12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20220627000.1
Qualification of CFAB as an additional Fab site options for select LBC3S devices
Change Notification / Sample Request

Date: June 29, 2022
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 (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) process.

TI 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, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

PCN Team
SC Business Services

20220627000.1
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	CUSTOMER PART NUMBER
MAX3238IPWR	null
TLC2274CPWR	null
TLV272CDGK	null
TLV271IDBVR	null
TRS3238EIPWR	null
TLV2374IPW	null
TLV2374IPWR	null
TLV272IDGKR	null
TLC2274ACPWR	null
TLV272CDGKR	null
TLV274CPWR	null
TLV2264AIPWR	null
TLV2375IPWR	null
TLV274IPWR	null
TLV2372IDGK	null
TLV2372IDGKR	null
MAX3238ECPWR	null
TLC2264CPWR	null
TLC2274AIPWR	null
TLV271IDBVT	null
TLC2264AIPWR	null
TLV2371IDBVR	null
TLV2371IDBVT	null
TLC2274IPW	null
TLV2474AIPWR	null
TLV2374IN	null
TLV2254AIPWR	null
TLV2373IDGS	null
TLV2373IDGSR	null

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

PCN Number:	20220627000.1	**PCN Date:**	June 29, 2022
Title:	Qualification of CFAB as an additional Fab site options for select LBC3S devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Sep 29, 2022	**Sample requests accepted until:**	July 29, 2022*

***Sample requests received after July 29, 2022 will not be supported.**

Change Type:

☐	Assembly Site	☐	Assembly Process	☐	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☒	Wafer Fab Site	☒	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its CFAB fabrication facilities as an additional Wafer Fab option for the devices listed in the "Product Affected" section.

Current Fab Site			New Fab Site		
Fab Site	**Process**	**Wafer Diameter**	**Fab Site**	**Process**	**Wafer Diameter**
DL-LIN	LBC3S	150 mm	CFAB	LBC3S	200 mm
DL-LIN	LBC3S	200 mm			

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-milimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

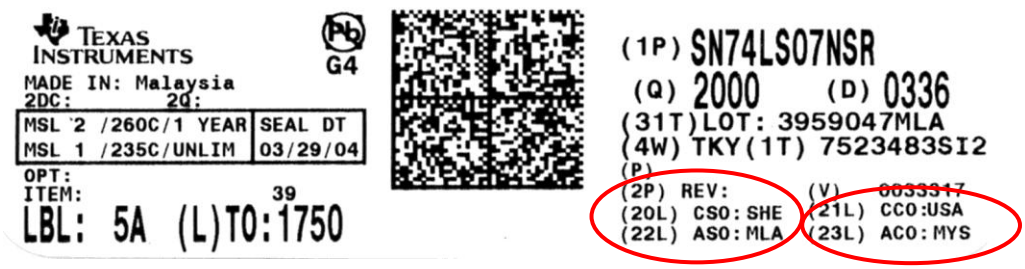
None

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
DL-LIN	DLN	USA	Dallas
CFAB	**CU3**	**CHN**	**Chengdu**

Sample product shipping label (not actual product label):



Product Affected:

MAX3238CPWR	TLC085AIDR	TLC2274IPWR	TLV2375IPW

MAX3238ECPWR	TLC2254CPW	TLV2254AIPW	TLV2375IPWR
MAX3238IPWR	TLC2254CPWR	TLV2254AIPWR	TLV2474AIPWR
SN1003028DBVR	TLC2254IN	TLV2264AIPWR	TLV271IDBVR
TLC072CDGN	TLC2264AIPWR	TLV2371IDBVR	TLV271IDBVT
TLC072CDGNR	TLC2264CN	TLV2371IDBVT	TLV272CDGK
TLC072CP	TLC2264CPWR	TLV2372IDGK	TLV272CDGKR
TLC072IDGN	TLC2264IN	TLV2372IDGKR	TLV272IDGK
TLC072IDGNR	TLC2274ACN	TLV2372IP	TLV272IDGKR
TLC073CDGQ	TLC2274ACPWR	TLV2373IDGS	TLV272IP
TLC073IDGQ	TLC2274AIPW	TLV2373IDGSR	TLV274CPWR
TLC073IDGQR	TLC2274AIPWR	TLV2374IN	TLV274IN
TLC082CDGN	TLC2274CN	TLV2374IPW	TLV274IPW
TLC082CDGNR	TLC2274CNSR	TLV2374IPWR	TLV274IPWR
TLC082IDGN	TLC2274CPWR	TLV2375ID	TRS3238EIPWR
TLC082IDGNR	TLC2274IPW	TLV2375IDR	

Qualification Report

Approve Date 23-May-2022

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

Type	Test Name / Condition	Duration	Qual Device: TLC2264AQPWRQ1	QBS Process Reference: CD3301RHHR	QBS Package Reference: TLV9064QPWRQ1
HTOL	Life Test, 150C	300 Hours	-	3/231/0	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	3/231/0	1/45/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-
AC	Autoclave 121C	96 Hours	-	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	-
CDM	ESD - CDM	750 V	1/3/0	1/3/0	-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	-
MQ	Assembly MQ	Per Site Specifications	Pass	Pass	Pass

- QBS: Qual By Similarity
- Qual Device TLC2264AQPWRQ1is qualified at LEVEL1-260C
- 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 13-Sept-2021

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

Type	Test Name / Condition	Duration	Qual Device: TLV2464CPWR	QBS Process Reference: CD3301RHHR	QBS Package Reference: TPS2042BD	QBS Package Reference: TPS2419DR
HTOL	Life Test, 150C	300 Hours	-	3/231/0	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	3/231/0	3/231/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	3/231/0
AC	Autoclave 121C	96 Hours	-	3/231/0	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0	3/231/0
HBM	ESD - HBM	4000 V	1/3/0	1/3/0	-	-
CDM	ESD - CDM	1000 V	1/3/0	1/3/0	-	-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	-	-
MQ	Assembly MQ	Per Site Specifications	Pass	Pass	Pass	Pass

- QBS: Qual By Similarity
- Qual Device TLV2464CPWR is qualified at LEVEL1-260C
- 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

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Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

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

Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com