12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20140130001
Hybrid Au/Cu wire bond flow for NFBGA Shiva and Freon Devices
Change Notification / Sample Request

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 90 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** 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.

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

PCN# 20140130001
Attachment: 1

Products Affected:

According to our records, there are the affected device(s) that you have purchased within the past twenty-four (24) months. Technical details of this Product Change follow on the next page(s).

PCN Number:	20140130001	PCN Date:	04/08/2014
Title:	Hybrid Au/Cu wire bond flow for NFBGA Shiva and Freon Devices		
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037
Dept:	Quality Services		
Proposed 1st Ship Date:	07/08/2014	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 is to Qualify a Hybrid Au/Cu wire bond flow for NFBGA Shiva and Freon Devices. See table below for reference:

Material Set	From	To
Wire diam (Mils)	0.8mil Au wire	0.8mil Au/Cu wire

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:

AM1802BZCED3	D840K012BZWT300	OMAPL132BZWTA2R	RZTHC6748
AM1802BZWTD3	D840K012BZWT400	OMAPL132DZWTA2	TMS320C6742BZCE2
AM1806BZCE3	D840K012BZWT456	OMAPL132DZWTA2R	TMS320C6742BZWT2
AM1806BZCE4	D840K022BZCE456	OMAPL132EZWTA2R	TMS320C6742BZWTA2
AM1806BZCEA3	D840K022BZWT300	OMAPL138AZCEA3	TMS320C6746AZWT3
AM1806BZCED4	D840K022BZWT456	OMAPL138AZWT3	TMS320C6746BZCE3
AM1806BZWT3	D850K002BZCE300	OMAPL138AZWT3SRT	TMS320C6746BZCEA3
AM1806BZWT4	D850K002BZCE400	OMAPL138BZCE3	TMS320C6746BZCED4
AM1806BZWTD4	D850K002BZCE456	OMAPL138BZCE4	TMS320C6746BZWT3
AM1808BZCE3	D850K002BZWT300	OMAPL138BZCEA3	TMS320C6746BZWT3CS
AM1808BZCE4	D850K002BZWT400	OMAPL138BZCEA3D	TMS320C6746BZWT4
AM1808BZCEA3	D850K002BZWT456	OMAPL138BZCEA3E	TMS320C6746BZWTA3

AM1808BZCED4	D850K012BZCE300	OMAPL138BZCEA3R	TMS320C6746BZWTD4
AM1808BZWT3	D850K012BZCE400	OMAPL138BZCED4	TMS320C6748AZCE3
AM1808BZWT4	D850K012BZCE456	OMAPL138BZCED4E	TMS320C6748AZWT3
AM1808BZWTA3	D850K012BZWT300	OMAPL138BZCEML	TMS320C6748BZCE3
AM1808BZWTD4	D850K012BZWT400	OMAPL138BZWT3	TMS320C6748BZCE4
AM1808BZWTT3	D850K012BZWT456	OMAPL138BZWT4	TMS320C6748BZCEA3
AM1810BZWTA3	D850K018BZWT400	OMAPL138BZWTA3	TMS320C6748BZCEA3E
AM3505AZCN	D850K022BZCE300	OMAPL138BZWTA3CS	TMS320C6748BZCED4
AM3505AZCNA	D850K022BZCE400	OMAPL138BZWTA3E	TMS320C6748BZCED4E
AM3505AZCNAC	D850K022BZCE456	OMAPL138BZWTA3R	TMS320C6748BZWT3
AM3505AZCNC	D850K022BZWT300	OMAPL138BZWTA4	TMS320C6748BZWT3CS
AM3517AZCN	D850K022BZWT400	OMAPL138BZWTD4	TMS320C6748BZWT4
AM3517AZCNA	D850K022BZWT456	OMAPL138BZWTD4E	TMS320C6748BZWTA3
AM3517AZCNAC	DCHGC6748	OMAPL138BZWTRB	TMS320C6748BZWTA3E
D840K002BZCE300	M1OMAPL138DZCE	OMAPL138CZWTA3RW	TMS320C6748BZWTD4
D840K002BZCE400	M1OMAPL138DZCER	OMAPL138CZWTD4RW	TMS320C6748BZWTD4E
D840K002BZCE456	M1OMAPL138EZCER	OMAPL138DZCEA3	TNETV138BINZWT4
D840K002BZWT300	M1OMAPL138ZCE	OMAPL138DZCEA3R	XAM1808BZCE4
D840K002BZWT400	M1OMAPL138ZCER	OMAPL138DZWTA3	XOMAPL138BZCE
D840K002BZWT456	OMAPL132BZWT2	OMAPL138DZWTA3R	XOMAPL138EZCEA3R
D840K012BZCE400	OMAPL132BZWTA2	OMAPL138EZCEA3R	XOMAPL138EZWTA3
D840K012BZCE456	OMAPL132BZWTA2E	OMAPL138EZWTA3R	XOMAPL138EZWTA3R

