

Product Change Notice (PCN)

Subject: Add SFA, Korea as Alternate Wafer Sort Location (CP1)

Publication Date: 5/23/2025

Effective Date: 8/22/2025

Revision Description:

Initial Release

Description of Change:

Renesas is adding SFA, Korea as an alternate Wafer Sort Location (CP1) for the select part# that are currently wafer sorted at Carsem, Malaysia. This change will allow flexibility to test from either facility and will provide increased capacity, flexibility and shorter lead time to meet market demand. Test processing flows and test programs are the same at all the qualified facilities. Renesas has completed the electrical test correlation and based on the test results we do not anticipate any impact on device performance. The testing is fully compatible and transferable between the two test facilities with no change to the test coverage.

Before PCN

Foundry (TSMC)→Wafer Test CP1 @ 85.5 °C (**CARSEM**)→Bake @ 250 °C,48 hours
(**CARSEM**)→Assembly (CARSEM)→Final Test FT1 (CARSEM)→Tape & Reel (CARSEM)

After PCN

Option 1:

Foundry (TSMC)→Wafer Test CP1 @ 85.5 °C (**CARSEM**)→Bake @ 250 °C,48 hours
(**CARSEM**)→Assembly (CARSEM)→Final Test FT1 (CARSEM)→Tape & Reel (CARSEM)

Option 2:

Foundry (TSMC)→Wafer Test CP1 @ 85.5 °C (**SFA**)→Bake @ 250 °C,48 hours (**SFA**)→
Assembly (CARSEM)→Final Test FT1 (CARSEM)→Tape & Reel (CARSEM)

Affected Product List: SPD5118-Y1B000NCG, SPD5118-Y1B000NCG8,
SPD5118Y1B000NCG8D, SPD5118Y1B000NCG8H

Reason for Change:

To provide increased capacity.

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

The change has no impact on the form, fit, function, quality, reliability and environmental compliance of the product.

Product Identification:

Traceability to the wafer sort location is available on request.

Qualification Status: Electrical characterization completed successfully. Refer Appendix A

Sample Availability Date: 6/30/2025

Device Material Declaration: Not applicable

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 - Electrical Test Characterization Results

Qual Vehicle: SPD5118-Y1B000NCG

Sample size: 1 Wafer with DPW of 9213

Descriptions	Existing Wafer Sort CP1 (Carsem, Malaysia)	Alternate Wafer Sort CP1 (SFA, Korea)
Prober	TSK UF2000	Opus3_SD from SEMICS
Probe Card	PHB2 CP1 48-sites Probe Card (same design)	PHB2 CP1 48-sites Probe Card (same design)
Docking Type	Pogo Tower with PIB (same design)	Pogo Tower with PIB (same design)
Tester Platform	Advantest V93K (PS1600)	Advantest V93K (PS1600)
Test Program	PHB2_SPD5118_WS_48S_ REV01F	PHB2_SPD5118_WS_48S_ REV01F
Test Site	48	48
Test Temperature	85.5 °C	85.5 °C
Wafer Sort Correlation Results	Passed	Passed
Parametric Test Correlation Results	Passed	Passed