

# **Product Change Notice (PCN)**

Subject: Alternate assembly facility of the listed Renesas Mini Module packaged products

Publication Date: 1/17/2024 Effective Date: 4/17/2024

### **Revision Description:**

Initial Release

## **Description of Change:**

Alternate assembly facility of the listed Renesas Mini Module packaged products

- JCET Semiconductor (Jiangyin D3) Co., Ltd, China

#### **Affected Product List**

RAA210030GLG#HD0 RAA2100404GLG#HD0

## List of changes:

This notice is to inform you that Renesas Electronics America, Inc will begin to use JCET as alternate assembly facility of the listed Mini Module product.

#### Reason for Change:

JCET is ISO9001:2015 and IATF 16949:2016 certified. The change is necessary to maintain product manufacturability in support of customer delivery requirements.

## Impact on fit, form, function, quality & reliability:

The assembly qualification plan is designed using JEDEC and other applicable industry standards to confirm there is no impact to form, function or interchangeability of the product. The remainder of the manufacturing operations (wafer fabrication, package level electrical test, etc) will continue to be processed to previously established manufacturing flow.

#### **Product Identification:**

Product affected by this change is identifiable via Renesas's internal traceability system. In addition, product assembled at JCET may also be identified by the assembly site code (country of assembly) when marked on the devices. The site code for product assembled at

| # | Assembly Site | Site Code |
|---|---------------|-----------|
| 1 | JCET          | Н         |

Qualification status: Completed Sample availability: 2/18/2024



Device material declaration: Available upon request

Sample is available February 18, 2024 onwards, and subject to availability. Customer may expect 1 - 2 months for sample replenishment.

#### 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 your regional change coordinator (below) |                            |                           |                                |  |  |  |
|---|----------------------------|---------------------------|--------------------------------|--|--|--|
| Americas: PCN-US@RENESAS.COM  | Europe: PCN-EU@RENESAS.COM | Japan: PCN-JP@RENESAS.COM | Asia Pac: PCN-APAC@RENESAS.COM |  |  |  |



Appendix A: Reliability Test Result

| Test Description                                  | Condition   | RAA210030GLG#HD0<br>10 Lead, Mini Module | RAA2100404GLG#HD0<br>10 Lead, Mini Module |
|---|-------------|--|---|
|   |             | N = 66                                   | N = 66                                    |
| Moisture Sensitivity Classification               | Level 3     | Acc = 0                                  | Acc = 0                                   |
|   |             | L3 Pb Free                               | L3 Pb Free                                |
|   |             | N = 240                                  | N = 240                                   |
| High Temperature Operating Life (HTOL)<br>+130°C; | 1000 hours  | Acc = 0                                  | Acc = 0                                   |
|   |             | N = 240                                  | N = 240                                   |
| Biased Highly Accelerated Stress Test (bHAST)     | 96 hours    | Acc = 0                                  | Acc = 0                                   |
| +130°C; 85% RH                                    |             | L3 Pb Free                               | L3 Pb Free                                |
|   |             | N=240                                    | N=240                                     |
| Unbiased Highly Accelerated Stress Test (uHAST)   | 96 hours    | Acc = 0                                  | Acc = 0                                   |
| +130°C; 85% RH                                    |             | L3 Pb-Free                               | L3 Pb-Free                                |
|   | 1000 hours  | N=240                                    | N=240                                     |
| Hot Temperature Stroage (HTS)                     | 1000 110013 | Acc = 0                                  | Acc = 0                                   |
| +150°C  | 2000 hours  | N=240                                    | N=240                                     |
|   | 2000 nours  | Acc = O                                  | Acc = 0                                   |
|   |             | N=240                                    | N=240                                     |
| Temperature Cycle (TCT)                           | 500 cycles  | Acc = O                                  | Acc = 0                                   |
| -65°C / +150°C                                    |             | L3 Pb-Free                               | L3 Pb-Free                                |
|   |             | N=240                                    | N=240                                     |
|   | 750 cycles  | Acc = 0                                  | Acc = 0                                   |
|   |             | L3 Pb-Free                               | L3 Pb-Free                                |

PASS

Qualified by Extension