

PCN Number:	20140505002			PCN Date:	05/07/2014												
Title:	Qualify New Assembly Material set for Selected Device(s)																
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037	Dept:	Quality Services												
Proposed 1st Ship Date:	08/07/2014	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												
PCN Details																	
Description of Change:																	
<p>Texas Instruments is pleased to announce the qualification of new assembly material set to add Cu as an additional bond wire option for devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Material</th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Wire</td> <td>Au</td> <td>Cu</td> </tr> <tr> <td>Mount compound</td> <td>A-03</td> <td>A-16</td> </tr> <tr> <td>Mold compound</td> <td>R-07</td> <td>R-21</td> </tr> </tbody> </table>						Material	Current	Proposed	Wire	Au	Cu	Mount compound	A-03	A-16	Mold compound	R-07	R-21
Material	Current	Proposed															
Wire	Au	Cu															
Mount compound	A-03	A-16															
Mold compound	R-07	R-21															
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:																	
74AHC1G125DCKRE4	SN74AHC1G04DCKTE4	SN74AUC2G34DCKRG4	SN74LVC1G240DCK6														
74AHC1G125DCKRG4	SN74AHC1G04DCKTG4	SN74AUP1G04DCKR	SN74LVC1G240DCKR														
74AHC1G125DCKTE4	SN74AHC1G08DCK6	SN74AUP1G04DCKRE4	SN74LVC1G240DCKT														
74AHC1G125DCKTG4	SN74AHC1G08DCKR	SN74AUP1G04DCKRG4	SN74LVC1G3157DCKR														
74AHC1G126DCKRE4	SN74AHC1G08DCKRE4	SN74AUP1G04DCKT	SN74LVC1G32DCK6														
74AHC1G126DCKRG4	SN74AHC1G08DCKRG4	SN74AUP1G04DCKTE4	SN74LVC1G32DCKR														
74AHC1G126DCKTE4	SN74AHC1G08DCKT	SN74AUP1G04DCKTG4	SN74LVC1G32DCKRE4														
74AHC1G126DCKTG4	SN74AHC1G08DCKTE4	SN74AUP1G17DCKR	SN74LVC1G32DCKRG4														
74AHC1GU04DCKRE4	SN74AHC1G08DCKTG4	SN74AUP1G17DCKRE4	SN74LVC1G32DCKT														
74AHC1GU04DCKRG4	SN74AHC1G09DCKR	SN74AUP1G17DCKRG4	SN74LVC1G32DCKTE4														
74AHC1GU04DCKTE4	SN74AHC1G125DCKR	SN74AUP1G17DCKT	SN74LVC1G32DCKTG4														
74AHC1GU04DCKTG4	SN74AHC1G125DCKT	SN74AUP1G17DCKTE4	SN74LVC1G332DCKR														
74AHC1G00DCKRE4	SN74AHC1G126DCK6	SN74AUP1G17DCKTG4	SN74LVC1G332DCKRG4														
74AHC1G00DCKRG4	SN74AHC1G126DCKR	SN74AUP1G97DCKR	SN74LVC1G57DCKR														

