12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20210202000.1
Qualification of RFAB as an additional Fab site option for select devices and Datasheet Update
Change Notification / Sample Request

Date: February 08, 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 (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

PCN Team
SC Business Services

20210202000.1
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
TPS62130RGTT	null
TPS62130RGTR	null
TPS62140RGTR	null
TPS62085RLTR	null
TPS2553DDBVR	null
TPS62142RGTR	null
TPS62085RLTT	null
TLV62130RGTT	null
TLV62130RGTR	null
TLV62150ARGTT	null
TPS62140RGTT	null
TPS2553DBVR	null
TLV62130ARGTR	null
TLV62085RLTR	null
TPS54622RHLT	null
BQ24045DSQR	null
TPS62150RGTR	null
TPS62150ARGTR	null
TPS62150RGTT	null
TPS62133RGTR	null
TPS62132RGTR	null
TPS62142RGTT	null
TLV62150ARGTR	null
TPS2553DBVT	null
TPS62152RGTT	null
TLV62085RLTT	null
TPS62130ARGTR	null
BQ24092DGQT	null
TPS54622RHLR	null
BQ24041DSQR	null
TPS62130ARGTT	null
TPS62133RGTT	null
TPS62152RGTR	null
BQ24040DSQT	null
TPS62143RGTR	null
TPS62150ARGTT	null
TLV62130ARGTT	null
TLV62150RGTT	null
TPS2553DDBVT	null

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

PCN Number:	20210202000.1	PCN Date:	Feb 8, 2021
Title:	Qualification of RFAB as an additional Fab site option for select devices and Datasheet Update		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	May 8, 2021	Estimated Sample Availability:	Date provided at sample request.

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		

Notification Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab source for the selected devices listed in the "Product Affected" section.

Current Fab Site			Additional Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**New Fab Site**	**Process**	**Wafer Diameter**
MIHO8	LBC7	200 mm	RFAB	LBC7	300 mm

As part of the RFAB qualification, it was determined that the previous Datasheet limits were not accurate (this is also true for MIHO8). This has been corrected and the datasheet number will be changing as shown below:

Device Family	Change From:	Change To:
TPS62085	SLVSB70B	SLVSB70C
BQ24040, BQ24041, BQ24045	SLUS941G	SLUS941H

TPS62085, TPS62086, TPS62087
SLVSB70C – OCTOBER 2013 – REVISED JANUARY 2021

TEXAS INSTRUMENTS
www.ti.com

4 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision B (July 2018) to Revision C (January 2021) — **Page**

- Updated the numbering format for tables, figures and cross-references throughout the document. 1
- Changed maximum $I_{PG,LKG}$ specification up to 125°C T_J from 0.16 µA to 0.25 µA in *Electrical Characteristics* table 5

TEXAS INSTRUMENTS

BQ24040, BQ24041, BQ24045
SLUS941H – SEPTEMBER 2009 – REVISED FEBRUARY 2021

Changes from Revision G (June 2020) to Revision H (February 2021) — **Page**

- Added BQ24040, BQ24045 to IEC 62368-1 CB Certification Feature 1
- Changed $I_{BD-SINK}$ minimum from 7 mA to 6 mA 7
- Changed I_{IH} maximum from 8 µA to 9.5 µA 7

These changes may be reviewed at the datasheet links provided.

http://www.ti.com/product/TPS62085

http://www.ti.com/product/BQ24040

Reason for Change:

Continuity of supply and to accurately reflect device characteristics.

