

PCN Number:	20170822001		PCN Date:	Aug 24 2017	
Title:	Qualification of alternate Bond Wire Material (Au) for the TMP411EDGKR/T				
Customer Contact:	PCN Manager	Dept:	Quality Services		
Proposed 1st Ship Date:	Nov 24 2017		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 Gold as an alternate bond wire for the TMP411EDGKR/T.					
What	Current	New			
Bond Wire Composition/Diameter	Cu/1.0 mils	Au/1.0 mils or Cu/1.0 mils			
Reason for Change:					
Continuity of Supply					
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):					
None					
Anticipated impact on Material Declaration					
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website .		
Changes to product identification resulting from this PCN:					
None					
Product Affected:					
TMP411EDGKR		TMP411EDGKT			

Qualification Report

TMP411EDGK Au wire Qual Approve Date 18-Jul-2017

Product Attributes

Attributes	Qual Device: TMP411EDGK	QBS Product Reference: TMP431ADGK	QBS Process/ Package Reference: INA301A1QDGKQ1	QBS Process/ Package Reference: INA301A2QDGKQ1	QBS Process/ Package Reference: INA301A3QDGKQ1
Assembly Site	ASE SHANGHAI	HNT	ASE SHANGHAI	ASE SHANGHAI	ASE SHANGHAI
Package Family	VSSOP	VSSOP	VSSOP	VSSOP	VSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	AIZU	AIZU	AIZU	AIZU	AIZU
Wafer Process	50HPA07	50HPA07	50HPA07	50HPA07	50HPA07

- QBS: Qual By Similarity

- Qual Device TMP411EDGK is qualified at LEVEL2-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TMP411EDGK	QBS Product Reference: TMP431ADGK	QBS Process/ Package Reference: INA301A1QDGKQ1	QBS Process/ Package Reference: INA301A1QDGKQ1	QBS Process/ Package Reference: INA301A1QDGKQ1
HTOL	Life Test, 150C	300 Hours	-	2/1540	1/77/0	1/77/0	1/77/0
HAST	Biased HAST 130C/85%RH	96 Hours	-	-	1/77/0	1/77/0	1/77/0
AC	Autoclave 121C	96 Hours	-	-	1/77/0	1/77/0	1/77/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	1/77/0	1/77/0	1/77/0
HTSL	High Temp. Storage Bake, 150C		-	-	1/45/0	-	-
HBM	ESD - HBM	4000V	1/3/0	-	-	-	-
CDM	ESD - CDM	1000V	1/3/0	-	-	-	-
LU	Latch-up	(per JESD78)	1/6/0	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	1/Pass	-	-	-	-

- 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 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

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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