PCN Number:
 20240320000.1
 PCN Date:
 March 20, 2024

Title: Qualification alternate Mount & Mold Compound material for select devices

Customer Contact:Change Management teamDept:Quality ServicesProposed 1st Ship Date:June 18, 2024Sample Requests accepted until:April 19, 2024*

*Sample requests received after April 19, 2024 will not be supported.

Change Type:

Assembly Site	Design	Wafer Bump Material
Assembly Process	Data Sheet	Wafer Bump Process
Assembly Materials	Part number change	Wafer Fab Site
Mechanical Specification	Test Site	Wafer Fab Material
Packing/Shipping/Labeling	Test Process	Wafer Fab Process

PCN Details

Description of Change:

This PCN is to inform of an alternate Mount & Mold Compound material set for the list of devices in the product affected sections below.

Group 1: Additional Mold compound qualification only

What	Current	Additional		
Mold Compound	4208625	4222198		

Group 2: Additional Mold compound and mount compound qualification

What	Current	Additional
Mount Compound	4207768	4207123
Mold Compound	4208625	4222198

Qualification results are shown below

Reason for Change:

Standardization

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
No Change		No Change	No Change

Changes to product identification resulting from this PCN:

None

Product Affected:

Group 1 Device list (Mold Compound Qualification only):

ADC3541IRSBR	ADC3644IRSBT	MSP430F2131IRGET	TPS6521845RSLT
ADC3541IRSBT	ADC3660IRSBR	MSP430F2234IRHAR	TPS6521855RSLR
ADC3542IRSBR	ADC3660IRSBT	MSP430F2254IRHAT	TPS6521855RSLT
ADC3542IRSBT	ADC3661IRSBR	MSP430G2444IRHA40T	TUSB8042AIRGCR

ADC3543IRSBR	ADC3661IRSBT	PCA9555RGER	TUSB8042AIRGCT
ADC3543IRSBT	ADC3662IRSBR	SN1909003A2RSL	TUSB8042ARGCR
ADC3544IRSBR	ADC3662IRSBT	SN2001053A2RSLR	TUSB8042ARGCT
ADC3544IRSBT	ADC3663IRSBR	SN3138064RGCR	TUSB8043AIRGCR
ADC3561IRSBR	ADC3663IRSBT	SN3138RGCR	TUSB8043AIRGCT
ADC3561IRSBT	ADC3664IRSBR	SN700013RSMR	TUSB8043ARGCR
ADC3562IRSBR	ADC3664IRSBT	TDES954RGZR	TUSB8043ARGCT
ADC3562IRSBT	ADC3681IRSBR	TDES954RGZT	TUSB8044AIRGCR
ADC3563IRSBR	ADC3681IRSBT	TPS51206DSQR	TUSB8044AIRGCT
ADC3563IRSBT	ADC3682IRSBR	TPS51206DSQT	TUSB8044ARGCR
ADC3564IRSBR	ADC3682IRSBT	TPS53317RGBR	TUSB8044ARGCT
ADC3564IRSBT	ADC3683IRSBR	TPS53317RGBT	UCD3138064ARGCR
ADC3581IRSBR	ADC3683IRSBT	TPS650945A0RSKR	UCD3138064ARGCT
ADC3581IRSBT	ADS6129IRGZR	TPS650945A0RSKT	UCD3138064RGCR
ADC3582IRSBR	ADS6129IRGZT	TPS650947A0RSKR	UCD3138064RGCT
ADC3582IRSBT	BQ25895PRTWR	TPS650947A0RSKT	UCD3138064RMHR
ADC3583IRSBR	CC2640R2LRGZR	TPS652170RSLR	UCD3138064RMHT
ADC3583IRSBT	CC2640R2LRHBR	TPS652170RSLT	UCD3138ARGCR
ADC3641IRSBR	CC2650MODAMOHR	TPS6521815RSLR	UCD3138ARGCT
ADC3641IRSBT	CDCI6114RGER	TPS6521815RSLT	UCD3138ARMHR
ADC3642IRSBR	CDCI6114RGET	TPS6521825RSLR	UCD3138ARMHT
ADC3642IRSBT	DP83867WRGZR	TPS6521825RSLT	UCD3138RGCR
ADC3643IRSBR	DP83867WRGZT	TPS6521835RSLR	UCD3138RGCT
ADC3643IRSBT	DRV8320HLRTVR	TPS6521835RSLT	UCD3138RMHR
ADC3644IRSBR	LMH1227RTVT	TPS6521845RSLR	UCD3138RMHT

Group 2 Device list (Mold Compound and Mount Compound qualification)