74AHCT1G00DCKTE4	SN74AHC1G126DCKT	SN74AUP1G97DCKRE4	SN74LVC1G57DCKRE4
74AHCT1G00DCKTG4	SN74AHC1G14DCK6	SN74AUP1G97DCKRG4	SN74LVC1G57DCKRG4
74AHCT1G02DCKRE4	SN74AHC1G14DCKR	SN74AUP1T00DCKR	SN74LVC1G58DCKR
74AHCT1G02DCKRG4	SN74AHC1G14DCKRE4	SN74AUP1T02DCKR	SN74LVC1G58DCKRE4
74AHCT1G02DCKTE4	SN74AHC1G14DCKRG4	SN74AUP1T04DCKR	SN74LVC1G58DCKRG4
74AHCT1G02DCKTG4	SN74AHC1G14DCKT	SN74AUP1T08DCKR	SN74LVC1G66DCKR
74AHCT1G04DCKRE4	SN74AHC1G14DCKTE4	SN74AUP1T14DCKR	SN74LVC1G66DCKRE4
74AHCT1G04DCKRG4	SN74AHC1G14DCKTG4	SN74AUP1T157DCKR	SN74LVC1G66DCKRG4
74AHCT1G04DCKTE4	SN74AHC1G32DCK6	SN74AUP1T158DCKR	SN74LVC1G79DCK6
74AHCT1G04DCKTG4	SN74AHC1G32DCKR	SN74AUP1T17DCKR	SN74LVC1G79DCKR
74AHCT1G08DCKRE4	SN74AHC1G32DCKRE4	SN74AUP1T32DCKR	SN74LVC1G79DCKRE4
74AHCT1G08DCKRG4	SN74AHC1G32DCKRG4	SN74AUP1T86DCKR	SN74LVC1G79DCKRG4
74AHCT1G08DCKTE4	SN74AHC1G32DCKT	SN74AUP1T87DCKR	SN74LVC1G79DCKT
74AHCT1G08DCKTG4	SN74AHC1G32DCKTE4	SN74AUP2G04DCKR	SN74LVC1G79DCKTE4
74AHCT1G125DCKRE4	SN74AHC1G32DCKTG4	SN74AUP2G06DCKR	SN74LVC1G79DCKTG4
74AHCT1G125DCKRG4	SN74AHC1G86DCK6	SN74AUP2G07DCKR	SN74LVC1G80DCKR
74AHCT1G125DCKTE4	SN74AHC1G86DCKR	SN74AUP2G14DCKR	SN74LVC1G80DCKRE4
74AHCT1G125DCKTG4	SN74AHC1G86DCKRE4	SN74AUP2G17DCKR	SN74LVC1G80DCKRG4
74AHCT1G126DCKRE4	SN74AHC1G86DCKRG4	SN74AUP2G34DCKR	SN74LVC1G86DCKR
74AHCT1G126DCKRG4	SN74AHC1G86DCKT	SN74CB3T1G125DCKR	SN74LVC1G86DCKRE4
74AHCT1G126DCKTE4	SN74AHC1G86DCKTE4	SN74CBT1G384DCKR	SN74LVC1G86DCKRG4
74AHCT1G126DCKTG4	SN74AHC1G86DCKTG4	SN74LVC1G00DCKR	SN74LVC1G86DCKT
74AHCT1G14DCKRE4	SN74AHC1GU04DCK6	SN74LVC1G00DCKRE4	SN74LVC1G86DCKTE4
74AHCT1G14DCKTE4	SN74AHC1GU04DCKR	SN74LVC1G00DCKRG4	SN74LVC1G86DCKTG4
74AHCT1G14DCKTG4	SN74AHC1GU04DCKT	SN74LVC1G00DCKT	SN74LVC1G97DCK6
74AHCT1G32DCKRE4	SN74AHCT1G00DCK6	SN74LVC1G00DCKTE4	SN74LVC1G97DCKR
74AHCT1G32DCKRG4	SN74AHCT1G00DCKR	SN74LVC1G00DCKTG4	SN74LVC1G97DCKRE4
74AHCT1G32DCKTE4	SN74AHCT1G00DCKT	SN74LVC1G02DCKR	SN74LVC1G97DCKRG4
74AHCT1G32DCKTG4	SN74AHCT1G02DCKR	SN74LVC1G02DCKRE4	SN74LVC1G97DCKT
74AHCT1G86DCKRE4	SN74AHCT1G02DCKT	SN74LVC1G02DCKRG4	SN74LVC1G97DCKTE4
74AHCT1G86DCKRG4	SN74AHCT1G04DCK6	SN74LVC1G02DCKT	SN74LVC1G97DCKTG4
74AHCT1G86DCKTE4	SN74AHCT1G04DCKR	SN74LVC1G02DCKTE4	SN74LVC1GU04DCKR
74AHCT1G86DCKTG4	SN74AHCT1G04DCKT	SN74LVC1G02DCKTG4	SN74LVC1GU04DCKT
74AUC1G125DCKRE4	SN74AHCT1G08DCK6	SN74LVC1G04DCKR	SN74LVC2G04DCKR
74AUC1G125DCKRG4	SN74AHCT1G08DCKR	SN74LVC1G04DCKRE4	SN74LVC2G04DCKRE4
74CB3T1G125DCKRE4	SN74AHCT1G08DCKT	SN74LVC1G04DCKRG4	SN74LVC2G04DCKRG4
74CB3T1G125DCKRG4	SN74AHCT1G125DCK6	SN74LVC1G04DCKT	SN74LVC2G04DCKT
74CBT1G384DCKRE4	SN74AHCT1G125DCKR	SN74LVC1G04DCKTE4	SN74LVC2G04DCKTE4
74CBT1G384DCKRG4	SN74AHCT1G125DCKT	SN74LVC1G04DCKTG4	SN74LVC2G04DCKTG4
74LVC1G125DCKRE4	SN74AHCT1G126DCKR	SN74LVC1G06DCK6	SN74LVC2G07DCKR
74LVC1G125DCKRG4	SN74AHCT1G126DCKT	SN74LVC1G06DCKR	SN74LVC2G07DCKRE4
74LVC1G125DCKTE4	SN74AHCT1G14DCKR	SN74LVC1G06DCKRE4	SN74LVC2G07DCKRG4
74LVC1G125DCKTG4	SN74AHCT1G14DCKRG4	SN74LVC1G06DCKRG4	SN74LVC2G07DCKT
74LVC1G126DCKRE4	SN74AHCT1G14DCKT	SN74LVC1G06DCKT	SN74LVC2G07DCKTE4
74LVC1G126DCKRG4	SN74AHCT1G32DCK6	SN74LVC1G06DCKTE4	SN74LVC2G07DCKTG4
74LVC1G126DCKTE4	SN74AHCT1G32DCKR	SN74LVC1G06DCKTG4	SN74LVC2G14DCKR
74LVC1G126DCKTG4	SN74AHCT1G32DCKT	SN74LVC1G07DCKR	SN74LVC2G14DCKRE4
74LVC1G240DCKRE4	SN74AHCT1G86DCKR	SN74LVC1G07DCKRE4	SN74LVC2G14DCKRG4
74LVC1G240DCKRG4	SN74AHCT1G86DCKT	SN74LVC1G07DCKRG4	SN74LVC2G14DCKT
74LVC1G240DCKTE4	SN74AUC1G00DCKR	SN74LVC1G07DCKT	SN74LVC2G14DCKTE4
74LVC1G240DCKTG4	SN74AUC1G00DCKRE4	SN74LVC1G07DCKTE4	SN74LVC2G14DCKTG4

