

Product Change Notice (PCN)

Subject: Supplier addition of Cu-wire for LQFP products in RH850/F1, R1 and D1 Series

Publication Date: 12/4/2024

Effective Date: 6/1/2025

Revision Description: Initial Release (HPLM-2024-0019)

Revision1 (99 Part Numbers added) Refer to Page 2.

Description of Change:

Renesas will add a Cu-wire supplier for LQFP products in RH850/F1, R1 and D1 Series as follows:

Item	Before Change	After Change
Cu-wire: Supplier Addition	Supplier A	Supplier A and Supplier B

Applicable Assembly Factory
 Renesas Electronics Corporation Nishiki Factory
 Renesas Semiconductor (Suzhou) Co., Ltd.

Affected Product List: Refer to “Product List” in “Appendix”.

Reason for Change: For stable product supply by adding Cu-wire suppliers.

Impact on Fit, Form, Function, Quality & Reliability:

The change will have no impact on the form, fit, function, quality and reliability of the devices.

Product Identification:

Our production history data can be queried by using the trace code of the product.

Qualification Status: Refer to “Q100 Qualification Test Results” in “Appendix”.

Sample Availability Date: N/A

Device Material Declaration:

Please contact and request Renesas' sales to provide Device Material Declaration.

Note:

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the changes as approved.
2. If timely acknowledgement is provided by customers, then customers shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If customers fail 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 customers must provide Renesas with the last order quantity and purchase order.

For additional information regarding this notice, please contact your Renesas sales representative.

Additional Product List (99 Part Number)

R7F7010023AFP-C#KA4	R7F7010254AFP-C#KA2	R7F701686FAFP-C#KA1	R7F701695FAFP-C#AA1
R7F7010024AFP-C#KA4	R7F7010443AFP-C#KA2	R7F701687FAFP-C#AA1	R7F701695FAFP-C#BA1
R7F7010213AFP-C#KA4	R7F7010444AFP-C#KA2	R7F701687FAFP-C#BA1	R7F701695FAFP-C#KA1
R7F7010214AFP-C#KA4	R7F7010453AFP-C#KA2	R7F701687FAFP-C#TA1	R7F701A643AFP-C#AA1
R7F7010223AFP-C#KA4	R7F7010454AFP-C#AAT	R7F701688FAFP-C#AA1	R7F701A653AFP-C#AA1
R7F7010224AFP-C#KA4	R7F7010454AFP-C#KA2	R7F701688FAFP-C#BA1	R7F701A663AFP-C#AA1
R7F7010233AFP-C#KA4	R7F7010454AFP-C#KAT	R7F701688FAFP-C#TA1	R7F701A673AFP-C#AA1
R7F7010234AFP-C#KA4	R7F7010643AFP-C#AA8	R7F701689FAFP-C#AA1	R7F701A683AFP-C#AA1
R7F7010653AFP-C#KA4	R7F7010693AFP-C#KA2	R7F701689FAFP-C#BA1	R7F701A693AFP-C#AA1
R7F7010673AFP-C#KA4	R7F7015303AFP-C#KA2	R7F701689FAFP-C#TA1	R7F701A703AFP-C#AA1
R7F701A083AFP-C#KA4	R7F7015313AFP-C#KA2	R7F701690FAFP-C#AA1	R7F701A713AFP-C#AA1
R7F701A323AFP-C#KA4	R7F701A793AFP-C#AA1	R7F701690FAFP-C#BA1	R7F701A723AFP-C#AA1
R7F701A324AFP-C#KA4	R7F701A803AFP-C#AA1	R7F701690FAFP-C#TA1	R7F701A733AFP-C#AA1
R7F701A333AFP-C#KA4	R7F701A813AFP-C#AA1	R7F701691FAFP-C#AA1	R7F701A743AFP-C#AA1
R7F701A334AFP-C#KA4	R7F701A823AFP-C#AA1	R7F701691FAFP-C#BA1	R7F701A753AFP-C#AA1
R7F701A363AFP-C#KA4	R7F701A833AFP-C#AA1	R7F701691FAFP-C#TA1	R7F7017603AFP-C#AA1
R7F701A364AFP-C#KA4	R7F701A843AFP-C#AA1	R7F701692FAFP-C#AA1	R7F7017623AFP-C#AA1
R7F701A474AFP-C#AA4	R7F701684FAFP-C#AA1	R7F701692FAFP-C#BA1	R7F7017643AFP-C#AA1
R7F701A474AFP-C#BA4	R7F701684FAFP-C#BA1	R7F701692FAFP-C#TA1	R7F701A763AFP-C#AA1
R7F7010033AFP-C#KA2	R7F701684FAFP-C#KA1	R7F701693FAFP-C#AA1	R7F701A773AFP-C#AA1
R7F7010034AFP-C#KA2	R7F701685FAFP-C#AA1	R7F701693FAFP-C#BA1	R7F701A783AFP-C#AA1
R7F7010243AFP-C#KA2	R7F701685FAFP-C#BA1	R7F701693FAFP-C#KA1	R7F7010124AFP-C#AAT
R7F7010244AFP-C#KA2	R7F701685FAFP-C#KA1	R7F701694FAFP-C#AA1	R7F7010124AFP-C#BAT
R7F7010244AFP-C#KAT	R7F701686FAFP-C#AA1	R7F701694FAFP-C#BA1	R7F7010124AFP-C#TAT
R7F7010253AFP-C#KA2	R7F701686FAFP-C#BA1	R7F701694FAFP-C#KA1	

Appendix

Product List

RH850/F1, R1 and D1 series:

