PCN Number:		20	20190807004.1				PCN Date:			Aug 19, 2019	
		on of a	of a new Green Mold compound material for selected Devices								
Cust	tomer Contact:	PCN	l Manager		Dep	t: Quality Se	 Services				
Proposed 1 st Ship Da		Date:	Nov19, 2019		19	Estimated Sa Availability:	nated Sample			rovided upon Requ	ıest
	nge Type:										
	Assembly Site				Design			<u>Ц</u>		r Bump Site	
	Assembly Proces										
	Assembly Mater Mechanical Spec					•					
H	Packing/Shippin			Test Site Wafer Fab Site Test Process Wafer Fab Materials							
	<u> </u>	<u> </u>	J9							r Fab Process	
					PCN	Details	•				
Des	cription of Cha	nge:									
mate	as Instruments is erial for the devi					qualification of	f a ne	ew g	green I	Mold compound	
Gro	u p 1 :					Current			New		
	Mold compor	und m	aterial		40100	025A1 (non-Gr	reen)	,	4020	42101 (Green)	
	Marking Difference			YMLLLLS XXXXXX TI YM = YEAR MONTH DATE CODE LLLL = ASSEMBLY LOT CODE X = DEVICE NAME S = ASSEMBLY SITE CODE				YMLLLLS XXXXX TI G3 YM = YEAR MONTH DATE CODE LLLL = ASSEMBLY LOT CODE X = DEVICE NAME S = ASSEMBLY SITE CODE G3 = ECAT VALUE			
					S	S = ASSEMBLY SITE CODE					
Gro	up 2:				S	S = ASSEMBLY SITE CODE					
Grou	up 2:				5	Current				New	
Grou	up 2: Mold compo	und m	aterial				en)		4020	New 42101 (Green)	
	Mold compo		aterial			Current	en)	<u> </u>	4020		
Rea :	Mold compounds on for Change ent mold compo	:		s bei	402	Current 20024A1 (Gree		r.	4020		
Reas Curr ROH	Mold compound of the compound	und m	aterial is		402	Current 20024A1 (Gree Intinued by su	pplie) :
Reas Curr ROH	Mold composed and mold composed compliance.	und m	aterial is		402	Current 20024A1 (Gree Intinued by su	pplie			42101 (Green)):
Reas Curr ROH Anti	Mold composed and mold composed compliance.	und m	aterial is	, Fu	402 ng disco	Current 20024A1 (Gree Intinued by sup Quality or Re	pplie			42101 (Green)):
Reas Curr ROH Anti None	Mold composed and mold composed and mold composed and com	und m on Fi on M ne ation	aterial is aterial is aterial is Ma pr re ob m wi	Declaterioduce lease stain ateriateriateriateriateriateriateriateri	ng disconnction, laration al Declaction date e. Upor ed from tial meet this PCN	Current 20024A1 (Gree Intinued by sup Quality or Re ta and will be a production re the TI Eco-Inf ing current rec change.	duct (available lease	Con able e the	tent references followerevise. The	42101 (Green)	rom n the

Group 1 Device: Sample product shipping label (not actual product label)

The "G3" designator indicates Pb-Free/Green product with a terminal finish of Matte Sn



2DC: 2Q:
MSL '2 /260C/1 YEAR SEAL DT
MSL 1 /235C/UNLIM 03/29/04

SPEN: LBL: 5A (L)

5A (L)T0:1750

G3



(1P) SN74LS07NSR

(Q) **2000** (D) **0,335** (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483SI2

(P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

Product Affected: Group 1

LP2950-50LPRE3	TL1431CLPR	TL431ACLPR	TL431CLPR
TL1431CLP	TL431ACLP	TL431CLP	
TL1431CLPME3	TL431ACLPM	TL431CLPM	

Product Affected: Group 2

BQ2022ALPR

Qualification Report

Approve Date 10-Jul-2019

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: BQ2022ALPR	Qual Device: LP2950-50LPRE3	Qual Device: TL1431CLP
ED	Electrical Characterization	Per Datasheet Parameters	-	-	1/30/0
FLAM	Flammability	Method A - UL94 V-0	-	-	3/15/0
HAST	Biased HAST 130C/85%RH	96 Hours	-	-	3/231/0
HTSL	High Temp. Storage Bake, 170 C	420 Hours	-	-	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/Pass	3/Pass	3/Pass
PD	Physical Dimensions	(per mechanical drawing)	-	-	3/15/0
PKG	Solder Heat, 260C	10 seconds	-	-	3/66/0
TC	Temperature Cycle -65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	3/231/0	-	3/231/0
VM	Visual / Mechanical	(per mfg. Site specification)	Pass	-	Pass
XRAY	X-ray	(top side only)	-	3/15/0	3/15/0
YLD	FTY and Bin Summary	-	1/Pass	-	-

⁻ 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

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