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 03/27/2014 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 Bump Process Pert number change Pert number change Pert number change Description of Change: Part number changes. Reason for Change: Continuity of supply. In a dign 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. None. Produc	PCN Number:		20131218003					PCN I	PCN Date: 12/27/2)13	
Customer Contact: PCN Manager Phone: +1(214)480-6037 Dept: Quality Services Proposed 1 st Ship Date: 03/27/2014 Estimated Sample Availability: Date provided at sample request 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 Part number change Wafer Fab Process Description of Change: PCN Details PCN Details Description of Change: Estimated and use wiring with enhanced mechanical and electrical properties Image: Product affected" section below. Devices will remain in current assembly facility and there will be no other piece part changes. Reason for Change: Estimated and use wiring with enhanced mechanical and electrical properties 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative): None. None. Product Affected: (Ansteindent in Control in this PCN: None. None.	Title: Add Cu as Alternative Wire Base Metal for Selected Device(s)											
Proposed 1 st Ship Date: 03/27/2014 Estimated Sample Availability: Date provided at sample request Change Type:	Customer Contact		t:	PCN Mana	<u>ger</u>	Phone:	+1(214)480-603	7	Dept:	Quality Services		
Date: 03/27/2014 Estimated stample Rotation(1) sample request Change Type: Assembly Site Assembly Process Assembly Materials Design Electrical Specification Mechanical Specification Wafer Bump Site Packing/Shipping/Labeling Test Process Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Site Part number change Wafer Fab Process Pert number change Pert Notetails Wafer Fab Process Description of Change: Pert number changes Pert number changes. Reason for Change: Continuity of supply. Pert number piece part changes. Reason for Change: Continuity of supply. Postanical 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. Product Affected: Ansembly form this PCN: None. Ansembly on this performation of the performat	Proposed 1 st Ship			03/27/2	014	Estimate	Estimated Sample Availability		·v·	Date provided at		t
Change Type: Assembly Site Assembly Process Assembly Materials Design Electrical Specification Mechanical Specification Wafer Bump Site Packing/Shipping/Labeling Test Process Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Site Packing/Shipping/Labeling Wafer Fab Process Part number change Wafer Fab Process Packing/Shipping/Labeling Wafer Fab Process Part number change Part number change Wafer Fab Process Packing/Shipping/Labeling Wafer Fab Process Pert number change Part number change Wafer Fab Process Part number change Wafer Fab Process Description of Change: PCN Details Pert number changes. Pert number changes. Reason for Change: Continuity of supply. In collign with world technology trends and use wiring with enhanced mechanical and electrical properties 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties In collign with world technology trends and use wiring with enhanced mechanical and electrical properties 2) Maximize flexibility within our Assembly/Test production sites. In collign with world technology trends and use wiring with enhanced mechanical and electrical properties	Date:			03/2//2	.011	Lotination		5		sampl	e request	
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 Part number change Wafer Fab Process PCN Details Part number change Wafer Fab Process Description of Change: Pert number change Wafer Fab Process 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. Product Affected:	Change	Туре:			-							
Design Electrical Specification Mechanical Specification Test Site Packing/Shipping/Labeling Test Process Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Site Part number change Wafer Fab Process Description of Change: Part number change Wafer Fab Process 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. Product Affected: Anse Affected:		mbly Site			Assembly Process				Assem	bly Mat	erials	
Itest Site Packing/Shipping/Labeling Itest Process Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Site Part number change Wafer Fab Process PCN Details Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert number change Pert details Pert details Pert number change Pert details Pert details Pert details Pert details Pert changes Pert changes Pert details Pert changes Pert changes Product Affected: Pert changes Pert ch	Desi	gn Cite			Electrical Specification			Mechar	nical Sp	ecification		
Water Bump Site Water Bump Process Water Fab Site Water Fab Materials Water Fab Process Part number change Water Fab Process Water Fab Process PCN Details Percent number change Percent Process Description of Change: PCN Details Percent Process 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: ADS54031ZAYP ADS54031ZAYP		Site	ita		Packing/Shipping/Labeling			Test Pr	OCESS	****		
Water Pab Site Water Pab 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. Product Affected: ADS54011ZAY ADS54031ZAYP		er burnp S	ne		Waf	Nater Bump Material			Wafer Bump Process			
PCN Details 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. Product Affected: ADS54001IZAY ADS54001ZAY		er rad Site			Part				Wafer Fab Process			
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. Product Affected: ADS54011ZAY ADS54031ZAYP					Ture	PCN	Details					
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. Product Affected: ADS54011ZAY ADS54031ZAYP	Descript	tion of Ch	ang	e:			Dettallo					
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: ADS54011ZAY	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.											
