

Product Change Notice (PCN)

Subject: Technology and fab location change for 9UMS9633BKILF

Publication Date: 1/31/2022

Effective Date: 5/1/2022

Revision Description:

Initial Release

Description of Change:

This notice is to advise our customers that the technology and fab location for the affected product list will be changed as the current process is no longer available and the current fab location has been discontinued. There is no change to the electrical characteristics of the device.

Renesas issued an End of life notice PLC220001 including these 9UMS9633BKILF & 9UMS9633BKILFT products. This change is required to support the Last Time Buy (LTB) and delivery periods defined in PLC220001 for the 9UMS9633BKILF & 9UMS9633BKILFT products as they transition to obsolescence.

Note: In this case, if customer cannot accept this PCN then Renesas will be unable to support last time buy demand and purchase order.

Refer to the below table for comparison between the existing and the new fab and technology.

Description	Existing Fab and Technology	New Fab and Technology
FAB	Fab 4, USA	TSMC
Process Technology	0.33um CMOS 3.3V	0.18um CMOS 1.8/3.3V
# Poly Layers	1	1
# Metal layers	3	3

Affected Product List:

9UMS9633BKILF	9UMS9633BKILFT
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Reason for Change:

The original supply chain for the device is no longer fully supported by our vendors; Renesas is unable to obtain more material. Renesas has an alternative supply chain that has been qualified and validated to support the same specifications.

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

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

Product Identification:

Date Code

Qualification Status: Completed. Refer Appendix A
Sample Availability Date: 1/31/2022
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 - Qualification Results

Product: 9UMS9633BKILF

Foundry: TSMC

Technology Information: CMOS 0.18 um 3.3V/1.8V

Device Qual Test Results Summary

Test Description	Conditions	Sample Size	Rejects	Comments
ESD: Human Body Model	JS-001	3	0	2500V
ESD: Charged Device Model	JESD22-C101	3	0	1000V
Latch-Up	JESD78	6	0	

Qualification Test Result Summary – JESD47 Recommended Tests

Test /Conditions	Conditions	Sample Size	Rejects	Comments
High Temperature Operating Life (Dynamic)	JESD22-A108D, +125°C, Vccmax @ 1000 hours or equivalent	77	0	
		77	0	
		77	0	
Temperature Cycle	JESD22-A104D, -55°C to +125°C, 700 cycles	25	0	
		25	0	
		25	0	
High Temperature Storage Bake	JESD22-A-103D, 150°C, 1000 hrs	25	0	
		25	0	
		25	0	
Highly Accelerated Stress Test (HAST)	EIA/JESD22-A110D, 130°C/85%R.H. Vcc max for 100 hours.	25	0	
		25	0	
		25	0	
Ball Shear Test	JESD22-B116A, Ball Shear Strength	5	0	

Note: For HAST and Temperature Cycle, samples have been subjected to pre-conditioning per JESD22-A113