

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

# PCN# 20210713001.1 Qualification of additional Fab site (RFAB), Datasheet update and additional Assembly site/BOM options for select LBC7 devices Change Notification / Sample Request

**Date:** July 20, 2021

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.

Texas Instruments requires acknowledgement of 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 samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

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 or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (<a href="PCN www admin team@list.ti.com">PCN www admin team@list.ti.com</a>). For sample requests or sample related questions, contact your local Field Sales Representative.

PCN Team SC Business Services

# 20210713001.1 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.

DEVICE	<b>CUSTOMER PART NUMBER</b>
TCA6416ARTWR	null
TCA9555RTWR	null
TPS22930AYZVT	null
TPS62177DQCT	null
TPS62175DQCR	null
TPS7A8801RTJT	null
TCA9539RTWR	null
TPS7A8701RTJT	null
TPS22930AYZVR	null
TPS7A8701RTJR	null
TPS62175DQCT	null
TPS62177DQCR	null

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

PCN Number: 202		210713001.1		PCN Date:		ite:	July 20, 2021		
				nal Fab site (RFAB), elect LBC7 devices	Datash	eet ι	updat	te and	additional Assembly
Customer	Contact:		PCN	l Manager		De	Dept:		Quality Services
Proposed 1 <sup>st</sup> Ship Date:			Oct. 20, 2021 Estima Availab		nted Sample bility:		nple	Date provided at sample request.	
Change Type:									
Assen	nbly Site		$\boxtimes$	Assembly Process			$\boxtimes$	Assembly Materials	
Desig	n		$\boxtimes$					Mecha	anical Specification
☐ Test Site ☐ Packing/Shipping/Label		Labeling			Test I	Process			
Wafer	Wafer Bump Site Wafer Bump Material				Wafei	Bump Process			
	fer Fab Site 🔲 Wafer Fab Materials				Wafei	Fab Process			
		•	Part number change			•			
PCN Details									

# **Description of Change:**

Texas Instruments is pleased to announce the qualification of an additional fab (RFAB) and assembly (CDAT) site/BOM options for selected devices as listed below in the product affected section.

Current Site			Additional Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
FFAB	LBC7	200mm	RFAB	LBC7	300mm

Construction differences are noted below:

## **Group 1 Adding RFAB + Clark adding CDAT A/T:**

No Material differences between sites

Group 2 Adding RFAB + MLA adding CDAT A/T Site, BOM Change:

	MLA	CDAT	
Mount Compound	4207768	4207123	
Mold Compound	4208625	4222198	

In addition, the datasheet number will be changing for the devices listed in group 3:

Device Family	Change From:	Change To:
TPS22930A	SLVSBL3C	SLVSBL3D

<b>J</b> i3	Texas
Y	Instruments

TPS22930

SLVSBL3D - NOVEMBER 2012 - REVISED JULY 2021

C	Changes from Revision C (January 2021) to Revision D (July 2021)			
•	Updated I <sub>RCP(leak)</sub> spec to 2.6 µA	5		

These changes may be reviewed at the datasheet links provided. <a href="https://www.ti.com/product/TPS22930">https://www.ti.com/product/TPS22930</a>

Qual details are provided in the Qual Data Section.

# Reason for Change:

Continuity of Supply

# Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative): None

# **Anticipated impact on Material Declaration**

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No Impact to	
the Material	
Declaration	

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 TI ECO website.

# Changes to product identification resulting from this PCN:

#### **Fab Site Information:**

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
FR-BIP-1	TID	DEU	Freising
RFAB	RFB	USA	Richardson

**Assembly Site Information:** 

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TI Malaysia	MLA	MYS	Kuala Lumpur
TI Clark	QAB	PHL	Angeles City, Pampanga
CDAT	CDA	CHN	Chengdu

Sample product shipping label (not actual product label)

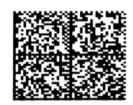
TEXAS INSTRUMENTS

MADE IN: Malaysia
2DC: 20:

MSI 2 /260C/1 YEAR SEAL DT

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

ያየጀሕ: LBL: 5A (L)T0:1750



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483\$12 (P) (2P) REV: (V) 0033817 (2D) CSO: SHE (21L) CCO: USA (22L) ASO: MLA (23L) ACO: MY\$

#### **Product Affected:**

Group 1 Device List: Adding RFAB + TI-Clark adding CDAT A/T Site					
TPS62175DQCR	TPS62175DQCT	TPS62177DQCR	TPS62177DQCT		

<b>Group 2 Device List:</b>	e and BOM Change		
TCA6416ARTWR	TCA1116RTWR	TCA9539RTWR	TCA9555RTWR

Group 3 Device List: Adding RFAB Wafer Fab site + Datasheet change		
TPS22930AYZVR	TPS22930AYZVT	

Group 4 Device List: Adding RFAB Wafer Fab site				
TLV7031DCKT	TPS7A8701RTJT	TPS7A8801RTJR	TPS7A8801RTJT	
TPS7A8701RTJR			_	

# Qualification Report

# Approve Date 6-October-2010

#### Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: TPS51217DSC	
ED	Electrical Characterization	Per Datasheet Parameters	Pass	
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	
AC	Autoclave, 121C	96 Hours	3/231/0	
HBM	ESD - HBM	2000 V	3/9/0	
CDM	ESD - CDM	500 V	3/9/0	
HTOL	Life Test, 135C	635 Hours	3/231/0	
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	
LU	Latch-up	(per JESD78)	3/18/0	
TC	Temperature Cycle, -65/150C	500 Cycles	3/18/0	

- Qual Device TPS51217DSC is qualified at LEVEL2-260C
- 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

#### Qualification Report Approve Date 02-June-2021

#### Qualification Results

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

			. ,					
Туре	Test Name / Condition	Duration	Qual Device: TCA6416ARTWR	Qual Device: TCA9555RTWR	Qual Device: TCA1116RTWR	Qual Device: TCA9539RTWR	QBS Package Reference: THS4552IRTW	QBS Package Reference: TMP116AIDRV
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	3/231/0	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	-	-	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	-	3/231/0	-
SD	Solderability	PB Free	-	-	-	-	2/44/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	-	3/231/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	3/231/0	3/231/0
WBP	Bond Pull	Wires	1/30/0	1/30/0	1/30/0	1/30/0	-	-
WBS	Ball Bond Shear	Wires	1/30/0	1/30/0	1/30/0	1/30/0	-	-

- Qual Device TCA6416ARTWR is qualified at LEVEL2-260C
- Qual Device TCA9555RTWR is qualified at LEVEL2-260C
- Qual Device TCA1116RTWR is qualified at LEVEL2-260C
- Qual Device TCA9539RTWR is qualified at LEVEL2-260C
- 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: 125C/rk Hours, 140C/480 Hours.
   The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/rk 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.

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Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN ww admin team@list.ti.com

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