

## Initial Product Change Notice (PCN)

**Subject:** Alternate assembly facility of the listed Renesas TSSOP packaged products

**Publication Date:** 1/22/2021

**Effective Date:** 4/19/2021

### Revision Description:

Initial Release

### Description of Change:

Alternate assembly facility of the listed Renesas 16 Leads and 28 Leads TSSOP packaged products

- *Amkor Technology Philippines, Inc., Philippines (ATP)*

### Affected Product List

|                 |                     |                 |
|-----------------|---------------------|-----------------|
| ISL6144IVZA     | ISL6740AIVZA-TR5508 | ICL3243ECVZ     |
| ISL6144IVZA-T   | ISL6740IVZ          | ICL3243ECVZ-T   |
| ISL6144IVZA-T7A | ISL6740IVZ-T        | ICL3243EIVZ     |
| ISL6721AAVZ     | ISL6741IVZ          | ICL3243EIVZ-T   |
| ISL6721AAVZ-T   | ISL6741IVZ-T        | ICL3243EIVZ-T7A |
| ISL6721AVZ      | ISL84051IVZ         |                 |
| ISL6721AVZ-T    | ISL84051IVZ-T       |                 |
| ISL6740AIVZA    | ISL84581IVZ         |                 |
| ISL6740AIVZA-T  | ISL84581IVZ-T       |                 |

### Reason for Change:

This notice is to inform you that Renesas Electronics America, Inc. will begin using ATP facility as alternate assembly facility of the Listed Renesas TSSOP (Thin Shrink Small Outline Package) products. ATP is an existing assembly supplier for Renesas. This action will expand current capability and capacity to optimize Renesas's ability to meet customer's delivery requirements. The ATP facility is ISO9001:2015 and IATF16949:2016 certified. ATP is qualified as primary supplier to Renesas for high volume assembly of TSSOP packaged product.

### 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, fit, function or interchangeability of the product. A summary of the qualification plan and results is included for reference. Please refer Appendix A. 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 ATP 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 | ATP           | L         |

**Qualification status:** Completed

**Sample availability:** 4/1/2021

**Device material declaration:** Available upon request

Sample is available April 01, 2021 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: <a href="mailto:PCN-US@RENESAS.COM">PCN-US@RENESAS.COM</a>                                      | Europe: <a href="mailto:PCN-EU@RENESAS.COM">PCN-EU@RENESAS.COM</a> | Japan: <a href="mailto:PCN-JP@RENESAS.COM">PCN-JP@RENESAS.COM</a> | Asia Pac: <a href="mailto:PCN-APAC@RENESAS.COM">PCN-APAC@RENESAS.COM</a> |

# Appendix A : Reliability Plan

| Test Description                                                   | Condition  | HIP6004ECVZ<br>20 Lead,<br>6.50mm x 4.40mm TSSOP Package | ICL3222EIVZ<br>20 Lead,<br>6.50mm x 4.40mm TSSOP Package | ICL3232CVZ<br>16 Lead,<br>5.00mm x 4.40mm TSSOP Package |
|--------------------------------------------------------------------|------------|----------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------|
| Moisture Sensitivity Classification                                | Level 1    |                                                          |                                                          | N = 44<br>Acc = 0<br>L1 Pb Free                         |
| Moisture Sensitivity Classification                                | Level 3    | N = 44<br>Acc = 0<br>L3 Pb Free                          | N = 44<br>Acc = 0<br>L3 Pb Free                          |                                                         |
| Unbiased Highly Accelerated Stress Test (uHAST)<br>+130°C ; 85% RH | 96 hours   | N=233<br>Acc = 0<br>L3 Pb-Free                           | N=240<br>Acc = 0<br>L3 Pb-Free                           | N=240<br>Acc = 0<br>L1 Pb-Free                          |
| Hot Temperature Stroage (HTS)<br>+150°C                            | 500 hours  | N=225<br>Acc = 0                                         | N=240<br>Acc = 0                                         | N=237<br>Acc = 0                                        |
|                                                                    | 1000 hours | N=225<br>Acc = 0                                         | N=240<br>Acc = 0                                         | N=237<br>Acc = 0                                        |
| Temperature Cycle (TCT)<br>-65°C / +150 °C                         | 500 cycles | N=236<br>Acc = 0<br>L3 Pb-Free                           | N=240<br>Acc = 0<br>L3 Pb-Free                           | N=240<br>Acc = 0<br>L1 Pb-Free                          |

|  |                     |
|--|---------------------|
|  | PASS                |
|  | Not Applicable (NA) |