

Product Change Notice (PCN)

Subject: Add Alternate Assembly Location on Select Device of VFQFPN Package

Publication Date: 4/2/2025

Effective Date: 7/1/2025

Revision Description:

Initial Release

Description of Change:

Renesas is adding Greatek, Taiwan as the alternate Assembly location in expanding the supply chain for select device of VFQFPN-20 package that currently assembled at Carsem Malaysia. The alternate assembly location is the current qualified location for Renesas. The material sets of the current location and the alternate assembly location are as shown in the table below. The process flows are identical at all the qualified assembly locations.

There will be no changes in the moisture sensitive level due to this change.

Material Set/Assembly	Carsem Malaysia (CRSS)	Greatek Taiwan (GEI)
Die Attach Epoxy	Alpha,800HT2V-P1	Namics H9890-6A
Bonding Wire	Gold wire	Gold wire
Mold Compound	G770HCD	G700HA

Affected Product List: RA81F1475SEGNK#BB0, RA81F1475SEGNK#HB0

Reason for Change:

The change is to create dual supply 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	Current Location	Alternate Location
MS	CRSS	
GR		GEI

Qualification Status: Completed. Refer Appendix A
Sample Availability Date: 8 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: VFQFPN-20

Qual Vehicle: VFQFPN-20 & VFQFPN-24

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, 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
Ball 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
Die Shear Test	MIL-STD-883 (Method 2019)	0/5	0/5	0/5
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 1, 260 °C	0/25	0/25	0/25

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