SN0805016DRBR	TPS22969DNYR	TPS40197RGYR	TPS40303DRCR
TPS22959DNYR	TPS22969DNYT	TPS40197RGYT	TPS40304DRCR
TPS22959DNYT			



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

AC ABSORD PIC 69 Hars 32310 32	Тууре	Test Name / Condition	Duration	Qual Device: 27541DRZR- V200	Qual Device: 430FR6968IRGZ B	Qual Device: AD31220(RVAR	Qual Device: AD\$8548\$RGCR	Qual Device: CC2641F268FHA B	Qual Device: DRV10386D BC B	Qual Device: RGC-DC	Qual Device: 3520F28010R8HT	Qual Device: TP 843000DRC B	Qual Device: TP 86683 TWD 3KR	GE3 Package Reference: TP362140RGTR	GES Package Reference: TPS7A4701GRGWRG: 1	GES Package Reference: TRSS122ERGER
REF. (Cyc. 40'00'C) FOR Control (Cyc. 40'00'C) FAM. (Cyc. 40'00	AC		96 Hours	3/231/0	3/231/0	3/231/0	3/231/0		3/231/0		3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
Description	BLR	Reliability, Temp	1000 Cycles							1/32/0					1/32/0	
Description Per Section Processing Per S	ED	Distributions	Cpk>1.67 Room, Hot, & Cold										-		3/90/0	
Part	ED	Characterization	Per Datasheet Parameters											1/15/0		1/30/0
April Apri	FLAM	695-2-2)	-												-	3/15/0
MANE] MORAL	FLAM	94V-0)	-											-	-	3/15/0
1500 1500	FLAM	1694)											-			3/15/0
SECOND S		130C/85%RH														
#ITCS LET TALL 195C																
HTCL LEF Total 1902 300 Hours																
HTSL Mp. Terms, Storage 1000 Holurs 302810										_						
Mail: Mail	HTOL.		300 Hours													1/77/0
Bale, 170C	HTSL.	Bake, 150C	1000 Hours		3/229/0			3/231/0			3/230/0			-	1/45/0	3/231/0
Proceedings		Bake, 170C				3/231/0							3/230/0			
PFIC Option 1000 Cycles 1000 Cycles 1000 Cycles 11500 12200 15000 Cycles 11500 12200 15000 Cycles 11500 12200 15000 Cycles 11500 12200 15000 Cycles 11500 12200 Cycles 11500 12200 Cycles 11500 12200 Cycles 11500 12200 Cycles 11500 11500 12200 Cycles 11500 115																
File Cycle 401/90C Statistyce Commonwealth Cycle	PD		-	3/15/0	3/15/0	3/15/0	3/15/0	3/15/0	3/15/0		3/15/0	3/15/0	3/15/0		3/30/0	3/30/0
Sedemantly (Press Seatment Mg. Perfect S	PTC	Oycle, 40/1250	1000 Cycles									٠			1/50/0	
September Sept	SD	Solderability	8 Hours Steam Age, Pb-Free								3/66/0	3/66/0			1/15/0	1/22/0
10 10 10 10 10 10 10 10	SD	Solderability	Pb												1/15/0	
Section Sect	TC	55/125C	700 Oycles					3/230/0								
THE MIT	TC	65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0		3/231/0		3/231/0	3/231/0	3/225/0	3/231/0	3/231/0	3/231/0
T 1000000048 20H MOSS		and Humidity, 85C/85%RH	1000 Hours								3/219/0					
T 1300/89/NH 3915/825	T	110C/85%RH	264 Hours					3/231/0								
WBP Bond Pull Wres 32280 32280 - 32280 32280 32280 32280 32280 32280 32280 32280	T	130C/85%RH													-	
						3/984/0	3/984/0	3/984/0								
WBS Ball Bond Shear Wres 32280 32280 - 32280 32280 32280 32280 32280 32280 32280 32280 32280	MBb	Bond Pull														
	WBS	Ball Bond Shear	Wres	3/228/0	3/228/0				3/228/0		3/228/0	3/228/0	3/228/0	3/228/0	3/90/0	3/228/0



TI Information Selective Disclosure

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

Туре	Test Name / Condition	Duration	Qual Device: 430F2132IRHBR	Qual Device: BQ24196RGER	Qual Device: TPS51285BRUKR	Qual Device: TPS53641RSBR	Qual Device: TPS62140RGTR	QBS Package Reference: BQ294504DRVR	QBS Package Reference: TRS3122ERGER
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	Pass	-	Pass
FLAM	Flammability (IEC 695-2-2)	-	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	-	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL- 1694)	-	-	-	-	-	-	-	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
WBP	Bond Pull	76 Wire, 3 units min	3/228/0	3/228/0	3/228/0	3/228/0	3/228/0	-	3/228/0
WBS	Ball Bond Shear	76 balls, 3 units min	3/228/0	3/228/0	3/228/0	3/228/0	3/228/0	-	3/228/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Themal 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 Tl's external Web site: http://www.ti.com/
- Green/Pb-free Status:
- Qualified Pb-Free(SMT) and Green
- TI Qualification ID: 20160218-116848, 20160217-116812 (QBS), 20160119-116479 (QBS)

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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