

## Product Change Notice (PCN)

**Subject:** Add Alternate Assembly Location for COL-8 Package

**Publication Date:** 2/23/2022

**Effective Date:** 5/23/2022

**Revision Description:**

Initial Release

**Description of Change:**

This notification is to advise our customers that Renesas is qualifying CRSS, Malaysia as an alternate assembly location for COL-8 package in addition to the current assembly location at UTL, Thailand. Presently, CRSS Malaysia is the qualified assembly location for Renesas. The material sets of the current and the alternate assembly location are as shown in the below table.

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

Material Sets	Existing Assembly UTL Thailand	Alternate Assembly CRSS Malaysia
Die Attach	8006NS	8006NS
Bonding Wire	Gold wire	Gold wire
Mold Compound	G770HCD	G770HCD
Plating Finish	PPF	PPF

**Affected Product List:** 5PB1104CMG1, 5PB1104CMG18

**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 "MS" denote CRSS Malaysia.

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

**Sample Availability Date:** 4 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](mailto:idt-pcn@lm.renesas.com)**

**Appendix A - Qualification Results**

**Affected Packages:** COL-8

**Qual Vehicle:** COL-8

**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 150°C, 1000 cycles)	JESD22-A104	0/77	0/77	0/77
* Temperature Humidity Bias (HAST) (130°C/85% RH, Vccmax, 96 Hrs)	JESD22-A110	0/77	0/77	0/77
*Unbias Temperature Humidity (UHAST) (130°C/85% RH, unbiased, 96 Hrs)	JESD22-A110	0/77	0/77	0/77
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/45	0/45	0/45
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 1, 260°C	0/25	0/25	-

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