

Product Change Notice (PCN)

Subject: Add Manufacturing Locations Combinations for P9320S-3AHGI8

Publication Date: 1/14/2021

Effective Date: 4/14/2021

Revision Description:

Initial Release

Description of Change:

This PCN notice is to add additional manufacturing combinations which already approved SCM by Samsung as marked in blue font below.

Flow	Fab Location	Pre Bump Sort Location	Bump Location	Post Bump Sort Location	Backend Location
1	TSMC Fab8	KYEC, Taiwan	SFA, Korea	SFA, Korea	SFA, Korea
2	TSMC Fab6	KYEC, Taiwan	SFA, Korea	SFA, Korea	SFA, Korea
3	TSMC Fab8	KYEC, Taiwan	SFA, Korea	Sigurd, Taiwan	Sigurd, Taiwan
4	TSMC Fab6	KYEC, Taiwan	SFA, Korea	Sigurd, Taiwan	Sigurd, Taiwan
5	TSMC Fab8	Sigurd, Taiwan	ATT, Taiwan	Sigurd, Taiwan	Sigurd, Taiwan
6	TSMC Fab6	Sigurd, Taiwan	ATT, Taiwan	Sigurd, Taiwan	Sigurd, Taiwan
7	TSMC Fab8	Sigurd, Taiwan	SFA, Korea	Sigurd, Taiwan	Sigurd, Taiwan
8	TSMC Fab6	Sigurd, Taiwan	SFA, Korea	Sigurd, Taiwan	Sigurd, Taiwan
9	TSMC Fab8	Sigurd, Taiwan	SFA, Korea	SFA, Korea	SFA, Korea
10	TSMC Fab6	Sigurd, Taiwan	SFA, Korea	SFA, Korea	SFA, Korea

Note: Combination 1 to 6 are the existing manufacturing locations, 7 to 10 are newly added combinations of manufacturing locations.

There is no change in the pre-bump and post bump sort processing flows. Load boards and test programs are the same as the existing qualified facilities. The electrical test correlation has been completed and based on the test results we do not anticipate any impact on device performance. The testing is fully compatible and transferrable between the test facilities with no change to the test coverage.

The processing at SFA bump location, Sigurd and SFA backend location remain unchanged.

Affected Product List: P9320S-3AHGI8

Reason for Change:

This change will allow the flexibility to ship from all the qualified facilities and will provide the increased capacity, flexibility and shorter lead time to meet market demand.

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

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

Product Identification:

Assembly lot# prefix "SL" denote bump location at SFA. And the lot# is traceabled to the sort and backend location.

Qualification Status: Refer Appendix A for ATE correlation data.

Sample Availability Date: 1/14/2021

Device Material Declaration: Available upon request

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 idt-pcn@lm.renesas.com

Appendix A: ATE Correlation

Description	KYEC-SFA-SFA-SFA, Fab8 (REF) SL08020	SGD-SFA-SGD-SGD, Fab8 Flow 7 SL08121	SGD-SFA-SFA-SFA, Fab8 Flow 9 SL08120
Tester Platform	<u>iFLEX</u>	<u>iFLEX</u>	<u>iFLEX</u>
<u>Loadboard</u>	AW730T/P9320-8-V-01A	AW730T/P9320-8-V-01A	AW730T/P9320-8-V-01A
Test Program	IDTP9320S-3_CSP_Rev_1p10	IDTP9320S-3_CSP_Rev_1p10	IDTP9320S-3_CSP_Rev_1p10
Test Site	8	8	8
Test Temperature	25	25	25
Sort Yield	99.54	99.07	98.17
Pareto	Reference	Comparable	Comparable
EC Table parameters - Mean	Reference	Comparable	Comparable
EC Table parameters - Sigma	Reference	Comparable	Comparable
RDSON - Mean delta	Reference	<2%	<2%
RDSON - Sigma delta	Reference	Comparable	Comparable

Description	KYEC-SFA-SFA-SFA, Fab6 (REF) SL08019	SGD-SFA-SGD-SGD, Fab6 Flow 8 SL08132	SGD-SFA-SFA-SFA, Fab6 Flow 10 SL08131
Tester Platform	<u>iFLEX</u>	<u>iFLEX</u>	<u>iFLEX</u>
<u>Loadboard</u>	AW730T/P9320-8-V-01A	AW730T/P9320-8-V-01A	AW730T/P9320-8-V-01A
Test Program	IDTP9320S-3_CSP_Rev_1p10	IDTP9320S-3_CSP_Rev_1p10	IDTP9320S-3_CSP_Rev_1p10
Test Site	8	8	8
Test Temperature	25	25	25
Sort Yield	98.99	98.95	98.87
Pareto	Reference	Comparable	Comparable
EC Table parameters - Mean	Reference	Comparable	Comparable
EC Table parameters - Sigma	Reference	Comparable	Comparable
RDSON - Mean delta	Reference	<2%	<2%
RDSON - Sigma delta	Reference	Comparable	Comparable