

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:			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input checked="" type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Wafer Fab Site	<input checked="" type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	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
MIH08	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 MIH08). 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



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 <i>Electrical Characteristics</i> table.....	5



[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	SN1809004RHLLT	TPS54622RHLLR	TPS62140RGTT
BQ24050DSQT	SN54622RHLLR	TPS54622RHLLT	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
SN1208058RHLLR	TLV62150RGTT	TPS62132RGTR	TPS62151RGTT
SN1210015RHLLR	TPS2553DBVR	TPS62132RGTT	TPS62152RGTR
SN1409057DBVR	TPS2553DBVT	TPS62133RGTR	TPS62152RGTT
SN1610044RHLLR	TPS2553DDBVR	TPS62133RGTT	TPS62153RGTR
SN1703013RHLLR	TPS2553DDBVT	TPS62140RGTR	TPS62153RGTT
SN1809004RHLLR			

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

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