

## 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](mailto:idt-pcn@lm.renesas.com)**

## Qualification Report

<b>Device Family:</b>	AW694T	<b>Process Technology:</b>	CV018GBCD, 1P4M
<b>Package Type:</b>	AHG52 (WLCSP52)	<b>Fab Location:</b>	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