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

PCN# 20140218001
Qualify Au wire as Alternative Wire Base Metal for Selected WSON Device(s)
Change Notification / Sample Request

Date: 2/24/2014
To: MOUSER PCN

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 30 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

20140218001
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
TPS51604DSGT	null

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

PCN Number:	20140218001	**PCN Date:**	02/24/2014

Title:	Qualify Au wire as Alternative Wire Base Metal for Selected WSON Device(s)

Customer Contact:	PCN Manager	**Phone:**	+1(214)480-6037	**Dept:**	Quality Services

Proposed 1st Ship Date:	05/24/2014	**Estimated Sample Availability:**	Date provided at sample request

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:

Texas Instruments is pleased to announce the qualification of Au as an additional bond wire option for devices listed in “Product affected” section below. Devices will remain in current assembly facility and there will be no other piece part changes.

Reason for Change:

Manufacturing flexibility.

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None.

Changes to product identification resulting from this PCN:

None.

Product Affected:

TPS51604DSGR	TPS51604DSGT

Qualification Data

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

Qual Vehicle : TPS51604DSG (MSL 2-260C)

Package Construction Details

Assembly Site:	TI-Clark	Mold Compound:	4208625
# Pins-Designator, Family:	8-DSG, WSON	Mount Compound:	4207768
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.96 Mil Dia., Au

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

Reliability Test	Conditions	Sample Size/Fail
Electrical Characterization	-	Pass
Manufacturability (Assembly)	(per mfg. Site specification)	Pass
Notes	**- Preconditioning sequence: Level 2-260C.	

Reference Qualification Data

Qual Vehicle 1 : T5A33403ARVC (MSL 2-260C)

Package Construction Details

Assembly Site:	TI-Clark	Mold Compound:	4208625
# Pins-Designator, Family:	20-RVC, WQFN	Mount Compound:	4207768
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.3 Mil Dia., Au

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

Reliability Test	Conditions	Sample Size Pass/Fail		
		Lot# 1	Lot# 2	Lot# 3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65/150C (500 cycles)	77/0	77/0	76/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	Level 2-260C	12/0	12/0	12/0

Notes **- Preconditioning sequence: Level 2-260C.

Qual Vehicle 2 : TLV70028DSE (MSL 1-260C)

Package Construction Details

Assembly Site:	TI-Clark	Mold Compound:	4208625
# Pins-Designator, Family:	6-DSE, WSON	Mount Compound:	4207768
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.8 Mil Dia., Au

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

Reliability Test	Conditions	Sample Size Pass/Fail		
		Lot# 1	Lot# 2	Lot# 3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65/150C (500 cycles)	77/0	77/0	76/0
Salt Atmosphere	-	22/0	22/0	22/0
Surface Mount Solderability	8 Hours Steam Age-Pb Free	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	Level 1-260C	12/0	12/0	12/0

Notes **- Preconditioning sequence: Level 1-260C.

Qual Vehicle 3 : TPS61161DRV (MSL 2-260C)			
Package Construction Details			
Assembly Site:	TI-Clark	Mold Compound:	4208625
# Pins-Designator, Family:	6-DRV, WSON	Mount Compound:	4207768
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.31 Mil Dia., Au

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

Reliability Test	Conditions	Sample Size Pass/Fail		
		Lot# 1	Lot# 2	Lot# 3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65/150C (500 cycles)	77/0	77/0	76/0
Salt Atmosphere	-	22/0	22/0	22/0
Surface Mount Solderability	8 Hours Steam Age-Pb Free	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	Level 2-260C	12/0	12/0	12/0
Notes	**- Preconditioning sequence: Level 2-260C.			

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