

## Product Change Notice (PCN)

**Subject:** Alternate MOSFET Driver (Dr MOS) used in the listed Renesas HDA module

**Publication Date:** 7/22/2021

**Effective Date:** 8/22/2021

**Revision Description:**

Initial Release

**Description of Change:**

Alternate Dr. MOS (Integrated Power MOSFET and Driver in one small package) used in Renesas HDA Module

**Reason for Change:**

This is to inform you that Renesas Electronics America Inc (REA) has begun to use FDMF6824A (Dr. MOS) to replace the existing FDMF6824B (Dr MOS) that is currently used for assembly of the listed Renesas HDA Module. Both FDMF6824A and FDMF6824B are manufactured by ON Semiconductor.

Both FDMF6824A and FDMF6824B with the same product characteristics and same Package Outline Dimension. While FDMF6824A is a better grade Dr MOS, which can handle maximum Output Current (Io) 60A, while FDMF6824B can handle maximum (Io) 55A.

ON Semiconductor is a global manufacturer of electronic components with multiple award recognition accredited by well-known certification body. For more information about ON Semiconductor Inc., it is available at the following link :

<https://www.onsemi.com/about/quality-reliability/certifications-qualified-sites>

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

Both existing and new Dr MOS with SAME electrical characteristics and will have no impact to Renesas HDA Module electrical performance. The qualification plan for new Dr MOS follows JEDEC and other applicable industry standards to confirm there is no impact on the form, fit, function, quality, reliability and environmental compliance of the devices. The remainder of the manufacturing operations (package assembly, test, shipment, etc.) will continue to be processed to previously established conditions and systems.

**Product Identification:**

Product affected by this change is identifiable via Renesas's internal traceability system.

**Qualification status:** Completed, see attached

**Sample availability:** 9/2/2021

**Device material declaration:** Available upon request

Note :

Due to limited components and capacity, we will not be able to offer samples for each and every product affected by the notice. For those products which we can accommodate sampling, samples will be available from Sept 02, 2021 onwards subject to availability. If interested, please contact Renesas Sales to determine if samples are available for product of your interest.

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.

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@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 - Affected Product List

**Affected Device List**

|                |                   |               |
|----------------|-------------------|---------------|
| ISL8270MAIRZ   | ISL8277MAIRZ      | ZL9023MBIRZ   |
| ISL8270MAIRZ-T | ISL8277MAIRZ-T    | ZL9023MBIRZ-T |
| ISL8270MBIRZ   | ISL8277MAIRZ-T1   | ZL9025MAIRZ   |
| ISL8270MBIRZ-T | RAA2108252GLG#AG0 | ZL9025MAIRZ-T |
| ISL8272MAIRZ   | RAA2108252GLG#HG0 | ZL9025MBIRZ   |
| ISL8272MAIRZ-T | RAA2108252GLG#MG0 | ZL9025MBIRZ-T |
| ISL8272MBIRZ   | ZL9023MAIRZ       |               |
| ISL8272MBIRZ-T | ZL9023MAIRZ-T     |               |

Appendix B - Qualification Results (see attached)

| Test Description   | Condition   | ISL8273MCIRZ<br>58 I/O Custom HDA Module<br>18mm x 23mm x 7.5mm Package | ZL9030MBIRZ<br>40 I/O Custom HDA Module<br>17mm x 19mm x 3.55mm Package |
|--|-------------|---|---|
| Moisture Sensitivity Classification                            | Level 3     | N=182<br>Acc=0<br>L3 Pb-Free  | N=182<br>Acc=0<br>L3 Pb-Free  |
| High Temperature Operating Life (HTOL)<br>+125°C               | 1000 hours  | N=156<br>Acc=0  | N=316<br>Acc=0  |
| Unbias High Accelerated Stress Test (uHAST)<br>+130°C / 85% RH | 96 hours    | N=160<br>Acc=0  | N=178<br>Acc=0  |
| Hot Temperature Storage (HTS)<br>+150°C                        | 1000 hours  | N=160<br>Acc=0  | N=180<br>Acc=0  |
| Temperature Cycling Test (TCT)<br>-40°C / +125°C               | 1000 cycles |   | N=180<br>Acc=0  |
| Temperature Cycling Test (TCT)<br>-65°C / +150°C               | 500 cycles  | N=160<br>Acc=0  |   |
|  | 1000 cycles | N=160<br>Acc=0  |   |

 Completed and Passed