Product Change Notice (PCN)

Subject: Introduce alternate assembly facility of the listed Renesas ODFN packaged products and Minor changed to the POD

Publication Date:

Initial PCN 08/06/2020

Final PCN 04/23/2021

Effective Date: 10/20/2021

Revision Description:

Initial Release

Revision A : Changes are in RED font.

1. Qualification status has changed from "In Progress" to "Completed".
2. Update PCN20021 with Reliability Test Result.
3. Update PCN Effective Date from 06/15/2021 to 10/20/2021
4. Update Sample availability date 05/20/2021
5. Include the transition status of ODFN assembly.
6. Include assembly site code for ODFN assembled at ASECL.

Description of Changes:

1. Alternate assembly facility of the listed Renesas ODFN packaged products
   - *Advanced Semiconductor Engineering, Chung Li, Taiwan R.O.C (ASECL)*
2. Minor change to the Package Outline Drawing (POD).

Affected Device List
ISL76671AROZ-T7
ISL76671AROZ-T7A
ISL76671AROZ-T7R5503
ISL76671AROZ-T7R5534
ISL76671AROZ-TKR5534
ISL76683AROZ-T7
ISL76683AROZ-T7A

Reason for Change:

This notice is an update to PCN20021 (which was published on August 06, 2020) , Renesas Electronics America (REA) will begin to use ASECL as alternate assembly facility of the listed Renesas ODFN (Optical Dual Flat No Lead) packaged products. Along with the site change, there is a minor change to the POD (Package Outline Drawing) with additional four (4) non-functional exposed pad (tie bar). Please see Appendix B for details.

The existing ODFN facility Dominant Semiconductors, Melaka, Malaysia (DSM) has officially announced discontinue ODFN assembly. As such, REA will discontinue the use of the existing ODFN facility, Dominant (DSM) effective on June 15th, 2021.

ASECL is existing assembly supplier for Renesas. Adding assembly site will expand current capabilities and capacities to optimize Renesas's ability to meet customer's delivery requirements. ASECL facility is ISO9001:2015 and IATF 16949:2016 certified.

Impact on fit, form, function, quality & reliability:
The assembly qualification plan is designed using AEC, 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 will be provided 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 ASECL 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	ASECL	U

Customers may expect to receive product from the current facilities or ASECL facilities until the existing inventory is depleted or earlier with customer's approval.

Qualification status: Completed, see attached
Sample availability: 5/20/2021
Device material declaration: Available upon request

Note : Sample is available 05/20/2021 onwards, and subject to availability. Customer may expect 1 – 2 months for sample replenishment.

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

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 - Qualification Result

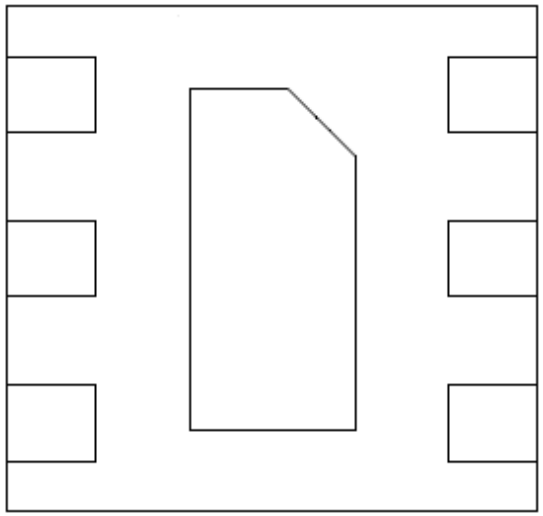
Test Description	Condition	ISL29020IROZ-T7S2705 6 Lead ODFN 2.1mm x 2.0mm x 0.7mm Package (0.65mm Pitch)	ISL76683AROZ 6 Lead ODFN 2.1mm x 2.0mm x 0.70mm Package (0.65mm Pitch)
Moisture Sensitivity Classification		N=44 Acc=0 L3 Pb-Free	N=44 Acc=0 L3 Pb-Free
Early Life Failure Rate +125°C	48 hours	N=2400 Acc=0	N=2400 Acc=0
High Temperature Operating Life (HTOL) +125°C	168, 500, 1000 hours	N=240 Acc=0	N=240 Acc=0
Bias High Accelerated Stress Test (b-HAST) +110°C / 85% RH	264 hours	N=240 Acc=0	N=240 Acc=0
Unbias High Accelerated Stress Test (uHAST) +110°C / 85% RH	264 hours	N=240 Acc=0	N=240 Acc=0
Hot Temperature Storage (HTS) +125°C	168, 500, 1000 hours	N=50 Acc=0	N=50 Acc=0
Temperature Cycling Test (TCT) -55°C / +125°C	200, 500, 1000 cycles	N=240 Acc=0	N=240 Acc=0

Completed and Passed

Qualified by Extension (QBE)

Appendix B – Minor change to the POD

Existing POD



New POD – with four (4) exposed pad (tie bar)