



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN#20190411001.1**

**Qualification of an additional material set for select devices in the QFN package  
Change Notification / Sample Request**

**Date:** April 26, 2019

**To:** TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Team ([PCN\\_ww\\_admin\\_team@list.ti.com](mailto:PCN_ww_admin_team@list.ti.com)). For sample requests or sample related questions, contact the TI Samples Team at [pcn\\_sr\\_team@list.ti.com](mailto:pcn_sr_team@list.ti.com).

Sincerely,

PCN Team  
SC Business Services

**20190411001.1**  
**Attachment: 1**

**Products Affected:**

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
DAC5688IRGCT	null
PCM1774RGPR	null
TPS22965DSGR	null
TPS61230DRCR	null
TPS74201RGWT	null
TPS74801RGWT	null
DP83822IRHBT	null
DP83867ISRGZT	null
TCA9555RGER	null
TPS22975DSGT	null
TPS2561DRCR	null
TUSB522PIRGET	null
BQ40Z50RSMR-R2	null
BQ40Z50RSMT-R2	null
CC1200RHBT	null
TPS54218RTER	null
TPS70933DRVR	null
LP5910-1.8DRVT	null
MSP430FR5738IRGET	null
ADS114S08BIRHBR	null
LM5165DRCR	null
TPS53315RGFR	null
TPS62262DRVT	null
TPS74801DRCR	null
TPS7A1901DRBR	null
TLK1221RHAT	null
TPS74701DRCR	null
ADS6149IRGZT	null
CC1201RHBT	null
DAC3282IRGZT	null
DAC5689IRGCT	null
DP83822IFRHBT	null
DP83822IRHBR	null
DP83867IRRGZT	null
DRV8320SRTVT	null
HD3SS3412RUAR	null
HD3SS3412RUAT	null
LMX2572RHAR	null
MSP430FR2433IRGER	null
ONET1141LRGET	null
TLV320AIC3100IRHBR	null
TPS22966DPUR	null
TPS51315RGFT	null
TPS60230RGTT	null
TPS62140ARGTR	null
TPS65131RGET	null
TPS74201RGWRG4	null
TPS74801RGWR	null
CC1200RHBR	null
TPS2553DRVR-1	null
TPS25940LRVCR	null
TPS62293DRVR	null
TPS650940A0RSKT	null
TPS70950DRVR	null
TPS74201RGWR	null
TUSB522PRGER	null
TPS62240DRVT	null

TPS22975DSGR	null
DRV8837CDSGT	null
TPS70930DRV	null
LP5912-3.3DRV	null
OPA1622IDRCR	null
TPA6120A2RGYR	null
TPS62562DRV	null
TPS54335ADRCR	null
TPA6120A2RGYT	null
TPS72015DRV	null
TLV320DAC3100IRHBT	null
BQ27210DRKR	null
BQ294711DSGR	null
BQ294712DSGR	null
LM5165DRCT	null
LM5166XDRCT	null
LMH1228RTVT	null
SN65DPHY440SSRHRR	null
TDP158RSBT	null
TPS2546RTER	null
TPS2557DRBR	null
TPS51604DSGR	null
TPS61080DRCT	null
TPS62240DRV	null
TPS65235-1RUKR	null
SN65DPHY440SSRHRT	null
CC1020RSST	null
DP83867ISRGR	null
TLV320DAC3100IRHBR	null
BQ24105RHLR	null
TPS55330RTER	null
TPS7A1901DRBT	null
TPS22975NDSGR	null
TPS22975NDSGT	null
TPS62510DRCR	null
TUSB8041ARGCT	null
PGA300ARHHR	null
PGA305ARHHR	null
PGA305ARHHT	null
DP83822IFRHBR	null
LM5175RHFT	null
PCM1774RGPT	null
SN65DP141RLJT	null
TPS651851RSLR	null
TPS65131RGER	null
TPS2113ADRBR	null
HD3SS6126RUAR	null
SN27541DRZR-P1	null
TAS5768MRMTR	null
TPD6S300RUKR	null
DRV8320SRTVR	null
BQ25890RTWR	null
SND9039A2CTRSKR	null
TPA5050RSAR	null
TS3DS10224RUKR	null

Technical details of this Product Change follow on the next page(s).

