

Product Change Notice (PCN)

Subject:Add Cirtek Philippines as an Alternate Manufacturing Location on Select Part

Publication Date: 4/20/2020

Effective Date: 7/20/2020

Revision Description:

Initial Release

Description of Change:

Renesas is adding Cirtek Philippines as an alternate manufacturing location on select part# as listed below.

The material sets of the current and the alternate location are as shown in the below table. There will be some changes in the material sets at the alternate location.

There is no change in the Test processing flows. Load boards and test programs are identical at both the qualified facilities. Electrical test correlation 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.

No change in moisture sensitive level as a result of this change.

	Existing	Alternate
Assembly Location	FABRINET, Thailand	Cirtek, Philippines
Solder Paste	Chipquick SAC305	Qualitek SAC305
Die Attach Material 1	Namics XH9960	Namics XH9960
Die Attach Material 2	Ablebond 84-1	Ablebond 84-1 LMI
Die Attach Material 3	Ablebond 84-3	Ablebond 84-3
Substrate	LTCC (Low temperature Co-Fire Ceramic) and GL771 (HITCE)	LTCC (Low temperature Co-Fire Ceramic) and GL771 (HITCE)
Wire	1.0mil Gold Wire, 0.7mil Gold Wire	1.0mil Gold wire
Lids	LCP with 6104 epoxy dispensed	LCP with 6104 epoxy dispense
Pre-Seal Test location	FABRINET, Thailand	Cirtek, Philippines
Final Test location	FABRINET, Thailand	Cirtek, Philippines

Affected Product List: GX62474-HIU and GX74470-HIU

Reason for Change:

The change is for increased manufacturing capability and business continuity.

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: Top Mark as described below

Part# GX62474-HIU	FABRINET Thailand	Cirtek Philippines
6th line	21-YYWW	31-YYWW

Denotation:

21: Assembly location code for Fabrinet Thailand

31: Assembly location code for Cirtek Philippines

YYWW: Datecode where YY – Year, WW - Week

Part# GX74470-HIU	FABRINET Thailand	Cirtek Philippines
3rd line	YYSSMCVCXXXX	YYSSMCVDXXXX

Denotation:

YY: Year

SS: Device code (GX)

M: Month (1 - Jan, 2 - Feb,.....9 - September, O – October, N - November and D – December)

C: Part identification or code assigned by ALU (G)

V: Version assigned by ALU (A)

C/D: Subcon code (C – Fabrinet Thailand, and D – Cirtek Philippines)

XXXX: Serial number

Qualification Status: Completed. Refer Appendix A

Sample Availability Date: 6 week from sample order date

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

Cirtek Qualification Report

Date: 3/30/2020

Product : GX62474-HIU & GX74470-HIU			
Process Technology:	GX62474 - 0.15u PHEMT	Qual Plan#:	M19-07-004
	GX74470 – GF 0.13μ, 8XP		
Fab Base:	GX62474 - IT2013 V1P	Assembly Location:	Cirtek Philippines
	GX74470 - AK873C001ZNA	Package Type:	Module

Test Description	Conditions	Sample Size	Results (rej/SS)	Comments
IR Characterization	ALU-8DS-01001-0044-ASZZA	1	0/1, x1 lot	Passed ²
Temperature Cycling ¹	JESD22-A104, -40°C to +85°C, 10 cycles	12	0/12, x2 lots	Passed
Temperature Cycling ¹	JESD22-A104, -25°C to +100°C, 500 cycles	12	0/12, x2 lots	Passed
Low Temperature Storage ¹	JESD22-A119, -40 °C, 72 hrs	12	0/12, x2 lots	Passed
High Temperature Storage Life ¹	JESD22-A103, +150°C, 1000 hrs	12	0/12, x2 lots	Passed
Bond Pull Strength	Mil-Std-883, M2011	2	0/2, x2 lots	Passed
Die Shear	MIL-STD-883, M2019	2	0/2, x2 lots	Passed
Lid Pull/Shear	Mil-Std-883 method 2028	6	0/6, x2 lots	Passed
Mechanical Shock ¹	JESD22-B104, Cond. B	12	0/12, x2 lots	Passed
Vibration ¹	JESD22-B103, Cond. A	12	0/12, x2 lots	Passed

Note:

1. Preconditioning per JESD22-A113, MSL 3 (260°C)
2. Due to COVID-19 plant shutdown, the GX74470-HIU IR characterization is pending completion.