

Product Change Notice (PCN)

Subject: Add Alternate Assembly Location for VFQFPN-80 Package

Publication Date: 10/13/2021

Effective Date: 1/13/2022

Revision Description:

Revision 1

Description of Change:

This revised notice is to update qualification results as shown in Appendix A.

This notification is to advise our customers that Renesas is qualifying ASECL, Taiwan as an alternate assembly location for VFQFPN-80 package in addition to the current assembly location at UTL, Thailand. Presently, ASECL Taiwan is the qualified assembly location for Renesas. The material sets of the current and the alternate assembly locations 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 Assembly UTL Thailand	Alternate Assembly ASECL Taiwan
Die Attach	Ablebond 8600	Hitachi EN4900G
Bonding Wire	Copper wire	Copper wire
Mold Compound	Sumitomo EME-G700LTD	Sumitomo EME-G700LA
Package bottom insulation material	Panasonic CV8715BT	Taiyo IJSR-4000

Affected Product List: 9QXL2001BNHGI, 9QXL2001BNHGI8, 9Q31103BNHGI, 9Q31103BNHGI8, 9Q31201BNHGI, 9Q31201BNHGI8.

Reason for Change:

The change is for increased manufacturing capability and business continuity.

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

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

Product Identification:

Assembly lot# with prefix "U" denote UTL Thailand, prefix "RC" denote ASECL, Taiwan.

Qualification Status: Completed and Passed. Refer Appendix A.

Sample Availability Date: 7/6/2021

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 Packages: VFQFPN-80

Qual Vehicle: VFQFPN-80

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
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Bond Pull Strength	Mils-Std-883, M2011	0/5	0/5	0/5
Bond Shear Test	JESD22-B116	0/5	0/5	0/5
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*