

## 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: Flextronics 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 (<u>PCN ww admin team@list.ti.com</u>). For sample requests or sample related questions, contact your local Field Sales Representative.

PCN Team SC Business Services

## **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
TCA9539RTWR	ALC3-1AB290460001
TCA9555RTWR	AMG00033168-100-A
TPS22930AYZVR	ITLH-H43461-001
TPS62175DQCT	FLKH-4826285
TPS7A8801RTJR	JNTG-310-067925
TPS62177DQCR	AMZ3-14-002874
TPS62177DQCR	AMZH-14-002874
TPS62177DQCT	PBEH-453564540751
TPS62175DQCR	AGIH-1827-5767 RNCH-57-00070-01
TPS62175DQCR	
TPS62175DQCR	HTDHP-632-10660-000 AVTG-1822-001062
TCA9555RTWR	
TCA9539RTWR	CISH-15-13310-01
TCA9539RTWR	VIO-120-0316-00
TCA6416ARTWR	VRJH-300258-EE
TCA6416ARTWR	AXI-1700916
TCA6416ARTWR	TDN-602-460-01
TCA6416ARTWR	TER602-460-01
TCA6416ARTWR	XILG-ICS-00430-01
TCA9539RTWR	CIS-15-13310-01-00
TPS22930AYZVT	
TPS22930AYZVR	FIG-ITLH-H43461-001
TPS22930AYZVR	PRRH-CPICS02436A
TPS62177DQCR	PBEH-453564540751
TPS62177DQCR	VHA-CMP-AA-0092
TPS7A8801RTJR	CNL1H-P007177
TPS7A8801RTJR	NOK1H-150-00202
TPS62175DQCR	PBEH-453564546811
TPS62175DQCR	BYEH-ICS-0044
TCA9539RTWR	AMZ3-14-003723
TCA6416ARTWR	SRWH-3401085
TCA9539RTWR	CIS-15-13310-01
TCA9539RTWR	ALC11-1AB290460001
TCA9555RTWR	TDN-638-549-00
TCA9555RTWR	ARI-IC-00779
TPS22930AYZVR	FIG-ITL4H-H43461-001
TPS22930AYZVR	MIS7H-X882140-001
TPS62175DQCT	PBEH-453564546811
TPS7A8801RTJR	CIE-035-4478-001
TPS62175DQCR	EBEH-036-1002160
TCA6416ARTWR	HLK2-998-06799
TCA9539RTWR	CIS3-15-13310-01
TPS62177DQCR	GEC1H-2101540-001
TCA9555RTWR	CISH-15-13819-01
TPS7A8801RTJT	JNTG-310-067925
TPS7A8701RTJR	SIKH-PWR068
TCA6416ARTWR	ISIH-030-0118-01
TCA6416ARTWR	GEC-2396959-4
TCA6416ARTWR	SCLH-200001858
TPS7A8801RTJR	ALC5H-24-1490-01
TLV7031DCKT	HUDH-151-00003
TPS62175DQCR	TRB2H-97064
TCA9539RTWR	CISH-15-13310-01-NPI-A
TCA9555RTWR	CIE-075-1674-001

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

TPS7A8701RTJT

FFV1H-ICS-0884-00

PCN Num	Number: 20210713001.1			.3001.1	PCN Date:			ate:	July 20, 2021	
Title:         Qualification of additional Fab site (RFAB), Datasheet update and additional Assite/BOM options for select LBC7 devices						additional Assembly				
Custome	r Contact:		<u>PCN</u>	I Manager		Dept:			Quality Services	
Proposed	l 1 <sup>st</sup> Ship Date	:	Oct	. 20, 2021		Estimated Sample Availability:			Date provided at sample request.	
Change 1	уре:									
🛛 Assei	mbly Site		$\boxtimes$	Assembly Process			Assembly Materials		mbly Materials	
Desig	jn		$\boxtimes$	Electrical Specifica	ation		Mechanical Specificati		anical Specification	
Test	Site		$\boxtimes$	Packing/Shipping/	Labeling	ļ	Test Process		Process	
Wafe	r Bump Site		Wafer Bump Material				Wafer Bump Process			
🛛 🛛 Wafe	r Fab Site		Wafer Fab Materials				Wafe	r Fab Process		
Part number char		Part number chan	ge							
				DCN Data	ile					

## 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		A	dditional 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:**