R7F7010063AFP-C#AA4	R7F7010333AFP-C#BA4	R7F7010523AFP-C#BA4	R7F701A004AFP-C#BA4
R7F7010063AFP-C#BA4	R7F7010333AFP-C#TA4	R7F7010523AFP-C#BA8	R7F701A004AFP-C#KA4
R7F7010063AFP-C#KA4	R7F7010334AFP-C#AA4	R7F7010523AFP-C#TA4	R7F701A013AFP-C#AA4
R7F7010064AFP-C#AA4	R7F7010334AFP-C#BA4	R7F7010523AFP-C#TA8	R7F701A013AFP-C#BA4
R7F7010064AFP-C#BA4	R7F7010334AFP-C#TA4	R7F7010524AFP-C#AA4	R7F701A013AFP-C#TA4
R7F7010064AFP-C#KA4	R7F7010343AFP-C#AA4	R7F7010524AFP-C#BA4	R7F701A014AFP-C#AA4
R7F7010073AFP-C#AA4	R7F7010343AFP-C#BA4	R7F7010524AFP-C#TA4	R7F701A014AFP-C#BA4
R7F7010073AFP-C#BA4	R7F7010343AFP-C#TA4	R7F7010533AFP-C#AA4	R7F701A014AFP-C#TA4
R7F7010073AFP-C#TA4	R7F7010344AFP-C#AA4	R7F7010533AFP-C#AA8	R7F7010023AFP-C#AA4
R7F7010074AFP-C#AA4	R7F7010344AFP-C#BA4	R7F7010533AFP-C#BA4	R7F7010023AFP-C#BA4
R7F7010074AFP-C#BA4	R7F7010344AFP-C#TA4	R7F7010533AFP-C#BA8	R7F7010023AFP-C#KA4
R7F7010074AFP-C#TA4	R7F7010463AFP-C#AA4	R7F7010533AFP-C#TA4	R7F7010024AFP-C#AA4
R7F7010263AFP-C#AA4	R7F7010463AFP-C#BA4	R7F7010533AFP-C#TA8	R7F7010024AFP-C#BA4
R7F7010263AFP-C#BA4	R7F7010463AFP-C#KA4	R7F7010534AFP-C#AA4	R7F7010024AFP-C#KA4
R7F7010263AFP-C#KA4	R7F7010464AFP-C#AA4	R7F7010534AFP-C#BA4	R7F7010083AFP-C#AA4
R7F7010264AFP-C#AA4	R7F7010464AFP-C#BA4	R7F7010534AFP-C#TA4	R7F7010083AFP-C#BA4
R7F7010264AFP-C#BA4	R7F7010464AFP-C#KA4	R7F7010543AFP-C#AA4	R7F7010083AFP-C#KA4
R7F7010264AFP-C#KA4	R7F7010473AFP-C#AA4	R7F7010543AFP-C#BA4	R7F7010084AFP-C#AA4
R7F7010273AFP-C#AA4	R7F7010473AFP-C#BA4	R7F7010543AFP-C#KA4	R7F7010084AFP-C#BA4
R7F7010273AFP-C#BA4	R7F7010473AFP-C#KA4	R7F7010544AFP-C#AA0	R7F7010084AFP-C#KA4
R7F7010273AFP-C#KA4	R7F7010474AFP-C#AA4	R7F7010544AFP-C#AA4	R7F7010093AFP-C#AA4
R7F7010274AFP-C#AA4	R7F7010474AFP-C#BA4	R7F7010544AFP-C#BA0	R7F7010093AFP-C#BA4
R7F7010274AFP-C#BA4	R7F7010474AFP-C#KA4	R7F7010544AFP-C#BA4	R7F7010093AFP-C#KA4
R7F7010274AFP-C#KA4	R7F7010483AFP-C#AA4	R7F7010544AFP-C#KA4	R7F7010094AFP-C#AA4
R7F7010283AFP-C#AA4	R7F7010483AFP-C#BA4	R7F7010553AFP-C#AA4	R7F7010094AFP-C#BA4
R7F7010283AFP-C#BA4	R7F7010483AFP-C#KA4	R7F7010553AFP-C#BA4	R7F7010094AFP-C#KA4
R7F7010283AFP-C#KA4	R7F7010484AFP-C#AA4	R7F7010553AFP-C#KA4	R7F7010103AFP-C#AA4
R7F7010284AFP-C#AA4	R7F7010484AFP-C#BA4	R7F7010554AFP-C#AA4	R7F7010103AFP-C#BA4
R7F7010284AFP-C#BA4	R7F7010484AFP-C#KA4	R7F7010554AFP-C#BA4	R7F7010103AFP-C#KA4
R7F7010284AFP-C#KA4	R7F7010493AFP-C#AA4	R7F7010554AFP-C#KA4	R7F7010104AFP-C#AA4
R7F7010293AFP-C#AA4	R7F7010493AFP-C#BA4	R7F7010563AFP-C#AA4	R7F7010104AFP-C#BA4
R7F7010293AFP-C#BA4	R7F7010493AFP-C#KA4	R7F7010563AFP-C#BA4	R7F7010104AFP-C#KA4
R7F7010293AFP-C#KA4	R7F7010494AFP-C#AA4	R7F7010563AFP-C#TA4	R7F7010113AFP-C#AA4
R7F7010294AFP-C#AA4	R7F7010494AFP-C#BA4	R7F7010564AFP-C#AA4	R7F7010113AFP-C#AA8
R7F7010294AFP-C#BA4	R7F7010494AFP-C#KA4	R7F7010564AFP-C#BA4	R7F7010113AFP-C#BA4
R7F7010294AFP-C#KA4	R7F7010503AFP-C#AA4	R7F7010564AFP-C#TA4	R7F7010113AFP-C#BA8
R7F7010303AFP-C#AA4	R7F7010503AFP-C#BA4	R7F7010573AFP-C#AA4	R7F7010113AFP-C#TA4
R7F7010303AFP-C#BA4	R7F7010503AFP-C#TA4	R7F7010573AFP-C#BA4	R7F7010113AFP-C#TA8
R7F7010303AFP-C#KA4	R7F7010504AFP-C#AA4	R7F7010573AFP-C#TA4	R7F7010114AFP-C#AA4
R7F7010304AFP-C#AA4	R7F7010504AFP-C#BA4	R7F7010574AFP-C#AA4	R7F7010114AFP-C#BA4
R7F7010304AFP-C#BA4	R7F7010504AFP-C#TA4	R7F7010574AFP-C#BA4	R7F7010114AFP-C#TA4
R7F7010304AFP-C#KA4	R7F7010513AFP-C#AA4	R7F7010574AFP-C#TA4	R7F7010123AFP-C#AA4
R7F7010323AFP-C#AA4	R7F7010513AFP-C#BA4	R7F7010713AFP-C#AA4	R7F7010123AFP-C#AA8
R7F7010323AFP-C#BA4	R7F7010513AFP-C#TA4	R7F7010713AFP-C#BA4	R7F7010123AFP-C#BA4
R7F7010323AFP-C#TA4	R7F7010514AFP-C#AA4	R7F7010713AFP-C#KA4	R7F7010123AFP-C#BA8
R7F7010324AFP-C#AA4	R7F7010514AFP-C#BA4	R7F701A003AFP-C#AA4	R7F7010123AFP-C#TA4
R7F7010324AFP-C#BA4	R7F7010514AFP-C#TA4	R7F701A003AFP-C#BA4	R7F7010123AFP-C#TA8
R7F7010324AFP-C#TA4	R7F7010523AFP-C#AA4	R7F701A003AFP-C#KA4	R7F7010124AFP-C#AA4
R7F7010333AFP-C#AA4	R7F7010523AFP-C#AA8	R7F701A004AFP-C#AA4	R7F7010124AFP-C#BA4

