TEXAS INSTRUMENTS 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20140127000
Qualification of copper wire as alternate bonding material for selected products in QFN Package
Final Change Notification

Date: 1/29/2014
To: MOUSER PCN

Dear Customer:

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

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.

The changes discussed within this PCN will not take effect any earlier than **30** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process. Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

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
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

20140127000
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
LMK03806BISQE/NOPB	LMK03806BISQE/NOPB
LMK04101SQE/NOPB	LMK04101SQE NOPB
LMK04803BISQE/NOPB	LMK04803BISQE/NOPB
LMK04806BISQE/NOPB	LMK04806BISQE NOPB
LMK04806BISQE/NOPB	LMK04806BISQE/NOPB
LMK04808BISQE/NOPB	LMK04808BISQE/NOPB
LMK04828BISQE/NOPB	null
LMK04906BISQE/NOPB	null

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

PCN Number:	20140127000	PCN Date:	01/29/2014
Title:	Qualification of copper wire as alternate bonding material for selected products in QFN Package		
Customer Contact:	PCN Manager	Phone: +1(214)480-6037	Dept: Quality Services
Proposed 1st Ship Date:	02/28/2014	Estimated Sample Availability:	01/29/2014

Change Type:

☐	Assembly Site	☒	Assembly Process	☒	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☐	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part Number Change		

PCN Details

Description of Change:

To qualify Cu wire as alternative bond material for selected products in QFN package. Most of the devices in this notification were included in Forecast PCN20123101B published on March 20, 2012 which was issued from the National Semiconductor PCN system.

	From	To
Wire	Au, 0.9mil & 1.0mil	Cu, 1 mil or Au, 0.9mil & 1.0mil

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

Changes to product identification resulting from this PCN:

None

Product Affected:			
LMK03806BISQ/NOPB	LMK04803BISQE/NOPB	LMK04808BISQX/NOPB	LMK04826BISQ/NOPB
LMK03806BISQE/NOPB	LMK04803BISQX/NOPB	LMK04808CISQ/NOPB	LMK04826BISQE/NOPB
LMK03806BISQX/NOPB	LMK04805BISQ/NOPB	LMK04808CISQE/NOPB	LMK04826BISQX/NOPB
LMK03806CISQ/NOPB	LMK04805BISQE/NOPB	LMK04808CISQX/NOPB	LMK04828BISQ/NOPB
LMK03806CISQE/NOPB	LMK04805BISQX/NOPB	LMK04808DISQ/NOPB	LMK04828BISQE/NOPB
LMK03806CISQX/NOPB	LMK04806BISQ/NOPB	LMK04808DISQE/NOPB	LMK04828BISQX/NOPB
LMK04101SQ/NOPB	LMK04806BISQE/NOPB	LMK04808DISQX/NOPB	LMK04906BISQ/NOPB
LMK04101SQE/NOPB	LMK04806BISQX/NOPB	LMK04816BISQ/NOPB	LMK04906BISQE/NOPB
LMK04101SQX/NOPB	LMK04808BISQ/NOPB	LMK04816BISQE/NOPB	LMK04906BISQX/NOPB
LMK04803BISQ/NOPB	LMK04808BISQE/NOPB	LMK04816BISQX/NOPB	

Qualification Data: Approved November, 2013

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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com