

PCN Number:	20140403000		PCN Date:	04/30/2014							
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:	07/30/2014	Estimated Sample Availability:	Date provided at sample request								
Change Type:											
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site						
<input checked="" type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material						
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process						
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site						
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials						
		<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process						
PCN Details											
Description of Change:											
<p>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.</p> <p>Group 1 Device: Wire material change only</p> <p>Group 2 Device: Wire material and diam change</p> <table border="1"> <thead> <tr> <th></th> <th>Au wire</th> <th>Cu wire</th> </tr> </thead> <tbody> <tr> <td>Wire diam (mils)</td> <td>1.20, 1.30</td> <td>1.0</td> </tr> </tbody> </table>							Au wire	Cu wire	Wire diam (mils)	1.20, 1.30	1.0
	Au wire	Cu wire									
Wire diam (mils)	1.20, 1.30	1.0									
Reason for Change:											
<p>Continuity of supply.</p> <ol style="list-style-type: none"> 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

ADS1112IDRCR	MSC1202Y3RHHT	SN75LBC180RSATG4	TPS62320DRCRG4
ADS1112IDRCRG4	MSC1202Y3RHHTG4	SN75LVCP601RTJR	TPS62321DRCR
ADS1112IDRCT	OPA2381AIDRBT	SN75LVCP601RTJT	TPS62321DRCRG4
ADS1112IDRCTG4	OPA2381AIDRBTG4	TLV320AIC26IRHB	TRF3701IRHC
ADS7826IDRBR	OPA381AIDRBR	TLV320AIC26IRHBG4	TRF3701IRHCG4
ADS7826IDRBRG4	OPA381AIDRBRG4	TLV320AIC26IRHBR	TRF3701IRHCR
ADS7826IDRBT	OPA381AIDRBT	TLV320AIC26IRHBG4	TRF3701IRHCRG4
ADS7826IDRBTG4	OPA381AIDRBTG4	TLV320AIC28IRGZ	TRF3702IRHC
ADS7827IDRBR	PCM1774RGPT	TLV320AIC28IRGZG4	TRF3702IRHCG4
ADS7827IDRBRG4	PCM1774RGPTG4	TLV320AIC28IRGZR	TRF3702IRHCR
ADS7827IDRBT	PCM1777RHB	TLV320AIC28IRGZRG4	TRF3702IRHCRG4
ADS7827IDRBTG4	PCM1777RHBR	TLV320AIC3106IRGZR	TRF3750IRGP
AMC7823IRTAR	PCM1777RHBT	TLV320AIC3106IRGZT	TRF3750IRGPG4
AMC7823IRTARG4	PCM1870RHFR	TLV320AIC31IRHBR	TRF3750IRGPR
AMC7823IRTAT	PCM1870RHFRG4	TLV320AIC31IRHBG4	TRF3750IRGPRG4
AMC7823IRTATG4	PCM1870RHFT	TLV320AIC31IRHBT	TSC2100IRHB
BQ27000DRKR	PCM1870RHFTG4	TLV320AIC31IRHBTG4	TSC2100IRHBG4
BQ27000DRKRG4	PCM3793ARHBR	TLV320AIC32IRHBR	TSC2100IRHBR
BQ27010DRKR	PCM3793ARHBG4	TLV320AIC32IRHBG4	TSC2100IRHBG4
BQ27010DRKRG4	PCM3793ARHBT	TLV320AIC32IRHBT	TSC2101IRGZ
BQ27200DRKR	PCM3793ARHBTG4	TLV320AIC32IRHBTG4	TSC2101IRGZG4
BQ27200DRKRG4	PCM3793RHBR	TLV320DA26IRHBG4	TSC2101IRGZR
BQ27210DRKR	PCM3793RHBRG4	TLV320DAC26IRHB	TSC2101IRGZRG4
BQ27210DRKRG4	PCM3793RHBT	TLV320DAC26IRHBG4	TSC2111IRGZT
CDCM1802RGTR	PCM3793RHBTG4	TLV320DAC26IRHBR	TSC2111IRGZTG4
CDCM1802RGTRG4	PCM3794ARHBR	TLV320DAC26IRHBG4	UCD9080RHBR
CDCM1802RGTT	PCM3794ARHBG4	TLVAIC3106IRGZRG4	UCD9080RHBRG4
CDCM1802RGTTG4	PCM3794ARHBT	TLVAIC3106IRGZTG4	UCD9080RHBT
DAC8531IDRBR	PCM3794ARHBTG4	TPS61103RGER	UCD9080RHBTG4
DAC8531IDRBRG4	PCM3794RHBR	TPS61103RGERG4	UCD9081RHBR
DAC8531IDRBT	PCM3794RHBRG4	TPS61107RGER	UCD9081RHBRG4
DAC8531IDRBTG4	PCM3794RHBT	TPS61107RGERG4	UCD9081RHBT
HPA00093IRGZR	PCM3794RHBTG4	TPS61132RSAR	UCD9081RHBTG4
HPA00203DRKR	PTLV320AIC19IRHB	TPS61132RSARG4	VCA2615RGZR
HPA00211DRKR	SN0708077DRPR	TPS62300DRCR	VCA2615RGZRG4
HPA00242DRKR	SN0708077DRPRG4	TPS62300DRCRG4	VCA2615RGZT
HPA00374DRKR	SN1002034DRKR	TPS62301DRCR	VCA2615RGZTG4
HPA00397RHFR	SN27210DRKR	TPS62301DRCRG4	VCA2617RHBR
HPA00425DRKR	SN55LBC180RSAR	TPS62302DRCR	VCA2617RHBRG4
HPA00599DRKR	SN55LBC180RSAT	TPS62302DRCRG4	VCA2617RHBT
HPA00906DRKR	SN65LBC180RSAR	TPS62303DRCR	VCA2617RHBTG4
HPA00949DRKR	SN65LBC180RSARG4	TPS62303DRCRG4	VSP5601RSHR
HPA00972RTJR	SN65LBC180RSAT	TPS62304DRCR	VSP5602RSLR
MSC1202Y2RHHT	SN65LBC180RSATG4	TPS62304DRCRG4	VSP5610RSHR
MSC1202Y2RHHTG4	SN74LVC244ARGYR	TPS62305DRCR	
MSC1202Y3RHHR	SN74LVC244ARGYRG4	TPS62305DRCRG4	
MSC1202Y3RHHRG4	SN75LBC180RSAT	TPS62320DRCR	