R7F7010124AFP-C#TA4	R7F7010623AFP-C#BA4	R7F701A384AFP-C#BA4	R7F7010243AFP-C#BA2
R7F7010133AFP-C#AA4	R7F7010623AFP-C#TA4	R7F701A384AFP-C#TA4	R7F7010243AFP-C#KA2
R7F7010133AFP-C#AA8	R7F7010653AFP-C#AA4	R7F701A393AFP-C#AA4	R7F7010244AFP-C#AA2
R7F7010133AFP-C#BA4	R7F7010653AFP-C#BA4	R7F701A393AFP-C#BA4	R7F7010244AFP-C#AAT
R7F7010133AFP-C#BA8	R7F7010653AFP-C#KA4	R7F701A393AFP-C#KA4	R7F7010244AFP-C#BA2
R7F7010133AFP-C#TA4	R7F7010673AFP-C#AA4	R7F701A394AFP-C#AA4	R7F7010244AFP-C#BAT
R7F7010133AFP-C#TA8	R7F7010673AFP-C#BA4	R7F701A394AFP-C#BA4	R7F7010244AFP-C#KA2
R7F7010134AFP-C#AA4	R7F7010673AFP-C#KA4	R7F701A394AFP-C#KA4	R7F7010244AFP-C#KAT
R7F7010134AFP-C#AAT	R7F701A023AFP-C#AA8	R7F701A403AFP-C#AA4	R7F7010253AFP-C#AA2
R7F7010134AFP-C#BA4	R7F701A023AFP-C#BA8	R7F701A403AFP-C#BA4	R7F7010253AFP-C#BA2
R7F7010134AFP-C#BAT	R7F701A023AFP-C#TA8	R7F701A403AFP-C#TA4	R7F7010253AFP-C#KA2
R7F7010134AFP-C#TA4	R7F701A033AFP-C#AA8	R7F701A404AFP-C#AA4	R7F7010254AFP-C#AA2
R7F7010134AFP-C#TAT	R7F701A033AFP-C#BA8	R7F701A404AFP-C#BA4	R7F7010254AFP-C#BA2
R7F7010163AFP-C#AA4	R7F701A033AFP-C#TA8	R7F701A404AFP-C#TA4	R7F7010254AFP-C#KA2
R7F7010163AFP-C#BA4	R7F701A083AFP-C#AA4	R7F701A413AFP-C#AA4	R7F7010403AFP-C#AA2
R7F7010163AFP-C#TA4	R7F701A083AFP-C#BA4	R7F701A413AFP-C#BA4	R7F7010403AFP-C#AA5
R7F7010164AFP-C#AA4	R7F701A083AFP-C#KA4	R7F701A413AFP-C#TA4	R7F7010403AFP-C#BA2
R7F7010164AFP-C#BA4	R7F701A223AFP-C#AA4	R7F701A414AFP-C#AA4	R7F7010403AFP-C#BA5
R7F7010164AFP-C#TA4	R7F701A223AFP-C#BA4	R7F701A414AFP-C#BA4	R7F7010403AFP-C#TA2
R7F7010173AFP-C#AA4	R7F701A313AFP-C#AA4	R7F701A414AFP-C#TA4	R7F7010403AFP-C#TA5
R7F7010173AFP-C#BA4	R7F701A313AFP-C#BA4	R7F701A474AFP-C#AA4	R7F7010404AFP-C#AA2
R7F7010173AFP-C#TA4	R7F701A313AFP-C#KA4	R7F701A474AFP-C#BA4	R7F7010404AFP-C#BA2
R7F7010174AFP-C#AA4	R7F701A314AFP-C#AA4	R7F7010033AFP-C#AA2	R7F7010404AFP-C#TA2
R7F7010174AFP-C#BA4	R7F701A314AFP-C#BA4	R7F7010033AFP-C#BA2	R7F7010413AFP-C#AA2
R7F7010174AFP-C#TA4	R7F701A314AFP-C#KA4	R7F7010033AFP-C#KA2	R7F7010413AFP-C#BA2
R7F7010183AFP-C#AA4	R7F701A323AFP-C#AA4	R7F7010034AFP-C#AA2	R7F7010413AFP-C#TA2
R7F7010183AFP-C#BA4	R7F701A323AFP-C#BA4	R7F7010034AFP-C#BA2	R7F7010414AFP-C#AA2
