PCN Number:	20171101000	**PCN Date:**	Nov 03, 2017
Title:	Qualify New Assembly Material set for Selected Device(s)		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Feb 03, 2018	**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:

Texas Instruments is pleased to announce the qualification of new assembly material set to add Cu as an additional bond wire option for WQFN package devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows:

Material	Current	Proposed
Wire	1.2mil Au	1.0mil Cu, 1.2mil Au

Reason for Change:

Continuity of supply.

1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties
2) Maximize flexibility within our Assembly/Test production sites.
3) Cu is easier to obtain and stock

Anticipated impact on Fit, Form, 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-Info website. There is no impact to the material meeting current regulatory compliance requirements with this PCN change.

Changes to product identification resulting from this PCN:

None.

Product Affected:

LMX2531LQ1500E/NOPB	LMX2531LQX1742/NOPB	LMX2531SQE1650E/S7002603
LMX2531LQ1570E/NOPB	LMX2531LQX1778E/NOPB	LMX2531SQE1700E/NOPB
LMX2531LQ1650E/NOPB	LMX2531LQX1910E/NOPB	LMX2531SQE1742/NOPB
LMX2531LQ1650E/S7002162	LMX2531LQX2080E/NOPB	LMX2531SQE1778E/NOPB
LMX2531LQ1700E/NOPB	LMX2531LQX2265E/NOPB	LMX2531SQE1910E/NOPB
LMX2531LQ1742/NOPB	LMX2531LQX2570E/NOPB	LMX2531SQE2080E/NOPB
LMX2531LQ1778E/NOPB	LMX2531SQ1650E/NOPB	LMX2531SQE2265E/NOPB
LMX2531LQ1910E/NOPB	LMX2531SQ1700E/NOPB	LMX2531SQE2570E/NOPB
LMX2531LQ2080E/NOPB	LMX2531SQ1742/NOPB	LMX2531SQX1650E/NOPB
LMX2531LQ2265E/NOPB	LMX2531SQ1778E/NOPB	LMX2531SQX1700E/NOPB
LMX2531LQ2570E/NOPB	LMX2531SQ1910E/NOPB	LMX2531SQX1742/NOPB
LMX2531LQX1500E/NOPB	LMX2531SQ2080E/NOPB	LMX2531SQX1910E/NOPB
LMX2531LQX1570E/NOPB	LMX2531SQ2265E/NOPB	LMX2531SQX2570E/NOPB
LMX2531LQX1650E/NOPB	LMX2531SQ2570E/NOPB	
LMX2531LQX1700E/NOPB	LMX2531SQE1650E/NOPB	

Qualification Data

This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qualification Device: LMK04808BISQ/NOPB (MSL 3-260c)

Package Construction Details

Assembly Site:	TIEM	Mold Compound:	8095387
# Pins-Designator, Family:	64-NKD, WQFN	Mount Compound:	8001111
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	1 Mil Dia., Cu

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
Electrical Characterization	Datasheet	Pass	--	--
**High Temp. Storage Bake	150C (500, 1000 Hrs)	77/0	77/0	--
**Autoclave 121C	121C, 2 ATM (96 hrs)	78/0	78/0	78/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Visual / Mechanical	(per mfg. Site specification)	Pass	Pass	Pass
Ball Bond Shear	76 balls, 3 units min	Pass	Pass	Pass
Bond Pull	76 Wire, 3 units min	Pass	Pass	Pass
X-ray	(top side only)	Pass	Pass	Pass

Notes: **Tests received preconditioning sequence: MSL3-260C

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

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USA	PCNAmericasContact@list.ti.com
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