

PCN Number:	20140916000			PCN Date:	09/29/2014									
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:	12/29/2014		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"/>	Wafer Fab Process									
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:														
<table border="1"> <thead> <tr> <th>Pkg</th> <th>Wire From</th> <th>Wire To</th> </tr> </thead> <tbody> <tr> <td>SOIC, SOT23, VSSOP, & TSSOP</td> <td>Au, 0.9 & 1.0mil</td> <td>Cu, 0.96mil or Au, 0.9 & 1.0mil</td> </tr> <tr> <td>TO263</td> <td>Au, 1.3 & 2.0mil</td> <td>Au, 1.3 & 2.0mil or Cu, 1.3 & 2.0mil</td> </tr> </tbody> </table>						Pkg	Wire From	Wire To	SOIC, SOT23, VSSOP, & TSSOP	Au, 0.9 & 1.0mil	Cu, 0.96mil or Au, 0.9 & 1.0mil	TO263	Au, 1.3 & 2.0mil	Au, 1.3 & 2.0mil or Cu, 1.3 & 2.0mil
Pkg	Wire From	Wire To												
SOIC, SOT23, VSSOP, & TSSOP	Au, 0.9 & 1.0mil	Cu, 0.96mil or Au, 0.9 & 1.0mil												
TO263	Au, 1.3 & 2.0mil	Au, 1.3 & 2.0mil or Cu, 1.3 & 2.0mil												
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 Form, Fit, Function, Quality or Reliability (positive / negative):														
None														
Changes to product identification resulting from this PCN:														
None														
Product Affected:														
ADC08351CIMTCE/NOPB	LM25085MYX/NOPB	LM5035DMH/NOPB	SM72240MFE-3.08/NOPB											
ADC141S625CIMM/NOPB	LM25101CMY/NOPB	LM5035DMHX/NOPB	SM72240MFE-4.63/NOPB											
ADC141S625CIMMX/NOPB	LM25118MH/NOPB	LM5035MH/NOPB	SM72240MFX-3.08/NOPB											
DAC121S101CIMMX/NOPB	LM25118MHE/NOPB	LM5035MHX/NOPB	SM72240MFX-4.63/NOPB											
EMB1402MT/NOPB	LM25118MHX/NOPB	LM5039MH/NOPB	SM73301MF/NOPB											
EMB1402MTE/NOPB	LM2743MTC/J7002889	LM5039MHX/NOPB	SM73301MFE/NOPB											
EMB1402MTX/NOPB	LM2743MTCX/J7002890	LM5085MM/NOPB	SM73301MFX/NOPB											
EMB1439MA/NOPB	LM317KTTR	LM5085MME/NOPB	SM73303MM/NOPB											
EMB1439MAE/NOPB	LM317KTTRG3	LM5085MMX/NOPB	SM73303MME/NOPB											
EMB1439MAX/NOPB	LM337KTTR	LM5085MY/NOPB	SM73303MMX/NOPB											
EMB1485MF/NOPB	LM337KTTRG3	LM5085MYE/NOPB	SM73306MA/NOPB											
EMB1485MFE/NOPB	LM3407MY/NOPB	LM5085MYX/NOPB	SM73306MAE/NOPB											
EMB1485MFX/NOPB	LM3407MYX/NOPB	LM5100CMY/NOPB	SM73306MAX/NOPB											
LDC5553MM-1/NOPB	LM3431AMH/NOPB	LM5100CME/NOPB	SM73403MF/NOPB											

