

Product Change Notice (PCN)

Subject: Add Alternate Assembly Location for VFQFPN-80 Package

Publication Date: 7/1/2022

Effective Date: 9/30/2022

Revision Description:

Revision 2

Description of Change:

This revised notice is to add additional part numbers to the change notice. In addition, it is to amend there is form changes.

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

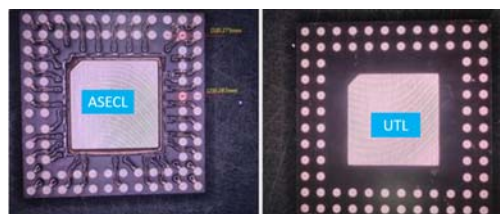
Affected Product List: Refer Appendix B.

Reason for Change:

The change is for increased manufacturing capability and business continuity.

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

The change is expected will have no impact on the fit, function, quality, reliability and environmental compliance of the products. However, form will differ due to different insulation material. Copper traces are covered by solder resist but still visible in parts assembled by ASECL. Whereas for parts assembled by UTL, Copper traces are not visible since it is covered by the mold compound. Refer below images.



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*

Appendix B – Affected Product ListAffected part in PCN210014(R1) with effective date 1/13/2022

9Q31103BNHGI
9Q31103BNHGI8
9Q31201BNHGI
9Q31201BNHGI8
9QXL2001BNHGI
9QXL2001BNHGI8

Affected part in PCN210014(R2) with effective date 9/30/2022

9QXL2001BNHGI8/W
9QXL2001CNHGK
9QXL2001CNHGK8
9Z61196DNHGI
9Z61196DNHGI8
9ZXL1951ANHG
9ZXL1951ANHG8
9ZXL1951ANHGI
9ZXL1951ANHGI8
9ZXL1951DNHGI
9ZXL1951DNHGI8
9ZXL1952ANHG
9ZXL1952ANHG8
9ZXL1952ANHGI
9ZXL1952ANHGI8
9ZXL1952DNHGI
9ZXL1952DNHGI8
RC19020AGN6#BD0
RC19020AGN6#KD0
RC19216AGN6#BD0
RC19216AGN6#KD0