<b>PCN Number:</b>	20190411001.1		<b>PCN Date:</b>	April 26 2019	
<b>Title:</b>	Qualification of an additional material set for select devices in the QFN package				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	July 26 2019		<b>Estimated Sample Availability:</b>	Provided upon Request	
<b>Change Type:</b>					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
	<input type="checkbox"/>	Part number change			
<b>PCN Details</b>					
<b>Description of Change:</b>					
Texas Instruments is pleased to announce the qualification of an additional material set for the devices listed in pg 2 of this notification as follows:					
		<b>Current</b>		<b>Additional</b>	
<b>Mount Compound</b>		4207768		<b>4207123</b>	
<b>Mold Compound</b>		4208625		<b>4222198</b>	
<b>Reason for Change:</b>					
Continuity of Supply					
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Anticipated impact on Material Declaration</b>					
<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 <a href="#">TI ECO website</a> .		
<b>Changes to product identification resulting from this PCN:</b>					
Not Applicable					
<b>Product Affected</b>					
See Page 2					

**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: ADS1220IRVAR	Qual Device: ADS8548SRGCR
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0
BLR	Board Level Reliability, Temp Cycle, -40/125C	1000 Cycles	-	-	-	-
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-
FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-
FLAM	Flammability (UL 94V-0)	--	-	-	-	-
FLAM	Flammability (UL-1694)	--	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	-
HBM	ESD - HBM	1000 V	-	-	-	-
CDM	ESD - CDM	250 V	-	3/9/0	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	3/229/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0	-
LU	Latch-up	(per JESD78)	-	-	-	-
PD	Physical Dimensions	--	3/15/0	3/15/0	3/15/0	3/15/0
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	-	-
SD	Surface Mount Solderability	8 Hours Steam Age, Pb-Free	-	-	-	-
SD	Surface Mount Solderability	Pb	-	-	-	-
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-	-
UHA	Unbiased HAST, 110C/85%RH	264 Hours	-	-	-	-
UHA	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-
VM	Visual / Mechanical	(per mfg. Site specification)	3/984/0	3/984/0	3/984/0	3/984/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	-	-
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	-	-

Type	Test Name / Condition	Duration	Qual Device: CC2541F256RHAR	Qual Device: DRV10866DSCR	Qual Device: RGC-DC	Qual Device: S320F28030RSH
AC	Autoclave 121C	96 Hours	-	3/231/0	-	3/231/0
BLR	Board Level Reliability, Temp Cycle, -40/125C	1000 Cycles	-	-	1/32/0	-
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-
FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-
FLAM	Flammability (UL 94V-0)	--	-	-	-	-
FLAM	Flammability (UL-1694)	--	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-
HBM	ESD - HBM	1000 V	-	-	-	-
CDM	ESD - CDM	250 V	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	-	-	3/230/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-
LU	Latch-up	(per JESD78)	-	-	-	-
PD	Physical Dimensions	--	3/15/0	3/15/0	-	3/15/0
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	-	-
SD	Surface Mount Solderability	8 Hours Steam Age, Pb-Free	-	-	-	3/66/0
SD	Surface Mount Solderability	Pb	-	-	-	-
TC	Temperature Cycle, -55/125C	700 Cycles	3/230/0	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	-	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-	3/219/0
UHA	Unbiased HAST, 110C/85%RH	264 Hours	3/231/0	-	-	-
UHA	Unbiased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	-
VM	Visual / Mechanical	(per mfg. Site specification)	3/984/0	3/984/0	-	3/984/0
WBP	Bond Pull	Wires	-	3/228/0	-	3/228/0
WBS	Ball Bond Shear	Wires	-	3/228/0	-	3/228/0

Type	Test Name / Condition	Duration	Qual Device: TPS63000DRCR	Qual Device: TPS65631WDSKR	QBS Package Reference: TPS7A4701QRGWRQ1	QBS Package Reference: TRS3122ERGER
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0
BLR	Board Level Reliability, Temp Cycle, -40/125C	1000 Cycles	-	-	1/32/0	-
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	3/90/0	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	1/30/0
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
HBM	ESD - HBM	1000 V	-	-	1/3/0	-
CDM	ESD - CDM	250 V	-	-	1/3/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0	-
HTOL	Life Test, 150C	300 Hours	-	-	-	1/77/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	1/45/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/230/0	-	-
LU	Latch-up	(per JESD78)	-	-	1/12/0	1/6/0
PD	Physical Dimensions	--	3/15/0	3/15/0	3/30/0	3/30/0
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	1/50/0	-
SD	Surface Mount Solderability	8 Hours Steam Age, Pb-Free	3/66/0	-	1/15/0	1/22/0
SD	Surface Mount Solderability	Pb	-	-	1/15/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/225/0	3/231/0	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-	-
UHA	Unbiased HAST, 110C/85%RH	264 Hours	-	-	-	-
UHA	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-
VM	Visual / Mechanical	(per mfg. Site specification)	3/984/0	3/984/0	-	3/984/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	3/90/0	3/228/0
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	3/90/0	3/228/0

- 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

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
WW PCN Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>