LDC5553MME-1/NOPB	LM3431AMHX/NOPB	LM5100CMYX/NOPB	SM73403MFE/NOPB
LDC5553MMX-1/NOPB	LM3431MH/NOPB	LM5101CMY/NOPB	SM73403MFX/NOPB
LDC6994BIME/NOPB	LM3431MHX/NOPB	LM5101CME/NOPB	TL2575-05IKTTR
LDC6994BIMX/NOPB	LM3447MT/NOPB	LM5101CMYX/NOPB	TL2575-05IKTTRG3
LDC963ACM3/NOPB	LM3447MTE/NOPB	LM5118MH/NOPB	TL2575-12IKTTR
LDC963ACM3E/NOPB	LM3447MTX/NOPB	LM5118MHX/NOPB	TL2575-15IKTTR
LDC963ACM3X/NOPB	LM3724EM5-3.08/NOPB	LM7372MR	TL2575-33IKTTR
LDC963BIM3/NOPB	LM4050CEM3-8.2/NO	LM7372MR/NOPB	TL2575-ADJIKTTR
LDC963BIM3E/NOPB	LM5015MH/NOPB	LM7372MRX	TL2575-ADJIKTTRG3
LDC963BIM3X/NOPB	LM5015MHE/NOPB	LM7372MRX/NOPB	TL2575HV-05IKTTR
LDC963CIM3/NOPB	LM5015MHX/NOPB	LMC555IM/NOPB	TL2575HV-05IKTTRG3
LDC963CIM3E/NOPB	LM5021MM-1/NOPB	LMC555IMX/NOPB	TL2575HV-12IKTTR
LDC963CIM3X/NOPB	LM5021MM-1/S7003080	LMC8101MMX/NOPB	TL2575HV-12IKTTRG3
LDCV963AIM5/NOPB	LM5021MM-2/NOPB	LME49726MY/NOPB	TL2575HV-15IKTTR
LDCV963AIM5E/NOPB	LM5021MMX-1/NOPB	LME49726MYX/NOPB	TL2575HV-33IKTTR
LDCV963AIM5X/NOPB	LM5021MMX-2	LMP2012MM/CY	TL2575HV-ADJIKTTR
LHV720MA/NOPB	LM5021MMX-2/NOPB	LMV342MMX/MESN	TL750L05CKTTR
LHV720MAX/NOPB	LM5027AMH/NOPB	LMV602MM/NOPB	TL750L05CKTTRG3
LM1971M	LM5027AMHX/NOPB	LMV602MMX/NOPB	TL780-05CKTTR
LM1971M/NOPB	LM5027MH/NOPB	LMV604MT/NOPB	TL780-05CKTTRG3
LM1971MX	LM5027MH-1/NOPB	LMV604MTX/NOPB	TL783CKTTR
LM1971MX/NOPB	LM5027MHX/NOPB	LMV611MF/NOPB	TL783CKTTRG3
LM25085AMM/NOPB	LM5027MHX-1/NOPB	LMV611MFX/NOPB	TLV1117-50CKTTR
LM25085AMME/NOPB	LM5034MTCX/S7002252	LMV612MM/NOPB	TLV1117CKTTR
LM25085AMMX/NOPB	LM5034MTCX/S7003093	LMV612MMX/NOPB	TLV1117CKTTRG3
LM25085AMY/NOPB	LM5035AMH/NOPB	LMV614MT/NOPB	TLV1117IKTTR
LM25085AMYE/NOPB	LM5035AMH-1/NOPB	LMV614MTX/NOPB	TLV1117IKTTRG3
LM25085AMYX/NOPB	LM5035AMHX/NOPB	LMV722MM/MESN	UA7805CKTTR
LM25085MM/NOPB	LM5035AMHX-1/NOPB	LMV7271MFX/HFLF	UA7805CKTTRG3
LM25085MME/NOPB	LM5035BMH/NOPB	LMV7271MFX/NOPB	UA7812CKTTR
LM25085MMX/NOPB	LM5035BMHX/NOPB	LMV774MT/CY	UA7812CKTTRG3
LM25085MY/NOPB	LM5035CMH/NOPB	SM72240MF-3.08/NOPB	UA7815CKTTR
LM25085MYE/NOPB	LM5035CMHX/NOPB	SM72240MF-4.63/NOPB	UA7905CKTTR

Qualification Data: Approved June, 2009

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: TLE4275QKTTRQ1 (MSL3 260C)

Package Construction Details

Assembly Site:	NFME	Mold Compound:	R-07
# Pins-Designator, Family:	5-KTT, TO-263	Mount Compound:	A-05
Lead frame (Finish, Base):	Cu, Matte Sn	Bond Wire, Diameter:	2.0 mil Cu wire

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot 1	Lot 2	Lot 3
**Temperature Cycle	-65/150C (750 cycles)	75/0	75/0	77/0
**High Temperature Storage	150C (1000 hrs)	50/0	-	-
**Autoclave	121C (96 hrs)	84/0	82/0	82/0
**Biased HAST	130C/85%RH (240 hrs)	79/0	79/0	85/0

Note: **Preconditioning: MSL 3@260C

Reference Qualification Data: Approved May, 2013

Qual Vehicle 2: LMC7101AIM5/NOPB (MSL 1-260C)

Package Construction Details

Assembly Site:	TIEM	Mount Compound:	8075531
# Pins-Designator, Family:	5-DBV, SOT	Mold Compound:	8095181
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	0.96 Mil Dia., Cu

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
**High Temp. Storage Bake	150C (500, 1000 Hrs)	77/0	--	--
**Biased HAST	130C/85%/33.3 psia (96 hrs),	77/0	77/0	77/0
**Autoclave	121C (96 hrs)	77/0	77/0	77/0
** Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0