R7F7010183AFP-C#TA4	R7F701A323AFP-C#KA4	R7F7010034AFP-C#KA2	R7F7010414AFP-C#BA2
R7F7010184AFP-C#AA4	R7F701A324AFP-C#AA4	R7F7010143AFP-C#AA2	R7F7010414AFP-C#TA2
R7F7010184AFP-C#BA4	R7F701A324AFP-C#BA4	R7F7010143AFP-C#BA2	R7F7010423AFP-C#AA2
R7F7010184AFP-C#TA4	R7F701A324AFP-C#KA4	R7F7010143AFP-C#TA2	R7F7010423AFP-C#AAT
R7F7010213AFP-C#AA4	R7F701A333AFP-C#AA4	R7F7010144AFP-C#AA2	R7F7010423AFP-C#BA2
R7F7010213AFP-C#BA4	R7F701A333AFP-C#BA4	R7F7010144AFP-C#BA2	R7F7010423AFP-C#BAT
R7F7010213AFP-C#KA4	R7F701A333AFP-C#KA4	R7F7010144AFP-C#TA2	R7F7010423AFP-C#TA2
R7F7010214AFP-C#AA4	R7F701A334AFP-C#AA4	R7F7010153AFP-C#AA2	R7F7010423AFP-C#TAT
R7F7010214AFP-C#BA4	R7F701A334AFP-C#BA4	R7F7010153AFP-C#BA2	R7F7010424AFP-C#AA2
R7F7010214AFP-C#KA4	R7F701A334AFP-C#KA4	R7F7010153AFP-C#TA2	R7F7010424AFP-C#AAT
R7F7010223AFP-C#AA4	R7F701A363AFP-C#AA4	R7F7010154AFP-C#AA2	R7F7010424AFP-C#BA2
R7F7010223AFP-C#BA4	R7F701A363AFP-C#BA4	R7F7010154AFP-C#BA2	R7F7010424AFP-C#BAT
R7F7010223AFP-C#KA4	R7F701A363AFP-C#KA4	R7F7010154AFP-C#TA2	R7F7010424AFP-C#TA2
R7F7010224AFP-C#AA4	R7F701A364AFP-C#AA4	R7F7010193AFP-C#AA2	R7F7010424AFP-C#TAT
R7F7010224AFP-C#BA4	R7F701A364AFP-C#BA4	R7F7010193AFP-C#BA2	R7F7010433AFP-C#AA2
R7F7010224AFP-C#KA4	R7F701A364AFP-C#KA4	R7F7010193AFP-C#TA2	R7F7010433AFP-C#BA2
R7F7010233AFP-C#AA4	R7F701A373AFP-C#AA4	R7F7010194AFP-C#AA2	R7F7010433AFP-C#TA2
R7F7010233AFP-C#BA4	R7F701A373AFP-C#BA4	R7F7010194AFP-C#BA2	R7F7010434AFP-C#AA2
R7F7010233AFP-C#KA4	R7F701A373AFP-C#TA4	R7F7010194AFP-C#TA2	R7F7010434AFP-C#BA2
R7F7010234AFP-C#AA4	R7F701A374AFP-C#AA4	R7F7010203AFP-C#AA2	R7F7010434AFP-C#TA2
R7F7010234AFP-C#BA4	R7F701A374AFP-C#BA4	R7F7010203AFP-C#BA2	R7F7010443AFP-C#AA2
R7F7010234AFP-C#KA4	R7F701A374AFP-C#TA4	R7F7010203AFP-C#TA2	R7F7010443AFP-C#BA2
R7F7010603AFP-C#AA4	R7F701A383AFP-C#AA4	R7F7010204AFP-C#AA2	R7F7010443AFP-C#KA2
R7F7010603AFP-C#BA4	R7F701A383AFP-C#BA4	R7F7010204AFP-C#BA2	R7F7010444AFP-C#AA2
R7F7010603AFP-C#TA4	R7F701A383AFP-C#TA4	R7F7010204AFP-C#TA2	R7F7010444AFP-C#BA2
R7F7010623AFP-C#AA4	R7F701A384AFP-C#AA4	R7F7010243AFP-C#AA2	R7F7010444AFP-C#KA2