Product Affected: Group 2 Devices			
ADS8361IRHBR	OPA2277AIDRMTG4	TLV320AIC23BIRHD	TPS61181RTERG4
ADS8361IRHBRG4	OPA2727AIDRBR	TLV320AIC23BIRHDG4	TPS61182RTER
ADS8361IRHBT	OPA2727AIDRBRG4	TLV320AIC23BIRHDR	TPS61182RTERG4
ADS8361IRHBTG4	OPA2727AIDRBT	TLV320AIC23BRHD	TPS61182RTET
BQ24650RVAR	OPA2727AIDRBTG4	TLV320AIC23BRHDG4	TPS61182RTETG4
BQ24650RVAT	OPA277AIDRMR	TLV320AIC23BRHDR	TPS61189RTJR
BQ24651RVAR	OPA277AIDRMRG4	TLV320AIC23BRHDRG4	TPS65190RHDR
BQ24651RVAT	OPA277AIDRMT	TLV320DAC23IRHD	TPS75003RHLR
BQ24704RGER	OPA277AIDRMTG4	TLV320DAC23IRHDG4	TPS75003RHLRG4
BQ24704RGET	OPA727AIDRBT	TLV320DAC23IRHDR	TPS75003RHLLT
BQ24730RGFT	OPA727AIDRBTG4	TLV320DAC23IRHDRG4	TPS75003RHLLTG4
BQ24730RGFTG4	OPA728AIDRBT	TLV320DAC23RHD	TSC2046EIRGVR
BQ24753ARHDR	OPA728AIDRBTG4	TLV320DAC23RHDG4	TSC2046EIRGVRG4
BQ24753ARHDT	THS4211DRBR	TLV320DAC23RHDR	TSC2046EIRGVT
DRV10863DSNR	THS4211DRBRG4	TLV320DAC23RHDRG4	TSC2046EIRGVTG4
DRV601RTJR	THS4211DRBT	TPA4411MRTJR	TSC2046IRGVR
DRV601RTJRG4	THS4211DRBTG4	TPA4411MRTJRG4	TSC2046IRGVRG4
DRV601RTJT	THS4215DRBR	TPA4411MRTJT	TSC2046IRGVT
DRV601RTJTG4	THS4215DRBRG4	TPA4411MRTJTG4	TSC2046IRGVTG4
HPA00146RHFR	THS4215DRBT	TPA4411RTJR	TSC2200IRHB
HPA00176BRHDR	THS4215DRBTG4	TPA4411RTJRG4	TSC2200IRHBG4
HPA00230MRTJRG4	THS6184RHFR	TPA4411RTJT	TSC2200IRHBR
HPA00388RTER	THS6184RHFRG4	TPA4411RTJTG4	TSC2200IRHBRG4
HPA00571RHLR	THS6184RHFT	TPS61181ARTER	
HPA00899RTER	THS6184RHFTG4	TPS61181ARTET	
OPA2277AIDRMT	TLV320A23BIRHDRG4	TPS61181RTER	

