PCN Number:		20200605000.1					PCN D	ate:	June 12, 2020		
Title	e: Qualifica	ation of Cu as an alternate bond wire for se					elect devices				
Cus	tomer Conta	ct: PCN	Manager	<u>r</u>	Dept:	Quality Services					
Proposed 1 st Shi		p Date: Sept. 1		. 10,	2020	Estimated Sampl Availability		-	·		
Change Type:											
	Assembly Site			Design			Wafer Bump Site				
\boxtimes				Data Sheet			Wafer Bump Material				
	Assembly Materials			Щ	Part number change			Wafer Bump Process			
	Mechanical Specification			Test Site				Wafer Fab Site			
Packing/Shipping/Labeling			Ш	Test Process			Wafer Fab Materials				
								Wafer Fab Process			
					PCN	Details					
Des	cription of C	hange:									
This PCN is to inform of an alternative bond wire qualification for the devices in the product affected section as follows:											
	Devic	e Group				t Bond wire,	,	Add	tional Bond wire,		
						iameter			diameter		
	RGW		Au, 0.96 mils				Cu, 1.0 mils				
		ORZ				0.80 mils			Cu, 0.8 mils		
	Inson for Char	ige:									
Con	son for Chan tinuity of supp	i ge: oly.	ala av t	t wo n d	Au,	0.80 mils	anhar	and m	Cu, 0.8 mils		
Con 1)	son for Chan tinuity of supp To align with v	n ge: oly. vorld techr	iology t	trend	Au,	0.80 mils	ı enhar	nced m	Cu, 0.8 mils		
Con 1)	son for Chan tinuity of supp To align with velectrical proper	i ge: oly. vorld techr erties			Au,	0.80 mils se wiring with		nced m	Cu, 0.8 mils		
Con 1) (2)	son for Chan tinuity of supp To align with v	ige: oly. vorld techr erties bility within	n our A	ssen	Au,	0.80 mils se wiring with		nced m	Cu, 0.8 mils		
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Qualification Results Data Displayed as: Number of lots / Total sample size / Total failed

Туре	Test Name / Condition	Duration	Qual Device: DRV401AIRGWR	Qual Device: SN27411DRZR-B1	QBS Package Reference: <u>MUX36D04IRUM</u>	QBS Package Reference: <u>MUX36S08IRUM</u>	QBS Package Reference: <u>TPS25740BRGE</u>
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	1/77/0	2/154/0	-
CDM	ESD - CDM	1000 V	-	-	1/3/0	1/3/0	1/3/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	Pass	Pass	PASS
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	2/154/0	3/231/0
HBM	ESD - HBM	4000 V	-	-	1/3/0	1/3/0	1/3/0
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	1/77/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	1/77/0	2/154/0	3/231/0
LU	Latch-up	(Per JESD78)	-	-	1/6/0	1/6/0	1/6/0
TC	Temperature Cycle, - 65/150C	500 Cycles	3/231/0	3/231/0	1/77/0	2/154/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	3/231/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	1/76/0	2/152/0	-
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	1/76/0	2/152/0	-

- 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

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