

Product Change Notice (PCN)

Subject: Qualified TSMC Fab 6 as An Alternate Fab Location

Publication Date: 2/10/2020

Effective Date: 5/10/2020

Revision Description:

Initial Release

Description of Change:

TSMC Fab 6 has been qualified as an alternate fab location for P9221-R, P9221-P, P9225-R and select P9221 and P9225 devices.

There will be no change to the product design or process technology as a result of this change. There will also be no change to the package, backend manufacturing process or the datasheet.

Affected Product List:

| | | | |
|---------------|----------------|---------------|---------------|
| P9221-0AHGI | P9221-P3AHGI | P9221-R1AHGI | P9225-5AHGI |
| P9221-0AHGI8 | P9221-P3AHGI8 | P9221-R1AHGI8 | P9225-5AHGI8 |
| P9221-13AHGI | P9221-P4AHGI | P9221-R3AHGI | P9225-R0AHGI |
| P9221-13AHGI8 | P9221-P4AHGI8 | P9221-R3AHGI8 | P9225-R0AHGI8 |
| P9221-20AHGI | P9221-PAHGI | P9221-R6AHGI | P9225-R1AHGI |
| P9221-20AHGI8 | P9221-PAHGI8 | P9221-R6AHGI8 | P9225-R1AHGI8 |
| P9221-25AHGI | P9221-R0AHGI | P9221-RAHGI | P9225-RAHGI |
| P9221-25AHGI8 | P9221-R0AHGI8 | P9221-RAHGI8 | P9225-RAHGI8 |
| P9221-P1AHGI | P9221-R11AHGI | P9225-4AHGI | |
| P9221-P1AHGI8 | P9221-R11AHGI8 | P9225-4AHGI8 | |

Reason for Change:

This is to provide additional manufacturing capacity.

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:

Traceability to the Fab location is provided through the 2 digit sequential lot code on the date code line of the top mark.

Qualification Status: Completed. Refer Appendix A

Sample Availability Date: Samples 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

Qualification Report

| | | | |
|-----------------------|-----------------|----------------------------|-----------------|
| Device Family: | AW694T | Process Technology: | CV018GBCD, 1P4M |
| Package Type: | AHG52 (WLCSP52) | Fab Location: | TSMC Fab 6 |

| Test Description | Conditions | Sample Size | Reject | Comments |
|---|--|-------------|--------|-----------|
| Device Characterization | IDT's datasheet condition | 80 | 0 | Pass |
| High Temperature Operating Life (Dynamic) | JESD22-A108, +125°C, Vcc-max | 77 | 0 | Pass |
| ESD: Human Body Model | JESD22-A114 (JS-001) Classification – 1B | 3 | 0 | Pass 1KV |
| ESD: Charged Device Model | JESD22-C101 Classification – C1 | 3 | 0 | Pass 500V |
| Latch-Up | JESD78 | 3 | 0 | Pass |
| Temperature Cycling | JESD22-A104-B (Cond. B -55°C to 125°C) | 77 | 0 | Pass |