74LVC1G3157DCKRE4	SN74AUC1G00DCKRG4	SN74LVC1G07DCKTG4	SN74LVC2G17DCKR
74LVC1G3157DCKRG4	SN74AUC1G04DCKR	SN74LVC1G08DCK6	SN74LVC2G17DCKRE4
74LVC1G332DCKRE4	SN74AUC1G04DCKRE4	SN74LVC1G08DCKR	SN74LVC2G17DCKRG4
74LVC1GU04DCKRE4	SN74AUC1G04DCKRG4	SN74LVC1G08DCKR-LI	SN74LVC2G17DCKT
74LVC1GU04DCKRG4	SN74AUC1G07DCKR	SN74LVC1G08DCKRE4	SN74LVC2G17DCKTE4
74LVC1GU04DCKTE4	SN74AUC1G07DCKRG4	SN74LVC1G08DCKRG4	SN74LVC2G17DCKTG4
74LVC1GU04DCKTG4	SN74AUC1G07DCKT	SN74LVC1G08DCKT	SN74LVC2G34DCK6
74LVC2GU04DCKRE4	SN74AUC1G07DCKTE4	SN74LVC1G08DCKTE4	SN74LVC2G34DCKR
74LVC2GU04DCKRG4	SN74AUC1G07DCKTG4	SN74LVC1G08DCKTG4	SN74LVC2G34DCKRE4
74LVC2GU04DCKTE4	SN74AUC1G08DCK6	SN74LVC1G10DCKR	SN74LVC2G34DCKRG4
74LVC2GU04DCKTG4	SN74AUC1G08DCKR	SN74LVC1G10DCKRE4	SN74LVC2GU04DCK6
HPA01001DCKR	SN74AUC1G08DCKRE4	SN74LVC1G10DCKRG4	SN74LVC2GU04DCKR
HPA01002DCKR	SN74AUC1G08DCKRG4	SN74LVC1G11DCKR	SN74LVC2GU04DCKT
HPA01003DCKR	SN74AUC1G125DCKR	SN74LVC1G11DCKRE4	TS5A1066DCKR
HPA01004DCKR	SN74AUC1G14DCKR	SN74LVC1G11DCKRG4	TS5A1066DCKRE4
HVAL02232DCKR	SN74AUC1G14DCKRE4	SN74LVC1G125DCK6	TS5A1066DCKRG4
LMV721IDCKR	SN74AUC1G14DCKRG4	SN74LVC1G125DCKR	TS5A3157DCKR
LMV721IDCKRG4	SN74AUC1G17DCKR	SN74LVC1G125DCKT	TS5A3157DCKRE4
LMV721IDCKT	SN74AUC1G17DCKRE4	SN74LVC1G126DCKR	TS5A3157DCKRG4
LMV721IDCKTG4	SN74AUC1G17DCKRG4	SN74LVC1G126DCKT	TS5A3166DCKR
SN0710022DCKR	SN74AUC1G32DCKR	SN74LVC1G14DCKR	TS5A3166DCKRE4
SN74AHC1G00DCK6	SN74AUC1G32DCKRE4	SN74LVC1G14DCKRE4	TS5A3166DCKRG4
SN74AHC1G00DCKR	SN74AUC1G32DCKRG4	SN74LVC1G14DCKRG4	TS5A3167DCKR
SN74AHC1G00DCKRE4	SN74AUC1G66DCKR	SN74LVC1G14DCKT	TS5A3167DCKRE4
SN74AHC1G00DCKRG4	SN74AUC1G66DCKRE4	SN74LVC1G14DCKTE4	TS5A3167DCKRG4
SN74AHC1G00DCKT	SN74AUC1G66DCKRG4	SN74LVC1G14DCKTG4	TS5A4594DCKR
SN74AHC1G00DCKTE4	SN74AUC1G79DCKR	SN74LVC1G17DCK6	TS5A4594DCKRE4
SN74AHC1G00DCKTG4	SN74AUC1G79DCKRE4	SN74LVC1G17DCKR	TS5A4594DCKRG4
SN74AHC1G02DCK6	SN74AUC1G79DCKRG4	SN74LVC1G17DCKRE4	TS5A4595DCKR
SN74AHC1G02DCKR	SN74AUC1G80DCKR	SN74LVC1G17DCKRG4	TS5A4595DCKRE4
SN74AHC1G02DCKRE4	SN74AUC1G80DCKRE4	SN74LVC1G17DCKT	TS5A4595DCKRG4
SN74AHC1G02DCKRG4	SN74AUC1G80DCKRG4	SN74LVC1G17DCKTE4	TS5A4624DCKR
SN74AHC1G02DCKT	SN74AUC2G04DCKR	SN74LVC1G17DCKTG4	TS5A4624DCKRE4
SN74AHC1G02DCKTE4	SN74AUC2G04DCKRE4	SN74LVC1G18DCKR	TS5A4624DCKRG4
SN74AHC1G02DCKTG4	SN74AUC2G04DCKRG4	SN74LVC1G18DCKRE4	TS5A63157DCKR
SN74AHC1G04DCK6	SN74AUC2G07DCKR	SN74LVC1G18DCKRG4	TS5A63157DCKRE4
SN74AHC1G04DCKR	SN74AUC2G07DCKRE4	SN74LVC1G19DCK6	TS5A63157DCKRG4
SN74AHC1G04DCKRE4	SN74AUC2G07DCKRG4	SN74LVC1G19DCKR	
SN74AHC1G04DCKRG4	SN74AUC2G34DCKR	SN74LVC1G19DCKRE4	
SN74AHC1G04DCKT	SN74AUC2G34DCKRE4	SN74LVC1G19DCKRG4	

