



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20210804000.1
Qualification of new BOM Options for Select Devices
Change Notification / Sample Request

Date: August 04, 2021
To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

PCN Team
SC Business Services

20210804000.1
Change Notification / Sample Request
Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
ADS7142IRUGR	null
TMP451AIDQFR	null
TMP451AIDQFT	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20210804000.1		PCN Date:	August 04, 2021													
Title:	Qualification of new BOM options for select devices																
Customer Contact:	PCN Manager	Dept:	Quality Services														
Proposed 1st Ship Date:	Nov 4, 2021		Estimated Sample Availability:	Date provided at sample request													
Change Type:																	
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site												
<input checked="" type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material												
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process												
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site												
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials												
				<input type="checkbox"/>	Wafer Fab Process												
PCN Details																	
Description of Change:																	
This PCN is to inform of the qualification of new BOM options for the devices listed below:																	
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>What</th> <th>Current</th> <th>Additional</th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>4221460</td> <td>4223872</td> </tr> <tr> <td>Bond Wire, diameter</td> <td>Au, 0.8 mils</td> <td>Cu, 0.8 mils</td> </tr> <tr> <td>Mold Compound</td> <td>4210087</td> <td>4222198</td> </tr> </tbody> </table>						What	Current	Additional	Mount Compound	4221460	4223872	Bond Wire, diameter	Au, 0.8 mils	Cu, 0.8 mils	Mold Compound	4210087	4222198
What	Current	Additional															
Mount Compound	4221460	4223872															
Bond Wire, diameter	Au, 0.8 mils	Cu, 0.8 mils															
Mold Compound	4210087	4222198															
Reason for Change:																	
Supply Continuity																	
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																	
None																	
Impact on Environmental Ratings																	
Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.																	
RoHS	REACH	Green Status	IEC 62474														
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change														
Changes to product identification resulting from this PCN:																	
None																	
Product Affected:																	
ADS7142IRUGR	ADS7142IRUGT	TMP451AIDQFR	TMP451AIDQFT														

Qualification Report

Approve Date 05-Jul-2021

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: ADS7142IRUGR	Qual Device: TMP451AIDQFR	QBS Package Reference: TLV9024RTER	QBS Package Reference: TLV9034RTER
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	-	1/77/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	-	-
MSL	Moisture Sensitivity, L1	Level1-260C	-	3/36/0	-	1/12/0
MSL	Moisture Sensitivity, L2	Level 2-260C	3/36/0	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	1/77/0	2/154/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	3/231/0	3/231/0	1/77/0	2/154/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	2/154/0
HBM	ESD - HBM	4000 V	-	-	1/3/0	2/6/0
LU	Latch-up	(Per JESD78)	-	-	1/6/0	2/12/0
HTOL	Life Test, 150C	300 Hours	-	-	-	1/77/0

- QBS: Qual By Similarity

- Qual Device ADS7142IRUGR is qualified at LEVEL2-260C

- Qual Device TMP451AIDQFR is qualified at LEVEL1-260CG

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN_ww_admin_team@list.ti.com

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