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 : ADS-8484IBRGZ (MSL 2-260C)			
Package Construction Details			
Assembly Site:	CRS	Mold Compound:	435370
# Pins-Designator, Family:	48-RGZ, QFN	Mount Compound:	439525
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results			
Reliability Test	Conditions	Sample Size/Fail	
		Lot# 1	Lot# 2
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-
**High Temp Storage Bake	175C (363 Hrs)	77/0	77/0
**Temperature Cycle	-65/150C (500 cyc)	77/0	77/0
Notes **- Preconditioning sequence: Level 2-260C.			

Qual Vehicle 2 : SN74CBTLV3245ARGYR (MSL 2-260C)					
Package Construction Details					
Assembly Site:	CRS	Mold Compound:	435370		
# Pins-Designator, Family:	20-RGY, QFN	Mount Compound:	439525		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu		
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test	Conditions	Sample Size/Fail			
		Lot# 1	Lot# 2	Lot# 3	
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	
** Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0	
** Autoclave	121C (96 Hrs)	77/0	77/0	77/0	
**Temperature Cycle	-65/150C (500 cyc)	77/0	77/0	77/0	
Moisture Sensitivity	(level 2 @ 260C peak +5/-0C)	12/0	12/0	12/0	
Notes ** - Preconditioning sequence: Level 2-260C.					
Qual Vehicle 3 : TLV320AIC3104IRHBR (MSL 2-260C)					
Package Construction Details					
Assembly Site:	CRS	Mold Compound:	435370		
# Pins-Designator, Family:	32-RHB, QFN	Mount Compound:	439525		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.8 Mil Dia., Cu		
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test	Conditions	Sample Size/Fail			
		Lot# 1	Lot# 2	Lot# 3	
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	
**High Temp Storage Bake	170C (420 Hrs)	80/0	80/0	80/0	
** Autoclave	121C (96 Hrs)	80/0	80/0	80/0	
**Temperature Cycle	-65/150C (500 cyc)	77/0	77/0	77/0	
Moisture Sensitivity	(level 2 @ 260C peak +5/-0C)	12/0	12/0	12/0	
Notes ** - Preconditioning sequence: Level 2-260C.					

Qual Vehicle 4 : TPA6130A2RTJR (MSL 2-260C)			
Package Construction Details			
Assembly Site:	CRS	Mold Compound:	435370
# Pins-Designator, Family:	20-RTJ, QFN	Mount Compound:	439525
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.8 Mil Dia., Cu
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results			
Reliability Test	Conditions	Sample Size/Fail	
		Lot# 1	Lot# 2
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-
**Temperature Cycle	-65/150C (500 cyc)	77/0	77/0
Notes **- Preconditioning sequence: Level 2-260C.			
Qual Vehicle 5 : TPS65192RHDR (MSL 2-260C)			
Package Construction Details			
Assembly Site:	CRS	Mold Compound:	435370
# Pins-Designator, Family:	28-RHD, QFN	Mount Compound:	439525
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results			
Reliability Test	Conditions	Sample Size/Fail	
		Lot# 1	Lot# 2
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	
Electrical Characterization	-	Pass	

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
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