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 1 st Ship Date: O3/27/2014 Estimated Sample Availability: Date provided at sample request Change Type: Assembly Site Assembly Process Assembly Materials Date provided at sample request Design Electrical Specification Mechanical Specification Mechanical Specification Wafer Bump Site Wafer Bump Material Wafer Bump Process Assembly Wafer Bump Process Wafer Fab Site Wafer Fab Materials Wafer Fab Process Wafer Fab Process Description of Change: PCN Details Post 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. In a lign with world technology trends and use wiring with enhanced mechanical and electrical properties Assembly/Test production sites. One. Onduct identification resulting from this PCN: None	PCN Number:		20	20131218003					PCN Date: 12/27/		12/27/20)13
Proposed 1 st Ship 03/27/2014 Estimated Sample Availability: Date provided at sample request Change Type:	Title:	itle: Add Cu as Alternative Wire Base Metal for Selected Device(s)										
Date: 03/27/2014 Estimated Sample Availability: sample request Change Type:			t:	PCN Mana	<u>ger</u>	Phone:	+1(214)480-603	7	Dept:	Quality Services		
Date: Isample request Change Type: Assembly Site Assembly Process Assembly Materials Design Electrical Specification Mechanical Specification Wafer Sump Site Packing/Shipping/Labeling Test Process Wafer Fab Site Packing/Shipping/Labeling Test Process Wafer Fab Site Wafer Fab Material Wafer Fab Process PCN Details Part number change Part number change PCN Details Part number change Part number change Reason for Change: Continuity of supply. 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. Nore devices listed in "Product affected" section sites. Maximize flexibility within our Assembly/Test production sites. So Cu is easier to obtain and stock Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative): None. None. Product Affected:	Proposed 1 st Ship			03/27/2	014	Estimate	Estimated Sample Availabilit		·v·	Date provided at		t
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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 : ADS5402IZAY (MSL 3-260C)							
Package Construction Details							
Assembly Site:	PHI (TIPI)	Mold Compound:	4206745	4206745			
# Pins-Designator, Family:	196-ZAY, BGA	Mount Compound:	4073505	4073505			
Solder Ball composition	SnAgCu	AgCu Bond Wire:		0.80Mil Cu			
Qualification: 🗌 Plan 🛛 Test Results							
Poliphility Test	Conditions	Conditions		Size/Fail			
Reliability Test	Conditions			Lot#2			
Electrical Characterization	-		30/0	-			
**T/C -55C/125C	-55C/+125C (10	-55C/+125C (1000 Cyc)		77/0			
Manufacturability	(per mfg. Site sp	(per mfg. Site specification) Pass -					
Notes **- Preconditioning sequence: Level 3-260C.							

Reference 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 : XIO2211ZAY (MSL 3-260C)							
Package Construction Details							
Assembly Site:	PHI (TIPI)	HI (TIPI) Mold Compound:		4206745			
# Pins-Designator, Family:	167-ZAY, BGA	Mount Compound:	40735	4073505			
Solder Ball composition	SnAgCu	Bond Wire: 0.80Mil Cu					
Qualification: 🗌 Plan 🛛 Test Results							
Deliebility Teet	Canditiana	Conditions		Sample Size/Fail			
Reliability Test	Conditions		Lot#1	Lot#2	Lot#3		
**Unbiased HAST	110C/85%RH (110C/85%RH (264 hrs)		77/0	77/0		
**T/C -55C/125C	-55C/+125C (1	-55C/+125C (1000 Cyc)		77/0	77/0		
**High Temp Storage Bake	150C (1000 hrs	150C (1000 hrs)		77/0	77/0		
Manufacturability	(per mfg. Site s	(per mfg. Site specification)		Pass	Pass		
Notes **- Preconditioning sequence: Level 3-260C.							

Qual Vehicle 2 : TWL3033H4IZXX (MSL 3-260C)							
Package Construction Details							
Assembly Site:	PHI (TIPI)	HI (TIPI) Mold Compound:		4206745			
# Pins-Designator, Family:	209-ZXX, BGA	09-ZXX, BGA Mount Compound:		4073505			
Solder Ball composition	SnAgCu	nAgCu Bond Wire:		0.80Mil Cu			
Qualification: 🗌 Plan	Test Results						
Deliebility Teet	Canditiana	Conditions		Sample Size/Fail			
Reliability Test	Conditions			Lot#2	Lot#3		
Electrical Characterization	-	-		-	-		
** Life test	125C (1000 hrs	125C (1000 hrs)		77/0	77/0		
**Biased HAST	130C/85%RH (130C/85%RH (96 hrs)		77/0	77/0		
**Unbiased HAST	110C/85%RH (110C/85%RH (264 hrs)		77/0	77/0		
**T/C -55C/125C	-55C/+125C (1	-55C/+125C (1000 Cyc)		77/0	77/0		
**High Temp Storage Bake	150C (1000 hrs	150C (1000 hrs)		77/0	77/0		
Manufacturability	(per mfg. Site				Pass		
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