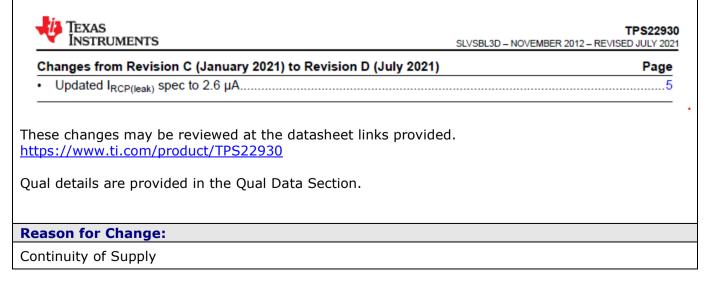
No Material differences between sites

## 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



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nti	cipated imp	act on M	aterial Declar	ation			
]	No Impact the Materia Declaration	to al	Material D production release.	eclarati n data a Jpon pr	ions or Product Con and will be available oduction release th e <u>TI ECO website</u> .	e following the	e production
har	nges to prod	luct ide	ntification resu	lting fi	rom this PCN:		
Fab	Site Inform	nation:					
Chip Site C		Chip Site Or Code (201		Chip Site Country	Code (21L)	Chip Site City	
	FR-BIP-1		TID		DEU		Freising
	RFAB		RFB		USA		Richardson
sse	mbly Site I			T			
	sembly Site	Assem	bly Site Origin (22L)	Assem	bly Country Code (23L)		mbly City
	I Malaysia		MLA		MYS		a Lumpur
	TI Clark		QAB		PHL	Angeles City, Pampang	
	CDAT		CDA		CHN		engdu
amı	ple product sl	hipping l	abel (not actual	product	6	07860	
	TEXAS STRUMENTS DE IN: Malays 20: 2 /260C/1 Y 1 /235C/UNL	SIA YEAR SEAL IM 03/2 39	CA G4	product	(1P) SN74LS (Q) 2000 (31T) LOT: 3 (4W) TKY (1T (P) (2D) REV: (22L) ASO: MLA	(D) 0336 959047MLA ) 75234839 (21L) CC039	512 54
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	TEXAS STRUMENTS DE IN: Malays 29: 2 /260C/1 Y 1 /235C/UNL 1 /235C/UNL L: 5A (L L: 5A (L L: 5A (L	sia YEAR SEAI O3/2 39 .)T0:17 d: 2 List: A	G4 DT 29/04 750 Adding RFAB +	TI-Clar	(1P) SN74LS (Q) 2000 (31T)LOT: 3 (4W) TKY (1T (P) (2D) REV: (20L) CSO: SHE (22L) ASO: MLA K adding CDAT A	(D) 033 959047MLA 7523483 (21L) CC0:US (21L) CC0:US (21L) AC0:M /T Site	SI2
	TEXAS STRUMENTS DE IN: Malays 20: 22 /260C/1 Y 1 /235C/UNL : M: L: 5A (L uct Affected	sia YEAR SEAI O3/2 39 .)T0:17 d: 2 List: A	Са <sup>рт</sup> 29/04 750	TI-Clar	(1P) SN74LS (Q) 2000 (31T)LOT: 3 (4W) TKY(1T (P) (2P) REV: (20L) CSO: SHE (22L) ASO: MLA	(D) 0336 959047MLA 9 75234835 (21L) CC0:US (21L) CC0:US (21L) AC0:M	SI2
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IN MACCONSIL MINING MININA MIN	TEXAS STRUMENTS 22:2/260C/1 Y 1/235C/UNL 1/235C/UNL L: 5A (L UCT Affected 000 1 Device 62175DQCR 000 2 Device 6416ARTWR 000 3 Device 22930AYZVR	sia YEAR SEAI 03/2 39 .)TO:17 d: List: A T List: A T List: A T List: A T	OT   DT   29/04   Adding RFAB +   PS62175DQCT   Adding RFAB +   CA1116RTWR	TI-Clai T MLA ac afer Fa	(1P) SN74LS (Q) 2000 (31T) LOT: 3 (4W) TKY (1T (P) (2D) REV: (2OL) CSO: SHE (22L) ASO: MLA <b>K adding CDAT A</b> PS62177DQCR <b>Iding CDAT A/T S</b> CA9539RTWR <b>b site + Datashee</b>	(D) 0336 959047MLA 959047MLA 900338 (21L) CC0:U (21L) CC0:U (21L	DQCT
IN MALCON 2DC MSL MSL MSL MSL MSL MSL MSL MSL MSL MSL	TEXAS STRUMENTS 22:2/260C/1 Y 1/235C/UNL 1/235C/UNL L: 5A (L UCT Affected 000 1 Device 62175DQCR 000 2 Device 6416ARTWR 000 3 Device 22930AYZVR	sia YEAR SEAI O3/2 39 .)TO:17 d: c List: A C List: A C List: A C List: A	Adding RFAB + PS62175DQCT Adding RFAB + CA1116RTWR Adding RFAB W PS22930AYZVT	TI-Clai TI-Clai T MLA ac T afer Fa	(1P) SN74LS (Q) 2000 (31T) LOT: 3 (4W) TKY (1T (P) (2D) REV: (2OL) CSO: SHE (22L) ASO: MLA <b>K adding CDAT A</b> PS62177DQCR <b>Iding CDAT A/T S</b> CA9539RTWR <b>b site + Datashee</b>	(D) 0336 959047MLA 959047MLA 900338 (21L) CC0:U (21L) CC0:U (21L	DQCT TWR

# 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 gualified 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: TH S4552IRTW	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	-
тс	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 gualified 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: 1250/1k Hours, and 1700/420 Hours,
 The following are equivalent TESL options based on an activation energy of 0.7eV: 1500/1k Hours, and 1700/420 Hours
 The following are equivalent Temp Cycle options per JESD47: -550/1250/700 Cycles and -650/1500/500 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

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