

PCN#20190411001.1B Qualification of an additional material set for select devices in the QFN package Change Notification / Sample Request

Date: November 19, 2020 To: Digi-Key PCN

Dear Customer:

Revision **B** is to announce the <u>retraction</u> of select devices.

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 (<u>PCN ww admin team@list.ti.com</u>). For sample requests or sample related questions, contact the TI Samples Team at <u>pcn sr team@list.ti.com</u>.

Sincerely,

PCN Team SC Business Services

20190411001.1B 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.

DEVICE

CUSTOMER PART NUMBER

TPS22959DNYR	null
TPS22959DNYT	null
TPS22969DNYR	null
TPS22969DNYT	null
TPS40197RGYT	null
TPS62240DRVR	null
TPS62240DRVT	null
ADS6129IRGZT	null
TPS40197RGYR	null

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

PCN Number: 2			20190411001.1B			Ρ	CN Date:	Νον	. 19, 2020		
Title:	Title: Qualification of an additional material set for select devices in the QFN package										
Custom	Customer Contact: PCN Manager Dept: Quality Services										
Propose				2019		timated Sai ailability:	mple	•		Provided upon Request	
Change	Туре:									·	
	embly Site		Assembly Process			\square	Assembly Materials				
Design			Electrical Specification				Mechanical Specification				
	Site		Pack	ing/Shipp	ing/L	abeling		Test Proce			
Wafe	er Bump Site		Wafe	er Bump N	1ateri	ial		Wafer Bur	np Pr	ocess	
Wafe	er Fab Site		Wafe	er Fab Ma	terial	S		Wafer Fab	Proc	ess	
			Part	number o	hang	le					
				PC	N De	etails					
Descrip	tion of Chang	le:				т. 					
Texas In	bove for the li struments is p isted in pg 2 o	lease	d to ann	ounce the		lification of	an a	dditional m	ateria	al set for the	
			notifica	tion as fol	llows:						
				C	urrer	: nt			ition		
	ount Compou	und		C	urrei 20776	: nt 58		420)712	3	
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See Page 2

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

Туре	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	-	-	-	-
UHAST	Unbiased HAST, 110C/85%RH	264 Hours	-	-	-	-
UHAST	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	-	-

Туре	Test Name / Condition	Duration	Qual Device: <u>CC2541F256RHAR</u>	Qual Device: DRV10866DSCR	Qual Device: <u>RGC-DC</u>	Qual Device: <u>S320F28030R SHT</u>
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
UHAST	Unbiased HAST, 110C/85%RH	264 Hours	3/231/0	-	-	-
UHAST	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

Туре	Test Name / Condition	Duration	Qual Device: <u>TPS63000DRCR</u>	Qual Device: <u>TPS65631WDSKR</u>	QBS Package Reference: <u>TPS7A4701QRGWRQ1</u>	QBS Package Reference: <u>TRS3122ERGER</u>
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	-	-	-	-
UHAST	Unbiased HAST, 110C/85%RH	264 Hours	-	-	-	-
UHAST	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	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN ww admin team@list.ti.com