Anticipated impact on Fit, Form, 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
MIHO8	MH8	JPN	Ibaraki
RFAB	**RFB**	**USA**	**Richardson**

Sample product shipping label (not actual product label)

Product Affected:

Group 1: Adding RFAB as an additional site

BQ24050DSQR	SN1809004RHLT	TPS54622RHLR	TPS62140RGTT
BQ24050DSQT	SN54622RHLR	TPS54622RHLT	TPS62141RGTR
BQ24052DSQR	SN62085RLTR	TPS546C20RVFR	TPS62141RGTT
BQ24052DSQT	SN62130ARGTR	TPS546C20RVFT	TPS62142RGTR
BQ24090DGQR	SN62130ARGTT	TPS62130AGRGTR	TPS62142RGTT
BQ24090DGQT	TLV62085RLTR	TPS62130AGRGTT	TPS62143RGTR
BQ24091DGQR	TLV62085RLTT	TPS62130ARGTR	TPS62143RGTT
BQ24091DGQT	TLV62130ARGTR	TPS62130ARGTT	TPS62150ARGTR
BQ24092DGQR	TLV62130ARGTT	TPS62130GRGTR	TPS62150ARGTT
BQ24092DGQT	TLV62130RGTR	TPS62130GRGTT	TPS62150BRGTR
BQ24093DGQR	TLV62130RGTT	TPS62130RGTR	TPS62150RGTR
BQ24093DGQT	TLV62150ARGTR	TPS62130RGTRF0	TPS62150RGTRF0
BQ24095DGQR	TLV62150ARGTT	TPS62130RGTT	TPS62150RGTT
BQ24095DGQT	TLV62150RGTR	TPS62131RGTR	TPS62151RGTR
SN1208058RHLR	TLV62150RGTT	TPS62132RGTR	TPS62151RGTT
SN1210015RHLR	TPS2553DBVR	TPS62132RGTT	TPS62152RGTR
SN1409057DBVR	TPS2553DBVT	TPS62133RGTR	TPS62152RGTT
SN1610044RHLR	TPS2553DDBVR	TPS62133RGTT	TPS62153RGTR
SN1703013RHLR	TPS2553DDBVT	TPS62140RGTR	TPS62153RGTT
SN1809004RHLR			

Group 2: Adding RFAB and Datasheet update			
BQ24040DSQR	BQ24041DSQT	SN2040DSQR	TPS62085RLTT
BQ24040DSQT	BQ24045DSQR	SN2040DSQT	
BQ24041DSQR	BQ24045DSQT	TPS62085RLTR	

Qualification Report

Approve Date 28-December-2020

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

Type	Test Name / Condition	Duration	Qual Device: BQ24095DGQR	Qual Device: SN1703013RHLR	Qual Device: TPS2553DBVR	Qual Device: TPS546C20RVFR	Qual Device: TPS62085RLTR	Qual Device: TPS62130ARGTR	QBS Process Reference: TPS3703C7500DSERQ1
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	-	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	-	-	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	-	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	-	-	-	3/231/0
HBM	ESD - HBM	V	1/3/0 (3000V)	1/3/0 (2000V)	1/3/0 (2000V)	1/3/0 (2000V)	1/3/0 (2000V)	1/3/0 (2000V)	1/3/0
CDM	ESD - CDM	V	1/3/0 (1500V)	1/3/0 (500V)	1/3/0 (500V)	1/3/0 (500V)	1/3/0 (500V)	1/3/0 (500V)	1/3/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0
ED	Electrical Distributions	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0	3/90/0
MQ	Assembly MQ	per mfg. Site specification	Pass	Pass	Pass	Pass	Pass	Pass	Pass
WBP	Bond Pull	Wires	1/80/0	1/80/0	1/80/0	1/80/0	1/80/0	1/80/0	3/240/0
WBS	Bond Shear	Wires	1/80/0	1/80/0	1/80/0	1/80/0	1/80/0	1/80/0	3/240/0

- QBS: Qual By Similarity
- Qual Device BQ24095DGQR is qualified at LEVEL1-260C
- Qual Device SN1703013RHLR is qualified at LEVEL2-260C
- Qual Device TPS2553DBVR is qualified at LEVEL1-260C
- Qual Device TPS546C20RVFR is qualified at LEVEL2-260C
- Qual Device TPS62085RLTR is qualified at LEVEL1-260C
- Qual Device TPS62130ARGTR 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

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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