

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:			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
		<input type="checkbox"/>	Wafer Bump Site
		<input type="checkbox"/>	Wafer Bump Material
		<input type="checkbox"/>	Wafer Bump Process
		<input type="checkbox"/>	Wafer Fab Site
		<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	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			
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	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