R7F7010453AFP-C#AA2	R7F7015453AFP-C#BA2	R7F701A303AFP-C#AA2	R7F7015633AFP-C#KA3
R7F7010453AFP-C#BA2	R7F7015453AFP-C#KA2	R7F701A303AFP-C#BA2	R7F7015634AFP-C#AA3
R7F7010453AFP-C#KA2	R7F7015454AFP-C#AA2	R7F701A303AFP-C#TA2	R7F7015634AFP-C#BA3
R7F7010454AFP-C#AA2	R7F7015454AFP-C#BA2	R7F7015423AFP-C#AA3	R7F7015634AFP-C#KA3
R7F7010454AFP-C#AAT	R7F7015454AFP-C#KA2	R7F7015423AFP-C#BA3	R7F7015663AFP-C#AA3
R7F7010454AFP-C#BA2	R7F7015483AFP-C#AA2	R7F7015423AFP-C#KA3	R7F7015663AFP-C#BA3
R7F7010454AFP-C#KA2	R7F7015483AFP-C#BA2	R7F7015424AFP-C#AA3	R7F7015663AFP-C#TA3
R7F7010454AFP-C#KAT	R7F7015483AFP-C#TA2	R7F7015424AFP-C#BA3	R7F7015664AFP-C#AA3
R7F7010643AFP-C#AA2	R7F7015484AFP-C#AA2	R7F7015424AFP-C#KA3	R7F7015664AFP-C#BA3
R7F7010643AFP-C#AA8	R7F7015484AFP-C#AA6	R7F7015433AFP-C#AA3	R7F7015664AFP-C#TA3
R7F7010643AFP-C#BA2	R7F7015484AFP-C#BA2	R7F7015433AFP-C#BA3	R7F7015673AFP-C#AA3
R7F7010643AFP-C#TA2	R7F7015484AFP-C#BA6	R7F7015433AFP-C#KA3	R7F7015673AFP-C#BA3
R7F7010643AFP-C#TA8	R7F7015484AFP-C#TA2	R7F7015434AFP-C#AA3	R7F7015673AFP-C#TA3
R7F7010693AFP-C#AA2	R7F7015484AFP-C#TA6	R7F7015434AFP-C#BA3	R7F7015674AFP-C#AA3
R7F7010693AFP-C#BA2	R7F7015493AFP-C#AA2	R7F7015434AFP-C#KA3	R7F7015674AFP-C#BA3
R7F7010693AFP-C#KA2	R7F7015493AFP-C#BA2	R7F7015463AFP-C#AA3	R7F7015674AFP-C#TA3
R7F7015013AFP-C#AA2	R7F7015493AFP-C#TA2	R7F7015463AFP-C#BA3	R7F7015773AFP-C#AA3
R7F7015013AFP-C#BA2	R7F7015494AFP-C#AA2	R7F7015463AFP-C#TA3	R7F7015773AFP-C#BA3
R7F7015013AFP-C#TA2	R7F7015494AFP-C#BA2	R7F7015464AFP-C#AA3	R7F7015773AFP-C#TA3
R7F7015014AFP-C#AA2	R7F7015494AFP-C#TA2	R7F7015464AFP-C#BA3	R7F7015774AFP-C#AA3
R7F7015014AFP-C#BA2	R7F7015643AFP-C#AA2	R7F7015464AFP-C#TA3	R7F7015774AFP-C#BA3
R7F7015014AFP-C#TA2	R7F7015643AFP-C#BA2	R7F7015473AFP-C#AA3	R7F7015774AFP-C#TA3
R7F7015023AFP-C#AA2	R7F7015643AFP-C#KA2	R7F7015473AFP-C#BA3	R7F7015803AFP-C#AA3
R7F7015023AFP-C#BA2	R7F7015644AFP-C#AA2	R7F7015473AFP-C#TA3	R7F7015803AFP-C#BA3
R7F7015023AFP-C#TA2	R7F7015644AFP-C#BA2	R7F7015474AFP-C#AA3	R7F7015803AFP-C#KA3
R7F7015024AFP-C#AA2	R7F7015644AFP-C#KA2	R7F7015474AFP-C#BA3	R7F7015804AFP-C#AA3
R7F7015024AFP-C#BA2	R7F7015653AFP-C#AA2	R7F7015474AFP-C#TA3	R7F7015804AFP-C#BA3
R7F7015024AFP-C#TA2	R7F7015653AFP-C#BA2	R7F7015573AFP-C#AA3	R7F7015804AFP-C#KA3
R7F7015263AFP-C#AA2	R7F7015653AFP-C#KA2	R7F7015573AFP-C#BA3	R7F7015813AFP-C#AA3
R7F7015263AFP-C#BA2	R7F7015654AFP-C#AA2	R7F7015573AFP-C#TA3	R7F7015813AFP-C#BA3
R7F7015263AFP-C#TA2	R7F7015654AFP-C#BA2	R7F7015574AFP-C#AA3	R7F7015813AFP-C#KA3
R7F7015264AFP-C#AA2	R7F7015654AFP-C#KA2	R7F7015574AFP-C#BA3	R7F7015814AFP-C#AA3
R7F7015264AFP-C#BA2	R7F7015683AFP-C#AA2	R7F7015574AFP-C#TA3	R7F7015814AFP-C#BA3
R7F7015264AFP-C#TA2	R7F7015683AFP-C#BA2	R7F7015603AFP-C#AA3	R7F7015814AFP-C#KA3
R7F7015273AFP-C#AA2	R7F7015683AFP-C#TA2	R7F7015603AFP-C#BA3	R7F7015823AFP-C#AA3
R7F7015273AFP-C#BA2	R7F7015684AFP-C#AA2	R7F7015603AFP-C#KA3	R7F7015823AFP-C#BA3
R7F7015273AFP-C#TA2	R7F7015684AFP-C#BA2	R7F7015604AFP-C#AA3	R7F7015823AFP-C#KA3
R7F7015274AFP-C#AA2	R7F7015684AFP-C#TA2	R7F7015604AFP-C#BA3	R7F7015824AFP-C#AA3
R7F7015274AFP-C#BA2	R7F7015693AFP-C#AA2	R7F7015604AFP-C#KA3	R7F7015824AFP-C#BA3
R7F7015274AFP-C#TA2	R7F7015693AFP-C#BA2	R7F7015613AFP-C#AA3	R7F7015824AFP-C#KA3
R7F7015303AFP-C#AA2	R7F7015693AFP-C#TA2	R7F7015613AFP-C#BA3	R7F7015833AFP-C#AA3
R7F7015303AFP-C#BA2	R7F7015694AFP-C#AA2	R7F7015613AFP-C#KA3	R7F7015833AFP-C#BA3
R7F7015303AFP-C#KA2	R7F7015694AFP-C#BA2	R7F7015614AFP-C#AA3	R7F7015833AFP-C#KA3
R7F7015313AFP-C#AA2	R7F7015694AFP-C#TA2	R7F7015614AFP-C#BA3	R7F7015834AFP-C#AA3
R7F7015313AFP-C#BA2	R7F701A243AFP-C#AA2	R7F7015614AFP-C#KA3	R7F7015834AFP-C#BA3
R7F7015313AFP-C#KA2	R7F701A243AFP-C#BA2	R7F7015623AFP-C#AA3	R7F7015834AFP-C#KA3
R7F7015443AFP-C#AA2	R7F701A243AFP-C#TA2	R7F7015623AFP-C#BA3	R7F7015863AFP-C#AA3
R7F7015443AFP-C#BA2	R7F701A244AFP-C#AA2	R7F7015623AFP-C#KA3	R7F7015863AFP-C#BA3
R7F7015443AFP-C#KA2	R7F701A244AFP-C#BA2	R7F7015624AFP-C#AA3	R7F7015863AFP-C#TA3
R7F7015444AFP-C#AA2	R7F701A244AFP-C#TA2	R7F7015624AFP-C#BA3	R7F7015864AFP-C#AA3
R7F7015444AFP-C#BA2	R7F701A293AFP-C#AA2	R7F7015624AFP-C#KA3	R7F7015864AFP-C#BA3
R7F7015444AFP-C#KA2	R7F701A293AFP-C#BA2	R7F7015633AFP-C#AA3	R7F7015864AFP-C#TA3
R7F7015453AFP-C#AA2	R7F701A293AFP-C#TA2	R7F7015633AFP-C#BA3	R7F7015873AFP-C#AA3