Note: **Preconditioning: MSL 1@260C

Reference Qualification Data: Approved July, 2014

Qual Vehicle 3: LM431CCM3/NOPB (MSL1-235C)

Package Construction Details

Assembly Site:	TIEM	Mount Compound:	8075531
# Pins-Designator, Family:	3-DBV, SOT	Mold Compound:	8095181
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	0.96 Mil Dia., Cu

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
**Autoclave	121C (96 hrs)	77/0	77/0	77/0
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0
**High Temp. Storage Bake	150C (500, 1000 Hrs)	77/0	77/0	77/0

Note: **Preconditioning: MSL 1@235C

Reference Qualification Data: Approved April, 2004					
Qual Vehicle 4: LM2594HVM-ADJ (MSL 1-235C)					
Package Construction Details					
Assembly Site:	TIEM	Mound Compound:	8075531		
# Pins-Designator, Family:	8-D, SOIC	Mold Compound:	8095181		
Leadframe (Finish, Base):	SnPb, Cu	Bond Wire:	1.5 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	
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0	
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Note: **Preconditioning: MSL 1@235C					

Reference Qualification Data: Approved October, 2012					
Qual Vehicle 5: LMC6482AIM/NOPB (MSL 1-260C)					
Package Construction Details					
Assembly Site:	TIEM	Mount Compound:	8075531		
# Pins-Designator, Family:	8-D, SOIC	Mold Compound:	8095181		
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	1 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	
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0	
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0	
**High Temperature Storage	150C (1000 hrs)	77/0	77/0	--	
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Note: **Preconditioning: MSL 1@260C					

Reference Qualification Data: Approved January, 2014					
Qual Vehicle 6: LMC6482IMMNOBP (MSL 1-260C)					
Package Construction Details					
Assembly Site:	TIEM	Mount Compound:	8075531		
# Pins-Designator, Family:	8-DGK, MSOP	Mold Compound:	8096859		
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	1 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	
**Autoclave 121C	121C, 2 ATM (96 hrs)	80/0	80/0	80/0	
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Note: **Preconditioning: MSL 1@260C					

Reference Qualification Data: Approved May, 2013**Qual Vehicle 7: LMV852MMX/NOPB (MSL 1-260C)**

Package Construction Details

Assembly Site:	TIEM	Mount Compound:	8075531
# Pins-Designator, Family:	8-DGK, MSOP	Mold Compound:	8096859
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	0.96 Mil Dia., Cu

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
**Autoclave 121C	121C, 2 ATM (96 hrs)	80/0	80/0	80/0
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0

Note: **Preconditioning: MSL 1@260C

Reference Qualification Data: Approved July, 2014**Qual Vehicle 8: LMV852MM/NOPB (MSL 1-260C)**

Package Construction Details

Assembly Site:	TIEM	Mount Compound:	8075531
# Pins-Designator, Family:	8-DGK, MSOP	Mold Compound:	4209002
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	0.96 Mil Dia., Cu

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0

Note: **Preconditioning: MSL 1@260C

Reference Qualification Data: Approved June, 2013**Qual Vehicle 9: LM5037MT/NOPB (MSL 1-260C)**

Package Construction Details

Assembly Site:	TIEM	Mount Compound:	8075531
# Pins-Designator, Family:	16-PW, TSSOP	Mold Compound:	8095181
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	1.0 Mil Dia., Cu

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
**Biased Temp. Humidity	85C/85%RH (1000 hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0
** High Temperature Storage	150C (1000 hrs)	77/0	77/0	77/0

Note: **Preconditioning: MSL 1@260C

Reference Qualification Data: Approved July, 2014					
Qual Vehicle 10: LM3657MH/NOPB (MSL 1-260C)					
Package Construction Details					
Assembly Site:	TIEM	Mount Compound:	8075531		
# Pins-Designator, Family:	14-PWP, TSSOP	Mold Compound:	8095181		
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	0.96 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	
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0	
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Note: **Preconditioning: MSL 1@260C					

Reference Qualification Data: Approved July, 2014					
Qual Vehicle 11: SCANSTA11MTX (MSL 1-260C)					
Package Construction Details					
Assembly Site:	TIEM	Mount Compound:	8075531		
# Pins-Designator, Family:	48-DGG, TSSOP	Mold Compound:	8095181		
Leadframe (Finish, Base):	Matte Sn, Cu	Bond Wire:	0.96 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	
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0	
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Note: **Preconditioning: MSL 1@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