

PCN Number:	20130814001			PCN Date:	08/26/2013
Title:	Add Cu as Alternative Wire Base Metal for Selected Device(s)				
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037	Dept:	Quality Services
Proposed 1st Ship Date:	11/26/2013	Estimated Sample Availability:	Date provided at sample request		
Change Type:					
<input type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
	<input type="checkbox"/>		Part number change		
PCN Details					
Description of Change:					
Texas Instruments is pleased to announce the qualification of Cu 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:					
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: Group 1 devices					
DAC34H84IZAY	DAC34H84IZAYR	DAC34SH84IZAY	DAC34SH84IZAYR		
Product Affected: Group 2 devices					
CSD95375Q4M	CSD97374Q4M	CSD97376Q4M			

Group 1 : 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 1: D6567GN0ZWKR (MSL 3-260C)

Package Construction Details

Assembly Site:	PHI (TIPI)	Mold Compound:	4206745
# Pins-Designator, Family:	385-ZWK, BGA	Mount Compound:	4073505
Solder Ball composition	SnAgCu	Bond Wire:	0.80Mil Cu

Qualification: Plan **Test Results**

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Biased Temp Humidity	85C/85%RH (600hrs)	78/0	-	-
**Unbiased HAST	110C/85%RH (264hrs)	78/0	78/0	78/0
**High Temp. Storage Bake	150C (600 hrs)	78/0	78/0	78/0
**T/C -65C/150C	-55C/+125C (1000 Cyc)	78/0	78/0	78/0
Manufacturability	(per mfg. Site specification)	Pass	Pass	Pass

Notes **- Preconditioning sequence: Level 3-260C.

Qual Vehicle 2: DAC34H84IZAY (MSL 3-260C)

Package Construction Details

Assembly Site:	PHI (TIPI)	Mold Compound:	4206745
# Pins-Designator, Family:	196-ZAY, BGA	Mount Compound:	4073505
Solder Ball composition	SnAgCu	Bond Wire:	0.95Mil Au

Qualification: Plan **Test Results**

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Autoclave	121C, 2atm (96hrs)	77/0	77/0	77/0
** Life Test	125C (1000hrs)	116/0	116/0	116/0
**Unbiased HAST	110C/85%RH (264hrs)	77/0	77/0	77/0
**T/C -65C/150C	-55C/+125C (500 Cyc)	77/0	77/0	77/0
Manufacturability	(per mfg. Site specification)	Pass	Pass	Pass

Notes **- Preconditioning sequence: Level 3-260C.

Group 2 : 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 1: CSD97374Q4M (MSL 2-260C)

Package Construction Details

Assembly Site:	TI Clark	Mold Compound:	4208625
# Pins-Designator, Family:	8-DPC, VSON	Mount Compound:	4211089
Lead frame (Finish, Base)	NiPdAu, Cu	Bond Wire:	0.96Mil Cu

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Autoclave	121C/100% RH (96hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH 80% Rated Vds (96hrs)	77/0	77/0	77/0
**T/C -65C/150C	-55C/+125C (1000 Cyc)	77/0	77/0	77/0
Manufacturability	(per mfg. Site specification)	Pass	Pass	Pass

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