R7F7015873AFP-C#BA3	R7F7016204AFP-C#AA3	R7F701A574AFP-C#KA1	R7F7016863AFP-C#KA1
R7F7015873AFP-C#TA3	R7F7016204AFP-C#BA3	R7F701A584AFP-C#AA1	R7F7016863AFP-C#KA9
R7F7015874AFP-C#AA3	R7F7016204AFP-C#KA3	R7F701A584AFP-C#BA1	R7F7016864AFP-C#AA1
R7F7015874AFP-C#BA3	R7F7016213AFP-C#AA3	R7F701A584AFP-C#KA1	R7F7016864AFP-C#AA9
R7F7015874AFP-C#TA3	R7F7016213AFP-C#BA3	R7F701A594AFP-C#AA1	R7F7016864AFP-C#BA1
R7F7015973AFP-C#AA3	R7F7016213AFP-C#KA3	R7F701A594AFP-C#BA1	R7F7016864AFP-C#BA9
R7F7015973AFP-C#BA3	R7F7016214AFP-C#AA3	R7F701A594AFP-C#TA1	R7F7016864AFP-C#KA1
R7F7015973AFP-C#TA3	R7F7016214AFP-C#BA3	R7F701A604AFP-C#AA1	R7F7016864AFP-C#KA9
R7F7015974AFP-C#AA3	R7F7016214AFP-C#KA3	R7F701A604AFP-C#BA1	R7F701686FAFP-C#AA1
R7F7015974AFP-C#BA3	R7F7016223AFP-C#AA3	R7F701A604AFP-C#TA1	R7F701686FAFP-C#BA1
R7F7015974AFP-C#TA3	R7F7016223AFP-C#BA3	R7F701A793AFP-C#AA1	R7F701686FAFP-C#KA1
R7F7016023AFP-C#AA3	R7F7016223AFP-C#KA3	R7F701A793AFP-C#BA1	R7F7016873AFP-C#AA1
R7F7016023AFP-C#BA3	R7F7016224AFP-C#AA3	R7F701A793AFP-C#TA1	R7F7016873AFP-C#BA1
R7F7016023AFP-C#KA3	R7F7016224AFP-C#BA3	R7F701A803AFP-C#AA1	R7F7016873AFP-C#TA1
R7F7016024AFP-C#AA3	R7F7016224AFP-C#KA3	R7F701A803AFP-C#BA1	R7F7016874AFP-C#AA1
R7F7016024AFP-C#BA3	R7F7016233AFP-C#AA3	R7F701A803AFP-C#TA1	R7F7016874AFP-C#BA1
R7F7016024AFP-C#KA3	R7F7016233AFP-C#BA3	R7F701A813AFP-C#AA1	R7F7016874AFP-C#TA1
R7F7016033AFP-C#AA3	R7F7016233AFP-C#KA3	R7F701A813AFP-C#BA1	R7F701687FAFP-C#AA1
R7F7016033AFP-C#BA3	R7F7016234AFP-C#AA3	R7F701A813AFP-C#KA1	R7F701687FAFP-C#BA1
R7F7016033AFP-C#KA3	R7F7016234AFP-C#BA3	R7F701A823AFP-C#AA1	R7F701687FAFP-C#TA1
R7F7016034AFP-C#AA3	R7F7016234AFP-C#KA3	R7F701A823AFP-C#BA1	R7F7016883AFP-C#AA1
R7F7016034AFP-C#BA3	R7F7016343AFP-C#AA1	R7F701A823AFP-C#KA1	R7F7016883AFP-C#BA1
R7F7016034AFP-C#KA3	R7F7016343AFP-C#BA1	R7F701A833AFP-C#AA1	R7F7016883AFP-C#TA1
R7F7016103AFP-C#AA3	R7F7016343AFP-C#KA1	R7F701A833AFP-C#BA1	R7F7016884AFP-C#AA1
R7F7016103AFP-C#BA3	R7F7016363AFP-C#AA1	R7F701A833AFP-C#KA1	R7F7016884AFP-C#BA1
R7F7016103AFP-C#KA3	R7F7016363AFP-C#BA1	R7F701A843AFP-C#AA1	R7F7016884AFP-C#TA1
R7F7016104AFP-C#AA3	R7F7016363AFP-C#KA1	R7F701A843AFP-C#BA1	R7F701688FAFP-C#AA1
R7F7016104AFP-C#BA3	R7F7016443AFP-C#AA1	R7F701A843AFP-C#KA1	R7F701688FAFP-C#BA1
R7F7016104AFP-C#KA3	R7F7016443AFP-C#BA1	R7F7016843AFP-C#AA1	R7F701688FAFP-C#TA1
R7F7016113AFP-C#AA3	R7F7016443AFP-C#KA1	R7F7016843AFP-C#BA1	R7F7016893AFP-C#AA1
R7F7016113AFP-C#BA3	R7F7016453AFP-C#AA1	R7F7016843AFP-C#KA1	R7F7016893AFP-C#BA1
R7F7016113AFP-C#KA3	R7F7016453AFP-C#BA1	R7F7016844AFP-C#AA1	R7F7016893AFP-C#TA1
R7F7016114AFP-C#AA3	R7F7016453AFP-C#KA1	R7F7016844AFP-C#AA9	R7F7016894AFP-C#AA1
R7F7016114AFP-C#AAT	R7F7016463AFP-C#AA1	R7F7016844AFP-C#BA1	R7F7016894AFP-C#AA9
R7F7016114AFP-C#BA3	R7F7016463AFP-C#BA1	R7F7016844AFP-C#BA9	R7F7016894AFP-C#BA1
R7F7016114AFP-C#BAT	R7F7016463AFP-C#KA1	R7F7016844AFP-C#KA1	R7F7016894AFP-C#BA9
R7F7016114AFP-C#KA3	R7F7016473AFP-C#AA1	R7F7016844AFP-C#KA9	R7F7016894AFP-C#TA1
R7F7016114AFP-C#KAT	R7F7016473AFP-C#BA1	R7F701684FAFP-C#AA1	R7F7016894AFP-C#TA9
R7F7016123AFP-C#AA3	R7F7016473AFP-C#KA1	R7F701684FAFP-C#BA1	R7F701689FAFP-C#AA1
R7F7016123AFP-C#BA3	R7F7016483AFP-C#AA1	R7F701684FAFP-C#KA1	R7F701689FAFP-C#BA1
R7F7016123AFP-C#KA3	R7F7016483AFP-C#BA1	R7F7016853AFP-C#AA1	R7F701689FAFP-C#TA1
R7F7016124AFP-C#AA3	R7F7016483AFP-C#TA1	R7F7016853AFP-C#BA1	R7F7016903AFP-C#AA1
R7F7016124AFP-C#BA3	R7F7016493AFP-C#AA1	R7F7016853AFP-C#KA1	R7F7016903AFP-C#BA1
R7F7016124AFP-C#KA3	R7F7016493AFP-C#BA1	R7F7016854AFP-C#AA1	R7F7016903AFP-C#TA1
R7F7016133AFP-C#AA3	R7F7016493AFP-C#TA1	R7F7016854AFP-C#BA1	R7F7016904AFP-C#AA1
R7F7016133AFP-C#BA3	R7F701A554AFP-C#AA1	R7F7016854AFP-C#KA1	R7F7016904AFP-C#AA9
R7F7016133AFP-C#KA3	R7F701A554AFP-C#BA1	R7F701685FAFP-C#AA1	R7F7016904AFP-C#BA1
R7F7016134AFP-C#AA3	R7F701A554AFP-C#KA1	R7F701685FAFP-C#BA1	R7F7016904AFP-C#BA9
R7F7016134AFP-C#BA3	R7F701A564AFP-C#AA1	R7F701685FAFP-C#KA1	R7F7016904AFP-C#TA1
R7F7016134AFP-C#KA3	R7F701A564AFP-C#BA1	R7F7016863AFP-C#AA1	R7F7016904AFP-C#TA9
R7F7016203AFP-C#AA3	R7F701A564AFP-C#KA1	R7F7016863AFP-C#AA9	R7F701690FAFP-C#AA1
R7F7016203AFP-C#BA3	R7F701A574AFP-C#AA1	R7F7016863AFP-C#BA1	R7F701690FAFP-C#BA1
R7F7016203AFP-C#KA3	R7F701A574AFP-C#BA1	R7F7016863AFP-C#BA9	R7F701690FAFP-C#TA1

