12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20170228002
Qualification of a new Die Attach for Select Devices
Change Notification / Sample Request

Date: March 01, 2017
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.

We request you acknowledge 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 you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated 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, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20170228002
Attachment: 1

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
OPA541AM	null
OPA541BM	null
OPA2541BM	null

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

PCN Number:	20170228002	**PCN Date:**	March 1, 2017
Title:	Qualification of a new Die Attach for Select Devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	June 1, 2017	**Estimated Sample Availability:**	Date provided at sample request

Change Type:

☐	Assembly Site	☐	Design	☐	Wafer Bump Site
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials
				☐	Wafer Fab Process

PCN Details

Description of Change:

This notification is to announce the qualification of a new die attach for the devices in the product affected section below as follows:

Current	Proposed
SID#142010015	SID#142010022

Reason for Change:

Die Attach Supplier change no longer producing current material

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website.

Changes to product identification resulting from this PCN:

None

Product Affected:

OPA2541AM	OPA2541SM	OPA541AM	OPA541SM
OPA2541BM	OPA2541SMQ	OPA541BM	

Qualification Report

MMT/ALP Qualification of New Die Attach Epoxy SID#142010022 as Replacement for SID#142010015

Product Attributes

Attributes	Qual Device: OPA2541SMQ
Assembly Site	ALP
Package Family	LMF
Wafer Fab Supplier	SFAB
Wafer Process	BIPOLAR

- Device OPA2541SMQ contains multiple dies.

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

Type	Test Name / Condition	Duration	Qual Device: OPA2541SMQ
-	D4 Constant Acceleration	Condition D, 20 kg, Y1 axis, 1 minute duration	3/32/0
-	D4 Electrical Test	Room temperature	3/32/0
-	D4 Fine and Gross Leak	-	3/32/0
-	D4 Mechanical Shock	Condition B, 1500 g, 0.5 ms Y1 6 pulses	3/32/0
-	D4 Vibration	Condition A, 20 g 20-2000 Hz, All 3 planes (x, y, z)	3/32/0
DS	Die Shear	MIL-STD-883, Method 2019	3/10/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0
HTOL	High Temp Operating Life, 125C	1000 Hours	2/77/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	PASS
TC	Temperature Cycle, -65C/150C	500 Cycles	3/77/0
XRAY	X-ray	Inspect for attach voids, wire bonds	3/5/0
XRAY	X-ray	Post TC (500 Cycles). Inspect for attach voids	3/5/0
YLD	FTY and Bin Summary	-	PASS

- 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 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 regional 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
Japan	PCNJapanContact@list.ti.com