Qualification Report

Approved on 04/02/2014

Product Attributes

Attributes	Qual Device: SN74AHC1G00DCKR	Qual Device: SN74AUP1G07DCKR	Qual Device: SN74CB3T1G125DCKR
Assembly Site	NFME	NFME	NFME
Package Family	SOT	SOT	SOT
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	SFAB	FFAB	FFAB
Wafer Fab Process	EPIC1S2	ASLC10-BOPO	ASL3C

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260C: SN74AHC1G00DCKR, SN74AUP1G07DCKR, SN74CB3T1G125DCKR

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: SN74AHC1G00DCKR	Qual Device: SN74AUP1G07DCKR	Qual Device: SN74CB3T1G125DCKR
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0	3/231/0
HAST	Biased HAST, 130C/85%RH	192 Hours	3/231/0	3/231/0	3/231/0
AC	Autoclave, 121C	96 Hours	3/231/0	3/231/0	3/231/0
TC	Temperature Cycle, -65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	600 Hours	3/231/0	3/231/0	3/231/0
HTOL	Life Test, 150C	300 Hours	3/231/0	3/231/0	3/231/0
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	3/228/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	3/228/0
PD	Physical Dimensions	--	3/15/0	3/15/0	3/15/0
LI	Lead Fatigue	Leads	3/66/0	3/66/0	3/66/0
LI	Lead Pull to Destruction	Leads	3/66/0	3/66/0	3/66/0
FLAM	Flammability (IEC 695-2-2)	--	-	-	3/15/0

FLAM	Flammability (UL 94V-0)	--	-	-	3/15/0
FLAM	Flammability (UL-1694)	--	-	-	3/15/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green
TI Qualification ID: 20130722-90262

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