

## Product Change Notice (PCN)

**Subject:** Alternate assembly and test facility for Intersil Product ISL91110IIAZ\*

**Publication Date:** 12/28/2015

**Effective Date:** 3/27/2016

### Description of Change:

Alternate assembly and test facility for Intersil Product ISL91110IIAZ\*

| Process  | Alternate manufacturing facility  |
|----------|---|
| Assembly | AMKOR ADVANCED TECHNOLOGY TAIWAN, INC. (AATT), Hsin-chu County, Taiwan R.O.C.                     |
| Test     | <del>Advanced Semiconductor Engineering — Chung-Li (ASE-CL), Chung-Li County, Taiwan R.O.C.</del> |
| Test     | UNISEM (M) Berhad, Ipoh, Perak, Malaysia.   |

### Revision Description:

Revision A: Remove the ASE-CL test site qualification from the PCN15062

### Reason for Change:

This notice is to inform you that Intersil will begin using Amkor Advanced Technology Taiwan (AATT) facility for assembly and UNISEM Ipoh (UNM) facility as alternate test facility of the listed Intersil WLCSP (Wafer Level Chip Scale Package) products. This action will expand current capabilities and capacities to optimize Intersil's ability to meet customer's delivery requirements.

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

The AATT and UNM facility are ISO9001:2008 and ISO/TS16949:2009 certified. There is no change in the manufacturing process flow, Moisture Sensitivity Level (MSL), Form, Fit, Function or interchangeability of the product.

The assembly qualification plan is designed using JEDEC and other applicable industry standards. A summary of the qualification results are shown in Appendix B. The remainder of the manufacturing operations will continue to be processed to previously established conditions and systems.

The following summarizes the test verification that were conducted in addition to the qualification results : -

- Intersil supplied test software and product specific hardware were used at UNM and current test site.
- The test equipment validation involved testing of control units and a correlation lot at UNM and current test site.
  - Control units were tested at the current test site and retested at UNM. Their performance were recorded and the results were analyzed to validate the set-up.
  - A correlation lot of approximately 500 units were tested at the current test site and retested at UNM. The test results from each site were compared.
  - Continuous monitoring and comparison of the data from lots processed at multiple sites were completed by the responsible product engineers.
- The visual / mechanical inspection, tray and tape & reel operations are compliance to JEDEC industry standards.

**Product Identification:**

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

**Qualification status:**

Site and product verification at AATT and UNM – completed

**Sample availability:** Engineering samples - 12/28/2015

**Device material declaration:** Available upon request

*Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Intersil within 30 days of the publication date.*

| For additional information regarding this notice, please contact your regional change coordinator (below) |  |   |  |
|---|--|---|--|
| Americas: <a href="mailto:PCN-US@INTERSIL.COM">PCN-US@INTERSIL.COM</a>                                    | Europe: <a href="mailto:PCN-EU@INTERSIL.COM">PCN-EU@INTERSIL.COM</a> | Japan: <a href="mailto:PCN-JP@INTERSIL.COM">PCN-JP@INTERSIL.COM</a> | Asia Pac: <a href="mailto:PCN-APAC@INTERSIL.COM">PCN-APAC@INTERSIL.COM</a> |

Appendix A - Affected Products List (see attached)

**Product List**

ISL91110IIAZ-T  
ISL91110IIAZ-T7A

Appendix B - Qualification Results (see attached)

| Stress / Conditions  | Duration | ISL91110IIAZ<br>25 Balls WLCSP<br>5mm x 5mm Array with 0.40mm pitch |
|--|----------|---|
| biased HAST (b-HAST)<br>T <sub>a</sub> = +130°C , 85% RH   | 96 Hrs   | N = 84<br>Acc = 0   |
| Unbiased HAST (u-HAST)<br>T <sub>a</sub> = +130°C , 85% RH | 96 Hrs   | N = 84<br>Acc = 0   |
| Hot Temperature Storage (HTS)<br>T <sub>a</sub> = +150°C   | 1000 Hrs | N = 105<br>Acc = 0  |
| Temp Cycle (TC)<br>T <sub>a</sub> = +125°C / -40°C         | 1000 Cyc | N = 96<br>Acc = 0   |

 Qualified by Extension (QBE)

 Qualification completed and passed