Product Change Notice (PCN)

Subject: Add Greatek Taiwan as an Alternate Assembly Location on Select Packages
Publication Date: 4/6/2020
Effective Date: 7/6/2020

Revision Description:
Initial Release

Description of Change:
Renesas is adding Greatek Taiwan as an alternate assembly location on TSSOP8, PTQFP32 and TQFP100.

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.

Package	Material Sets	Existing Assembly		Alternate Assembly
		UTL Thailand	Amkor Philippines	Greatek Taiwan
TSSOP8	Die Attach	8200T		EN4900GC
	Bonding Wire	Gold / Copper wire		Copper wire
	Mold Compound	EME-G600		G700H
PTQFP32	Die Attach		ABLESTIK 3230	CRM-1076DJ-G
	Bonding Wire		Gold / Copper wire	Copper wire
	Mold Compound		G700Y	G700H
TQFP100	Die Attach		ABLESTIK 3230	Sumitomo film CDF625P8C8
	Bonding Wire		Gold wire	Gold wire
	Mold Compound		G700L	G700H

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

Product Identification:
Assembly lot# with prefix “GR” denotes lot assembled in Greatek, Taiwan.

Qualification Status: Completed. Refer Appendix A
Sample Availability Date: 6 week from sample order 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 Packages: TSSOP8
Qual Vehicle: TSSOP8
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) Copper wire		
		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
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
Solderability Test	MIL-STD-883 (Method 2003), J-STD-002D	0/5	0/5	0/5
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*

Affected Packages: PTQFP32
Qual Vehicle: TQFP100
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) Copper wire		
		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
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
Solderability Test	MIL-STD-883 (Method 2003), J-STD-002D	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*

Affected Packages: TQFP100
Qual Vehicle: TQFP100
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) Gold wire		
		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
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
Solderability Test	MIL-STD-883 (Method 2003), J-STD-002D	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 List

1337AGDVGI	6V50025DVG	71T75802S133PFGI	840S07BYILF
1337AGDVGI8	6V50025DVG8	71T75802S133PFGI8	840S07BYILFT
1337GDVGI	71T75602S133PFG	71T75802S150PFG	85322AGILF
1337GDVGI8	71T75602S133PFG8	71T75802S150PFG8	85322AGILFT
1338-31DVGI	71T75602S133PFGI	71T75802S166PFG	853S011BGILF
1338-31DVGI8	71T75602S133PFGI8	71T75802S166PFG8	853S011BGILFT
1338B-18DVGI	71T75602S150PFG	71T75802S166PFGI	853S011CGILF
1338B-18DVGI8	71T75602S150PFG8	71T75802S166PFGI8	853S011CGILFT
1338D-31DVGI	71T75602S150PFGI	71T75802S200PFG	853S111BYILF
1338D-31DVGI8	71T75602S150PFGI8	71T75802S200PFG8	853S111BYILFT
1339-2DVGI	71T75602S166PFG	71T75802S200PFGI	8OSK481GILF
1339-2DVGI8	71T75602S166PFG8	71T75802S200PFGI8	8OSK481GILFT
1339-31DVGI	71T75602S166PFGI	71T75902S75PFGI	8T33FS6111DXGI
1339-31DVGI8	71T75602S166PFGI8	71T75902S75PFGI8	8T33FS6111DXGI8
1339D-31DVGI	71T75802S133PFG	840S05AYILF	
1339D-31DVGI8	71T75802S133PFG8	840S05AYILFT	