

PCN Number:	20220314002.1		PCN Date:					
Title:	Qualification of Cu as an alternate bond wire for select devices							
Customer Contact:	PCN Manager	Dept:	Quality Services					
Proposed 1st Ship Date:	Jun 16 2022	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:								
This PCN is to inform of the qualification of an alternate bond wire qualification as follows:								
<table border="1" style="margin: auto;"> <thead> <tr> <th style="background-color: #e1eef6;">Current Bond Diameter</th> <th style="background-color: #e1eef6;">Additional Bond wire & diameter</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Au, 1.3 mils</td> <td style="text-align: center;">Cu, 0.96 mil</td> </tr> </tbody> </table>					Current Bond Diameter	Additional Bond wire & diameter	Au, 1.3 mils	Cu, 0.96 mil
Current Bond Diameter	Additional Bond wire & diameter							
Au, 1.3 mils	Cu, 0.96 mil							
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								
Impact on Environmental Ratings								
Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.								
RoHS	REACH	Green Status	IEC 62474					
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change					
Changes to product identification resulting from this PCN:								
None								

Product Affected:			
UC2842AN	UC2844AN	UC3842ANG4	UC3844ANG4
UC2842ANG4	UC2844ANG4	UC3842N	UC3844N
UC2842N	UC2844N	UC3842NG4	UC3844NG4
UC2842NG4	UC2845AN	UC3843AN	UC3845AN
UC2843AN	UC2845ANG4	UC3843ANG4	UC3845ANG4
UC2843ANG4	UC2845N	UC3843N	UC3845N
UC2843N	UC2845NG4	UC3843NG4	UC3845NG4
UC2843NG4	UC3842AN	UC3844AN	

TI Information
Selective Disclosure



Qualification Report
Approve Date 11-MARCH -2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: UC2844N	QBS Reference: L293DNE	QBS Reference: NE5532P	QBS Reference: TS12A4514P	QBS Reference: UCC37322P
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	-	1/77/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/225/0	-	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	-	1/77/0	3/231/0
HTOL	B1	Life Test	150C	300 Hours	-	-	3/231/0	-	-

- QBS: Qual By Similarity
- 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: R-CHG-2108-005

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

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