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: ADS54001ZAY ADS54001ZAY ADS54001ZAY ADS54001ZAY	Reason for Change:											
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative): None. Product Affected: ADS54011ZAY	 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 											
None. Product Affected: ADS54011ZAX ADS54031ZAXP	Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):											
Changes to product identification resulting from this PCN: None. Product Affected: ADS54011ZAX ADS54031ZAXP	None.											
None. Product Affected: ADS54011ZAY ADS54031ZAYP	Changes to product identification resulting from this PCN:											
	None.											
	Product Affected:											
	ADS540	1IZAY		ADS540)3IZA	YR	ADS5409IZAY		ADS54	T02IZA	AYR	
ADS5401IZAYR ADS5404IZAY ADS5409IZAYR ADS54T04IZAY	ADS540	1IZAYR		ADS540)4IZA	Y	ADS5409IZAYR		ADS54	T04IZA	λY	
ADS5402IZAY ADS5404IZAYR ADS54T01IZAY ADS54T04IZAYR	ADS540	2IZAY		ADS540)4IZA	YR	ADS54T01IZAY		ADS54	T04IZA	AYR .	
ADS5402IZAYR ADS5407IZAY ADS54T01IZAYR	ADS540	2IZAYR		ADS540)7IZA	Y	ADS54T01IZAYR					
ADS5403IZAY ADS5407IZAYR ADS54T02IZAY	ADS540	3IZAY		ADS540)7IZA	YR	ADS54T02IZAY					

Qualification Data						
This qualification has been developed for the validation of this change. The qualification data						
validates that the propose	ed cl	hange meets the a	pplicable released teo	chnical specifica	ations.	
Qual Vehicle : ADS5402IZAY (MSL 3-260C)						
Package Construction Details						
Assembly Site: Pl		I (TIPI)	Mold Compound:	Compound: 4206745		
# Pins-Designator, 19		6-ZAY, BGA	Mount Compound:	4073505	4073505	
Family:		-				
Solder Ball composition Sr		nAgCu Bond Wire:		0.80Mil Cu	0.80Mil Cu	
Qualification: 🗌 Plan 🛛 Test Results						
Deliability Teet		Conditions		Sample Size/Fail		
Reliability Test		Conditions		Lot#1	Lot#2	
Electrical Characterizatior	۱	-		30/0	-	
**T/C -55C/125C		-55C/+125C (1000 Cyc)		77/0	77/0	
Manufacturability		(per mfg. Site sp	ecification)	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)	Mold Compound:	42067	45		
# Pins-Designator, Family:	167-ZAY, BGA	67-ZAY, BGA Mount Compound:		4073505		
Solder Ball composition	SnAgCu	SnAgCu Bond Wire:		0.80Mil Cu		
Qualification: 🗌 Plan 🛛 Test Results						
Doliability Toot	Conditions		Sample Size/Fail			
Reliability Test			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 Con	struction 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	SnAgCu Bond Wire:		0.80Mil Cu			
Qualification: 🗌 Plan 🛛 Test Results							
Deliability Teet	Conditions	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		
**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	(per mfg. Site specification) Pass Pass Pas			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