PCN Number:	20191105000.2	**PCN Date:**	Dec. 16, 2019
Title:	Qualification of new mount compound for select devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Jun 16, 2020	**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 PCN is to inform of a new mount compound qualification as follows:

Current mount compound	New mount compound
SID#1120999A1	**SID#1120999A2**

Reason for Change:

Standardization

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:

74LVC1G3208MDBVTEP	V62/13605-01XE

Qualification Results

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

Type	Test Name / Condition	Duration	QBS Package: TL431LIBQDBZR	QBS Product /Process Reference: TL431LIQBDBZR
AC	Autoclave 121C	96 Hours	-	3/231/0
DPA	Destructive Physical Analysis	1000 Hours	-	3/90/0
ED	Electrical Characterization	Per Datasheet Parameters	-	3/90/0
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0
HBM	ESD - HBM	2500 V	-	3/9/0
CDM	ESD - CDM	1500 V	-	3/9/0
HTOL	Life Test, 150C	300 Hours	-	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	3/231/0
LU	Latch-up	(per JESD78) 25C	-	3/18/0
LU	Latch-up	(per JESD78) 125C	-	3/18/0
PC	PreConditioning	Level 1-260C	3/924/0	3/924/0
TC	Temperature Cycle, -65/150C	1000 Cycles	3/231/0	3/231/0
PD	Physical Dimension	Per Datasheet	-	3/15/0
SD	Solderability	Pb-Free	-	3/66/0
UHAST	UnBiased HAST, 130C/85%RH	96 Hours	3/231/0	-
WBP	Bond Pull	Wires	3/228/0	3/228/0
WBS	Bond Shear	Wires	3/228/0	3/228/0
MQ	Manufacturing (Assembly)	Per Mfg Site Specification	3/Pass	3/Pass
MQ	Manufacturing (Fab)	Per Mfg Site Specification	-	3/Pass
MQ	Manufacturing (Testability)	Per Mfg Site Specification	3/Pass	3/Pass
MSL	Moisture Sensitivity	MSL 1 @ 260C	3/36/0	3/36/0
VQR	Visual Quality Reliability Inspection	Post Autoclave	-	3/6/0
VQR	Visual Quality Reliability Inspection	Post High Temp Storage Bake	-	3/6/0
VQR	Visual Quality Reliability Inspection	Post Temp Cycle	-	3/6/0

- QBS: Qual By Similarity
- Qual Device TL432LIBQDBZR is qualified at LEVEL1-260C; and other options as follows:
  - o TL432LIBIDBZR – 0.5% -40C to 85C
  - o TL432LIBCDBZR – 0.5% -40C to 70C
  - o TL432LIAQDBZR – 1% -40C to 125C
  - o TL432LIAIQDBZR – 1% -40C to 85C
  - o TL432LIACDBZR – 1% -40C to 70C

- 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

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