R7F7016913AFP-C#AA1	R7F7016954AFP-C#AA9	R7F7017603AFP-C#KA1	R7F701402E***AFB-C#KA1
R7F7016913AFP-C#BA1	R7F7016954AFP-C#BA1	R7F7017623AFP-C#AA1	R7F701422E***AFB-C#KA1
R7F7016913AFP-C#TA1	R7F7016954AFP-C#BA9	R7F7017623AFP-C#BA1	R7F701414E***AFB-C#KA1
R7F7016914AFP-C#AA1	R7F7016954AFP-C#KA1	R7F7017623AFP-C#KA1	R7F701434E***AFB-C#KA1
R7F7016914AFP-C#BA1	R7F7016954AFP-C#KA9	R7F7017643AFP-C#AA1	R7F701422E***AFB-C#KA9
R7F7016914AFP-C#TA1	R7F701695FAFP-C#AA1	R7F7017643AFP-C#BA1	R7F701402EA02AFB-C#KA1
R7F701691FAFP-C#AA1	R7F701695FAFP-C#BA1	R7F7017643AFP-C#TA1	R7F701402EA12AFB-C#KA1
R7F701691FAFP-C#BA1	R7F701695FAFP-C#KA1	R7F701A763AFP-C#AA1	R7F701402EA14AFB-C#KA1
R7F701691FAFP-C#TA1	R7F701A643AFP-C#AA1	R7F701A763AFP-C#BA1	R7F701402EA55AFB-C#KA1
R7F7016923AFP-C#AA1	R7F701A643AFP-C#BA1	R7F701A763AFP-C#TA1	R7F701402EA56AFB-C#KA1
R7F7016923AFP-C#AA9	R7F701A643AFP-C#KA1	R7F701A773AFP-C#AA1	R7F701414EA03AFB-C#KA1
R7F7016923AFP-C#BA1	R7F701A653AFP-C#AA1	R7F701A773AFP-C#BA1	R7F701414EA04AFB-C#KA1
R7F7016923AFP-C#BA9	R7F701A653AFP-C#BA1	R7F701A773AFP-C#KA1	R7F701414EA05AFB-C#KA1
R7F7016923AFP-C#TA1	R7F701A653AFP-C#KA1	R7F701A783AFP-C#AA1	R7F701414EA13AFB-C#KA1
R7F7016923AFP-C#TA9	R7F701A663AFP-C#AA1	R7F701A783AFP-C#BA1	R7F701414EA15AFB-C#KA1
R7F7016924AFP-C#AA1	R7F701A663AFP-C#BA1	R7F701A783AFP-C#KA1	R7F701414EA16AFB-C#KA1
R7F7016924AFP-C#AA9	R7F701A663AFP-C#KA1	R7F7010124AFP-C#AAT	R7F701414EA54AFB-C#KA1
R7F7016924AFP-C#BA1	R7F701A673AFP-C#AA1	R7F7010124AFP-C#BAT	R7F701400EAFB-C#AA1
R7F7016924AFP-C#BA9	R7F701A673AFP-C#BA1	R7F7010124AFP-C#TAT	R7F701420EAFB-C#AA1
R7F7016924AFP-C#TA1	R7F701A673AFP-C#TA1	R7F701442EAFB-C#AA0	R7F701400EAFB-C#BA1
R7F7016924AFP-C#TA9	R7F701A683AFP-C#AA1	R7F701462EAFB-C#AA0	R7F701420EAFB-C#BA1
R7F701692FAFP-C#AA1	R7F701A683AFP-C#BA1	R7F701442EAFB-C#BA0	R7F701400EAFB-C#KA1
R7F701692FAFP-C#BA1	R7F701A683AFP-C#TA1	R7F701462EAFB-C#BA0	R7F701420EAFB-C#KA1
R7F701692FAFP-C#TA1	R7F701A693AFP-C#AA1	R7F701442EAFB-C#TA0	R7F701420EAFB-C#KA9
R7F7016933AFP-C#AA1	R7F701A693AFP-C#BA1	R7F701462EAFB-C#TA0	R7F701401EAFB-C#AA1
R7F7016933AFP-C#AA9	R7F701A693AFP-C#TA1	R7F701462EAFB-C#TA9	R7F701421EAFB-C#AA1
R7F7016933AFP-C#BA1	R7F701A703AFP-C#AA1	R7F701442E***AFB-C#TA0	R7F701401EAFB-C#BA1
R7F7016933AFP-C#BA9	R7F701A703AFP-C#BA1	R7F701462E***AFB-C#TA0	R7F701421EAFB-C#BA1
R7F7016933AFP-C#KA1	R7F701A703AFP-C#TA1	R7F701462E***AFB-C#TA9	R7F701401EAFB-C#KA1
R7F7016933AFP-C#KA9	R7F701A713AFP-C#AA1	R7F701403EAFB-C#AA1	R7F701421EAFB-C#KA1
R7F7016934AFP-C#AA1	R7F701A713AFP-C#BA1	R7F701423EAFB-C#AA1	R7F701421EAFB-C#KA9
R7F7016934AFP-C#BA1	R7F701A713AFP-C#TA1	R7F701403EAFB-C#BA1	R7F701400E***AFB-C#KA1
R7F7016934AFP-C#KA1	R7F701A723AFP-C#AA1	R7F701423EAFB-C#BA1	R7F701420E***AFB-C#KA1
R7F701693FAFP-C#AA1	R7F701A723AFP-C#BA1	R7F701403EAFB-C#TA1	R7F701420E***AFB-C#KA9
R7F701693FAFP-C#BA1	R7F701A723AFP-C#TA1	R7F701423EAFB-C#TA1	R7F701401E***AFB-C#KA1
R7F701693FAFP-C#KA1	R7F701A733AFP-C#AA1	R7F701423EAFB-C#TA9	R7F701421E***AFB-C#KA1
R7F7016943AFP-C#AA1	R7F701A733AFP-C#BA1	R7F701403E***AFB-C#TA1	R7F701421E***AFB-C#KA9
R7F7016943AFP-C#BA1	R7F701A733AFP-C#KA1	R7F701423E***AFB-C#TA1	R7F701400EA21AFB-C#KA1
R7F7016943AFP-C#KA1	R7F701A743AFP-C#AA1	R7F701423E***AFB-C#TA9	R7F701400EA22AFB-C#KA1
R7F7016944AFP-C#AA1	R7F701A743AFP-C#BA1	R7F701402EAFB-C#AA1	R7F701400EA23AFB-C#KA1
R7F7016944AFP-C#BA1	R7F701A743AFP-C#KA1	R7F701422EAFB-C#AA1	R7F701400EA29AFB-C#KA1
R7F7016944AFP-C#KA1	R7F701A753AFP-C#AA1	R7F701414EAFB-C#AA1	R7F701400EA30AFB-C#KA1
R7F701694FAFP-C#AA1	R7F701A753AFP-C#BA1	R7F701434EAFB-C#AA1	R7F701400EA49AFB-C#KA1
R7F701694FAFP-C#BA1	R7F701A753AFP-C#KA1	R7F701402EAFB-C#BA1	R7F701401EA00AFB-C#KA1
R7F701694FAFP-C#KA1	R7F7017083AFP-C#AA1	R7F701422EAFB-C#BA1	R7F701401EA01AFB-C#KA1
R7F7016953AFP-C#AA1	R7F7017083AFP-C#BA1	R7F701414EAFB-C#BA1	R7F701401EA10AFB-C#KA1
R7F7016953AFP-C#AA9	R7F7017083AFP-C#TA1	R7F701434EAFB-C#BA1	R7F701401EA24AFB-C#KA1
R7F7016953AFP-C#BA1	R7F7017093AFP-C#AA1	R7F701402EAFB-C#KA1	R7F701401EA31AFB-C#KA1
R7F7016953AFP-C#BA9	R7F7017093AFP-C#BA1	R7F701422EAFB-C#KA1	R7F701401EA46AFB-C#KA1
R7F7016953AFP-C#KA1	R7F7017093AFP-C#TA1	R7F701414EAFB-C#KA1	
R7F7016953AFP-C#KA9	R7F7017603AFP-C#AA1	R7F701434EAFB-C#KA1	
R7F7016954AFP-C#AA1	R7F7017603AFP-C#BA1	R7F701422EAFB-C#KA9	

