



PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: A2001-01	DATE: 8-Jan-2020	MEANS OF DISTINGUISHING CHANGED DEVICES:	
Product Affected: TVSOP-48 (Refer to Attachment II for the affected part#)		<input type="checkbox"/> Product Mark	Lot # will have:
		<input checked="" type="checkbox"/> Back Mark	"U" prefix for UTL, Thailand
		<input type="checkbox"/> Date Code	
		<input type="checkbox"/> Other	
Date Effective: 8-Apr-2020			
Contact: IDT PCN DESK		Attachment: <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
E-mail: idt-pcn@lm.renesas.com		Samples:	Please contact your local sales representative for sample request.

DESCRIPTION AND PURPOSE OF CHANGE:

<input type="checkbox"/> Die Technology	
<input type="checkbox"/> Wafer Fabrication Process	This notification is to advise our customers that select products that currently assembled in OSET, Taiwan will be transferred to UTL, Thailand as a result of OSET has discontinued the production of the select products.
<input type="checkbox"/> Assembly Process	
<input type="checkbox"/> Equipment	
<input checked="" type="checkbox"/> Material	There is a change to the moisture performance from MSL1 to MSL 3.
<input type="checkbox"/> Testing	
<input checked="" type="checkbox"/> Manufacturing Site	Attachment I details the qualification results.
<input type="checkbox"/> Data Sheet	Attachment II lists the affected part numbers.
<input checked="" type="checkbox"/> Other - MSL Rating	

RELIABILITY/QUALIFICATION SUMMARY:
Refer to qualification data shown in Attachment I.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:
IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.
IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: _____	<input type="checkbox"/> Approval for shipments prior to effective date.
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____
CUSTOMER COMMENTS: _____	

IDT ACKNOWLEDGMENT OF RECEIPT:
RECD. BY: _____ DATE: _____



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ATTACHMENT I - PCN # : A2001-01

PCN Type: Change of Assembly Location, Material Sets and MSL Rating

Data Sheet Change: None

Change in moisture sensitivity level (MSL)

Detail Of Change:

This notification is to advise our customers that select products that currently assembled in OSET, Taiwan will be transferred to UTL, Thailand as a result of OSET has discontinued the production of the select products.

The material set details of the current and newly added assembly locations are as shown in Table 1. There will be no change in wire type as a result of this PCN.

There is a change to the moisture performance from MSL1 to MSL 3.

The material declaration will differ.

Table 1: Assembly Material Sets for The Existing and Newly added Assembly Locations

	Existing Assembly	New Assembly
Material Set / Assembly	OSET - OSE, Taiwan	UTL, Thailand
Die Attach	EN4900GC	8200T
Bonding Wire	Gold wire	Gold wire
Mold Compound	CEL-9200HF	G605L



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ATTACHMENT I - PCN # : A2001-01

Qualification Information and Qualification Data:

Affected Packages: TVSOP-48

Assembly Material: Shown on page 2 of this attachment.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests.

Qualification Vehicle: TVSOP-48

Test Description	Test Method	Test Results (Rej / SS)		
		Lot 1	Lot 2	Lot 3
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/25	0/25	0/25
* HAST - biased (130 °C/85% RH, 96 Hrs)	JESD22-A110	0/25	0/25	0/25
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Ball Shear Test	JESD22-B116	0/5	0/5	0/5
Bond Pull Test	MIL-STD-883 (Method 2011)	0/5	0/5	0/5
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 3, 260 °C	0/25	0/25	-

* Tests were subjected to Preconditioning per JESD22-A113 prior to stress test



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ATTACHMENT II - PCN # : A2001-01

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
74FCT163244APFG	74FCT163244CPFG	74FCT163245APFG	74FCT163245CPFG
74FCT163244APFG8	74FCT163244CPFG8	74FCT163245APFG8	74FCT163245CPFG8