

## Product Change Notice (PCN)

**Subject:** Add Alternate Assembly Location on Select Package

**Publication Date:** 1/29/2021

**Effective Date:** 4/29/2021

**Revision Description:**

Initial Release

**Description of Change:**

Renesas is adding JCET, China as an alternate assembly location on VFQFPN-16. Presently, JCET, China is the qualified assembly location for Renesas. The current assembly location for the impacted VFQFPN-16 package is at Carsem, Malaysia. 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.

No change in moisture sensitive level as a result of this change.

Material Sets	Existing Carsem Malaysia	Alternate JCET China
Die Attach	QMI519	EN4900GC
Bonding Wire	Gold wire	Gold wire
Mold Compound	EME-G700HCD	EME-G700LA

**Affected Product List:** F1490NLGA, F1490NLGA8

**Reason for Change:**

The change is for increased manufacturing capability and 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# with prefix "JC" denotes JCET China.

**Qualification Status:** Completed. Refer Appendix A

**Sample Availability Date:** 12 weeks upon sample request 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](mailto:idt-pcn@lm.renesas.com)**

**Appendix A - Qualification Results**

**Affected Packages:** VFQFPN-16

**Qual Vehicle:** VFQFPN-16

**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
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 1, 260 °C	0/25	0/25	-

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