

<b>PCN Number:</b>	20240319000.1		<b>PCN Date:</b>	March 25, 2024																																
<b>Title:</b>	Qualify New Assembly Material set for Selected Device(s)																																			
<b>Customer Contact:</b>	Change Management team	<b>Dept:</b>	Quality Services																																	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	June 23, 2024	<b>Sample requests accepted until:</b>	April 24, 2024*																																	
*Sample requests received after April 24, 2024 will not be supported.																																				
<b>Change Type:</b>																																				
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material																															
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process																															
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site																															
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Material																															
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process																															
<b>PCN Details</b>																																				
<b>Description of Change:</b>																																				
Texas Instruments is pleased to announce the qualification of new assembly material for devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows:																																				
<table border="1"> <thead> <tr> <th>Material</th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Mount compound</td> <td>4207768</td> <td>4207123</td> </tr> <tr> <td>Mold compound</td> <td>4208625</td> <td>4222198</td> </tr> </tbody> </table>					Material	Current	Proposed	Mount compound	4207768	4207123	Mold compound	4208625	4222198																							
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<b>Reason for Change:</b>																																				
Continuity of Supply																																				
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																																				
None																																				
<b>Impact on Environmental Ratings</b>																																				
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.																																				
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<b>Changes to product identification resulting from this PCN:</b>																																				
None																																				
<b>Product Affected:</b>																																				
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# Qualification Report

Approve Date 05-Mar-2018

## Product Attributes

Attributes	Qual Device: 27541DRZR-V200	Qual Device: 430FR5969IRGZR	Qual Device: AD11220IRVAR	Qual Device: AD188481RDCR	Qual Device: CC2541F256RHAR	Qual Device: DRV10866DSCR	Qual Device: RGC-DC	Qual Device: S320F28030RSHT	Qual Device: TP181000DRCR	Qual Device: TP188811WDSKR	QBS Package Reference: TP17A4701QRGWRQ1	QBS Package Reference: TR1122ERGER
Assembly Site	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CHENGDU AT
Package Family	WSON	VQFN	VQFN	VQFN	VQFN	WSON	VQFN	VQFN	WSON	WSON	QFN 5 x 5 MM	VQFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Support	DFAB, TSMC WBT	DMOS 0	AIZU	DMOS	TSMC WBT	RFAB	RFAB	DMOS	WFO 8	RFAB	FREISING (FFAB)	RFAB
Wafer Fab Process	L8C4X, TSMC 0.25	HFE035	HFA07	50HPAD7HF 03DR	0.18-0P5M-FLASH	LBC7	-	18F05 25L	LBC7	LBC7X	BICOM3-HV	LBC7

- QBS: Qual By Similarity
- Qual Device qualified at LEVEL1-260CG: TPS65631WDSKR
- Qual and QBS Devices qualified at LEVEL2-260CG: 27541DRZR-V200, ,DRV10866DSCR, TPS63000DRCR, ADS1220IRVAR, TPS7A4701QRGWRQ1, TRS3122ERGER
- Qual Devices qualified at LEVEL3-260CG: ADS8548SRGCR, , RGC-DC, CC2541F256RHAR ,S320F28030RSHT, 430FR5969IRGZR
- Device 27541DRZR-V200 contains multiple dies

## Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: 27541DRZR-V200	Qual Device: 430FR5969IRGZR	Qual Device: AD11220IRVAR	Qual Device: AD188481RDCR	Qual Device: CC2541F256RHAR	Qual Device: DRV10866DSCR	Qual Device: RGC-DC	Qual Device: S320F28030RSHT	Qual Device: TP181000DRCR	Qual Device: TP188811WDSKR	QBS Package Reference: TP17A4701QRGWRQ1	QBS Package Reference: TR1122ERGER
AC	Autoclave 121C	96 Hours	3/2310	3/2310	3/2310	3/2310	-	3/2310	-	3/2310	3/2310	3/2310	3/2310	3/2310
BLR	Board Level Reliability, Temp Cycle, -40/125C	1000 Cycles	-	-	-	-	-	-	1/320	-	-	-	1/320	-
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	-	-	-	-	-	-	-	-	3/900	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	-	-	-	-	-	-	1/300	-
FLAM	Flammability (IEC 60529)	-	-	-	-	-	-	-	-	-	-	-	3/150	-
FLAM	Flammability (UL 94V-0)	-	-	-	-	-	-	-	-	-	-	-	3/150	-
FLAM	Flammability (UL-1694)	-	-	-	-	-	-	-	-	-	-	-	3/150	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/2310	-	-	-	-	-	-	-	-	3/2310	3/2310
HBM	ESD - HBM	1000 V	-	-	-	-	-	-	-	-	-	-	1/30	-
CDM	ESD - CDM	250 V	-	3/50	-	-	-	-	-	-	-	-	1/30	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	-	-	-	-	-	-	3/2310	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-	-	-	-	-	-	-	1/770	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	3/2280	-	-	3/2310	-	-	3/2300	-	-	1450	3/2310
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/2310	-	-	-	-	-	-	-	3/2300	-	-
LU	Latch-up (per JEDEC78)	-	-	-	-	-	-	-	-	-	-	-	1/120	1/60
PD	Physical Dimensions	-	3/150	3/150	3/150	3/150	3/150	3/150	3/150	3/150	3/150	3/150	3/300	3/300
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	-	-	-	-	-	-	-	-	1550	-
SD	Surface Mount Solderability	8 Hours Steam Age, Pb-Free	-	-	-	-	-	-	-	3/660	-	3/660	1/150	1/220
SD	Surface Mount Solderability	Pb	-	-	-	-	-	-	-	-	-	-	1/150	-
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	-	-	3/2300	-	-	-	-	-	-	-
TC	Temperature Cycle, -55/150C	500 Cycles	-	-	-	-	-	3/2310	-	-	-	3/2310	3/2250	3/2310
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	3/2310	3/2310	3/2310	3/2310	-	-	3/2190	-	3/2310	-	-	-
UNHAST	Unbiased HAST, 110C/85%RH	264 Hours	-	-	-	-	3/2310	-	-	-	-	-	-	-
UNHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-
VM	Visual / Mechanical (per mfg. Site specification)	-	3/9840	3/9840	3/9840	3/9840	3/9840	3/9840	-	3/9840	3/9840	3/9840	-	3/9840
WBP	Bond Pull	Wires	3/2280	3/2280	-	-	-	3/2280	-	3/2280	3/2280	3/2280	3/900	3/2280
WBS	Ball Bond Shear	Wires	3/2280	3/2280	-	-	-	3/2280	-	3/2280	3/2280	3/900	-	3/2280

- 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 JEDEC78 : -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 Change Management team or your local Field Sales Representative.

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