG	8A35001C-000AJG8	8A35017E-000AJG	RC32614A000G BB#BC0
8A34011E-002AJG8	8A35001C-001AJG	8A35017E-000AJG8	RC32614A000G BB#HC0
8A34011E-003AJG	8A35001C-001AJG8	8A35017E AJG	RC32614A001G BB#BC0
8A34011E-003AJG8	8A35001C AJG	8A35017E AJG8	RC32614A001G BB#BCC
8A34011E AJG	8A35001C AJG8	8A35029E-001AJG	RC32614A001G BB#HC0
8A34011E AJG8	8A35001E-000AJG	8A35029E-001AJG8	RC32614A001G BB#HCC
8A34041E-000AJG	8A35001E-000AJG8	8A35029E AJG	
8A34041E-000AJG8	8A35001E-001AJG	8A35029E AJG8	
8A34041E-001AJG	8A35001E-002AJG	8A35030E-000AJG	