*** means ROM code

Q100 Qualification Test Results

AEC-Q100-REV-H

[Note : Qualification tests were performed using a representative product with the same wafer process and the same package structure, and also using generic data.]

Test	#	Reference	Test Conditions	Lots	S.S.	Total	Results (Fail of Total)	Comments: (N/A =Not Applicable)
------	---	-----------	-----------------	------	------	-------	-------------------------	---------------------------------

TEST GROUP A – ACCELERATED ENVIRONMENT STRESS TESTS

PC	A1	JESD22 A113 J-STD-020	Preconditioning: (Test @ Rm) SMD only; Moisture Preconditioning for THB/HAST, AC/UHST, TC, &PTC ; Peak Reflow Temp=260°C	Min.MSL=3			MSL=3	-
THB or HAST	A2	JESD22 A101	Temperature Humidity Bias: (Test @ Rm/Hot) Ta=85°C, RH=85%, 1000hrs	3	77	231	0 of 231	-
AC or UHST or TH	A3	JESD22 A118	Unbiased Highly Accelerated Stree Test: (Test @ Rm) Ta=110°C, 85% RH, 264h	3	77	231	0 of 231	-
TC	A4	JESD22 A104	Temperature Cycle: (Test @ Hot) Ta=-65°C to 150°C, 500cyc or Ta=-55°C to 150°C, 1000cyc	3	77	231	0 of 231 0 Fails after TC (WBP)	-
PTC	A5	JESD22 A105	Power Temperature Cycle: (Test @ Rm/Hot) Ta=40°C to 125°C, 1000cyc	1	45	45	0 of 45	* Applicable products only
HTSL	A6	JESD22 A103	High Temperature Storage Life: (Test @ Rm/Hot) Ta=150°C, 1000hrs or Ta=175°C, 500hrs	1	45	45	0 of 45	-

TEST GROUP B – ACCELERATED LIFETIME SIMULATION TESTS

HTOL	B1	JESD22 A108	High Temp Operating Life: (Test @ Rm/Cold/Hot) Ta=150°C, 1000hrs	3	77	231	0 of 231	-	
ELFR	B2	AEC-Q100-008	Early Life Failure Rate: (Test @ Rm/Hot) Ta=125°C, 48hrs	3	800	2400	0 of 2400	-	
EDR	B3	AEC-Q100-005	NVM Endurance & Data Retention Test: (Test @ Rm/Hot)	For HTOL	3	77	231	0 of 231	-
				For HTSL	1	45	45	0 of 45	-

TEST GROUP C – PACKAGE ASSEMBLY INTEGRITY TESTS

WBS	C1	AEC-Q100-001 AEC-Q003	Wire Bond Shear Test: (Cpk > 1.67)	30 bonds	5 parts Min.	30 bonds	0 of 30bonds	Cpk>1.67
WBP	C2	MIL-STD-883 Method 2011 AEC-Q003	Wire Bond Pull: (Cpk > 1.67); Each bonder used	30 bonds	5 parts Min.	30 bonds	0 of 30bonds	Cpk>1.67
SD	C3	JESD22 B102 JSTD-002D	Solderability: (>95% coverage) 8 hr steam aging prior to testing	1	15	15	0 of 15	-
PD	C4	JESD22 B100, JESD22 B108 AEC-Q003	Physical Dimensions: (Cpk > 1.67)	3	10	30	0 of 30	Cpk>1.67
SBS	C5	AEC-Q100-010 AEC-Q003	Solder Ball Shear: (Cpk > 1.67); 5 balls from min. of 10 devices	-	-	-	-	N/A
LI	C6	JESD22 B105	Lead Integrity: (No lead cracking or breaking); Through-hole only; 10 leads from each of 5 devices	-	-	-	-	N/A

TEST GROUP D – DIE FABRICATION RELIABILITY TESTS

EM	D1	JESD61	Electromigration:	-	-	-	Pass	Confirmed by process TEG
TDDDB	D2	JESD35	Time Dependant Dielectric Breakdown:	-	-	-	Pass	Confirmed by process TEG
HCI	D3	JESD60 & 28	Hot Carrier Injection:	-	-	-	Pass	Confirmed by process TEG
NBTI	D4	JESD90	Negative Bias Temperature Instability:	-	-	-	Pass	Confirmed by process TEG
SM	D5	JESD61,87 & 202	Stress Migration:	-	-	-	Pass	Confirmed by process TEG

Test	#	Reference	Test Conditions	Lots	S.S.	Total	Results (Fail of Total)	Comments: (N/A =Not Applicable)
------	---	-----------	-----------------	------	------	-------	----------------------------	------------------------------------

TEST GROUP E- ELECTRICAL VERIFICATION

TEST	E1	User/Supplier Specification	Pre and Post Stress Electrical Test:	All	All	All	0 of All	-
HBM	E2	AEC-Q100-002	Electrostatic Discharge, Human Body Model: (Test @ Rm/Hot); (2KV HBM / Class 2 or better)	1	3	3	0 of 3 ESD Level= HBM:2	HBM>2KV
CDM	E3	AEC-Q100-011	Electrostatic Discharge, Charged Device Model: (Test @ Rm/Hot); (750V corner leads, 500V all other leads / Class C4B or better)	1	3	3	0 of 3 ESD Level= CDM:C4B	Corner leads: 750V Pass All other leads:500V Pass
LU	E4	AEC-Q100-004	Latch-Up: (Test @ Rm/Hot)	1	6	6	0 of 6	-
ED	E5	AEC-Q100-009 AEC-Q003	Electrical Distributions: (Test @ Rm/Hot/Cold) (where applicable, Cpk>1.67)	3	30	90	Cpk>1.67	-
FG	E6	AEC-Q100-007	Fault Grading:	-	-	-	>98%	-
CHAR	E7	AEC-Q003	Characterization: (Test @ Rm/Hot/Cold)	-	-	-	Pass	According to Renesas standard procedure
EMC	E9	SAE J1752/3	Electromagnetic Compatibility (Radiated Emissions)	1	1	1	0 of 1	-
SC	E10	AEC Q100-012	Short Circuit Characterization	-	-	-	-	N/A
SER	E11	JESD89-1 JESD89-2 JESD89-3	Soft Error Rate	1	3	3	Pass	* Applicable product only
LF	E12	AEC-Q005	Lead (Pb) Free: (see AEC-Q005)	-	-	-	Pass	Solderability: See SD (C3) result. Solder heat resistance: N/A (Wave Solder is Not recommended.) Whisker: Performed on product TEG with test method based on JESD201.

TEST GROUP F – DEFECT SCREENING TESTS

PAT	F1	AEC-Q001	Process Average Testing: (see AEC-Q001)	All	All	All	Reject units outside PAT limits	Apply to mass production according to Renesas standard procedure
SBA	F2	AEC-Q002	Statistical Bin/Yield Analysis: (see AEC-Q002)	All	All	All	Reject units outside criteria	Apply to mass production according to Renesas standard procedure

TEST GROUP G – CAVITY PACKAGE INTEGRITY TESTS (for Ceramic Package testing only)

MS	G1	JESD22 B104	Mechanical Shock: (Test @ Rm)	-	-	-	-	N/A
VFV	G2	JESD22 B103	Variable Frequency Vibration: (Test @ Rm)	-	-	-	-	N/A
CA	G3	MIL-STD-883 Method 2001	Constant Acceleration: (Test @ Rm)	-	-	-	-	N/A
GFL	G4	MIL-STD-883 Method 1014	Gross and Fine Leak:	-	-	-	-	N/A
DROP	G5	-----	Drop Test: (Test @ Rm) MEMS cavity parts only. Drop part on each of 6 axes once from a height of 1.2m onto a concrete surface.	-	-	-	-	N/A
LT	G6	MIL-STD-883 Method 2004	Lid Torque:	-	-	-	-	N/A
DS	G7	MIL-STD-883 Method 2019	Die Shear:	-	-	-	-	N/A
IWV	G8	MIL-STD-883 Method 1018	Internal Water Vapor:	-	-	-	-	N/A