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.

Qual Vehicle 1: AM3517ZCN (MSL 3-260C)

Package Construction Details

Assembly Site:	TI-PHI	Mold Compound:	4205283
# Pins-Designator, Family:	491-ZCN, BGA	Mount Compound:	4205412
Solder Ball composition	SnAgCu	Bond Wire:	0.80Mil Au/Cu

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

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
** Biased HAST	130C/85%RH (264 HRS)	77/0	77/0	77/0
**Unbiased HAST	130C/85%RH (192 HRS)	77/0	77/0	77/0
**T/C	-55C/+125C (1000 Cyc)	77/0	77/0	77/0
**High Temp Storage Bake	150C (1000 Hrs)	20/0	20/0	20/0
ESD CDM	+/- 250V	3/0	3/0	3/0
Manufacturability	(per mfg. Site specification)	Pass	-	-
Notes **- Preconditioning sequence: Level 3-260C.				

Qual Vehicle 2: AM1808BZCE4 (MSL 3-260C)			
Package Construction Details			
Assembly Site:	TI-PHI	Mold Compound:	4208515
# Pins-Designator, Family:	361-ZCE, BGA	Mount Compound:	4205412
Solder Ball composition	SnAgCu	Bond Wire:	0.80Mil Au/Cu
Qualification: ☐ **Plan** ☒ **Test Results**			

Reliability Test	Conditions	Sample Size/Fail
ESD CDM	+/- 250V; +/- 500v; +/- 750V	3/0
Manufacturability	(per mfg. Site specification)	Pass

Qual Vehicle 3: OMAPL138BZWTQ3 (MSL 3-260C)			
Package Construction Details			
Assembly Site:	TI-PHI	Mold Compound:	4208515
# Pins-Designator, Family:	361-ZWT, BGA	Mount Compound:	4205412
Solder Ball composition	SnAgCu	Bond Wire:	0.80Mil Au/Cu
Qualification: ☐ **Plan** ☒ **Test Results**			

Reliability Test	Conditions	Sample Size/Fail
ESD CDM	+/- 250V; +/- 500v; +/- 750V	3/0
Manufacturability	(per mfg. Site specification)	Pass

Qual Vehicle 4: TMS320C6748BZWTA3E (MSL 3-260C)			
Package Construction Details			
Assembly Site:	TI-PHI	Mold Compound:	4208515
# Pins-Designator, Family:	361-ZWT, BGA	Mount Compound:	4205412
Solder Ball composition	SnAgCu	Bond Wire:	0.80Mil Au/Cu
Qualification: ☐ **Plan** ☒ **Test Results**			

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
** Biased Temp and Humidity	85C/85%RH (1000 Hrs)	26/0	26/0	26/0
**Unbiased HAST	110C/85%RH (264 Hrs)	77/0	77/0	77/0
**T/C	-55C/+125C (1000 Cyc)	77/0	77/0	77/0
**High Temp Storage Bake	150C (1000 Hrs)	77/0	77/0	77/0
Notes **- Preconditioning sequence: Level 3-260C.				

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