12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240430000.1
Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet, and additional Assembly site options for select devices
Change Notification / Sample Request

Date: April 30, 2024
To: MOUSER 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 and approval of this 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 change management team.

For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

Change Management Team
SC Business Services

20240430000.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
TPS562201DDCR	NULL
TPS562201DDCT	NULL
TPS562208DDCR	NULL
TPS562208DDCT	NULL
TPS563201DDCR	NULL
TPS563201DDCT	NULL
TPS563208DDCR	NULL
TPS563208DDCT	NULL

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

PCN Number:	20240430000.1	**PCN Date:**	April 30, 2024
Title:	Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet, and additional Assembly site options for select devices		
Customer Contact:	Change Management Team	**Dept:**	Quality Services
Proposed 1st Ship Date:	July 29, 2024	**Sample requests accepted until:**	May 30, 2024*

***Sample requests received after May 30, 2024 will not be supported.**

Change Type:

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

PCN Details

Description of Change:

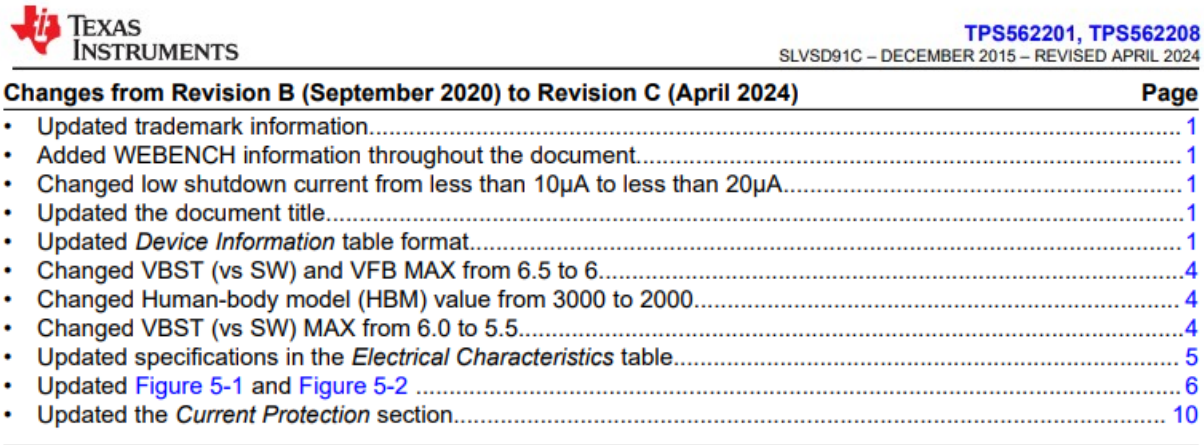
Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab option in addition to a new Assembly site (CDAT) for the devices listed in the "Product Affected" section.

Current Fab Site			Additional Fab Site		
Fab Site	**Process**	**Wafer Diameter**	**Fab Site**	**Process**	**Wafer Diameter**
MIHO8	LBC7	200 mm	RFAB	LBC9	300 mm
RFAB	LBC7	300 mm			

The die was also changed as a result of the process change.

With CDAT being added as a new Assembly site in addition to JCETCZ and TIPI, there are no new BOM materials being introduced.

The datasheets will be changing as a result of the above mentioned changes. The datasheet change details can be reviewed in the datasheet revision history. The links to the revised datasheets are available in the table below.



TEXAS INSTRUMENTS

TPS562201, TPS562208

SLVSD91C – DECEMBER 2015 – REVISED APRIL 2024

Changes from Revision B (September 2020) to Revision C (April 2024) **Page**

- Updated trademark information 1
- Added WEBENCH information throughout the document 1
- Changed low shutdown current from less than 10µA to less than 20µA 1
- Updated the document title 1
- Updated *Device Information* table format 1
- Changed VBST (vs SW) and VFB MAX from 6.5 to 6 4
- Changed Human-body model (HBM) value from 3000 to 2000 4
- Changed VBST (vs SW) MAX from 6.0 to 5.5 4
- Updated specifications in the *Electrical Characteristics* table 5
- Updated Figure 5-1 and Figure 5-2 6
- Updated the *Current Protection* section 10

Changes from Revision * (December 2015) to Revision A (April 2024) **Page**

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
TPS56220x	SLVSD91B	**SLVSD91C**	http://www.ti.com/product/TPS562201
TPS56320x	SLVSD90	**SLVSD90A**	http://www.ti.com/product/TPS563201

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

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

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**

Die Rev:

Current	New
Die Rev [2P]	**Die Rev [2P]**
A	**A**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
JCETCZ	JCC	CHN	Chuzhou
TIPI	PHI	PHL	Baguio City
CDAT	**CDA**	**CHN**	**Chengdu**

Sample product shipping label (not actual product label):

Product Affected:

TPS562201DDCR	TPS562208DDCR	TPS563201DDCR	TPS563208DDCR
TPS562201DDCT	TPS562208DDCT	TPS563201DDCT	TPS563208DDCT

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TPS563201DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-	1/77/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	3/231/0
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0	-	1/77/0	-
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	1/77/0	-	-	3/231/0	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	1/77/0	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	3/231/0	3/231/0	-	-

Type	#	Test Name	Condition	Duration	Qual Device: TPS563201DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	3/231/0	1/77/0	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	3/66/0	3/66/0	-	-	1/22/0
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	-	1/5/0	-	-
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	-	-	-	1/3/0	-
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	-	-	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	-	1/3/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	3/90/0	1/30/0	-
FTY	E6	Final Test Yield	-	-	-	-	-	3/3/0	1/1/0	-

- QBS: Qual By Similarity
- Qual Device TPS563201DDCR is qualified at MSL1 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/

TI Qualification ID: R-NPD-2307-003

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TPS562208DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR	QBS Reference: TPS563201DDCR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-	1/77/0	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	3/231/0	-
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	1/77/0	-	1/77/0
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	-	-	3/231/0	3/231/0	-	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	1/77/0	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	3/231/0	3/231/0	-	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	3/231/0	1/77/0	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	-	-	-

Type	#	Test Name	Condition	Duration	Qual Device: TPS562208DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR	QBS Reference: TPS563201DDCR
SD	C3	PB-Free Solderability	Precondition w:155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	3/66/0	3/66/0	-	-	1/22/0	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	-	1/5/0	-	-	-
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	-	-	-	1/3/0	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	-	-	1/3/0	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	-	1/3/0	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	3/90/0	1/30/0	-	1/30/0
FTY	E6	Final Test Yield	-	-	-	-	-	3/3/0	1/1/0	-	-

- QBS: Qual By Similarity
- Qual Device TPS562208DDCR is qualified at MSL1 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/

TI Qualification ID: R-NPD-2307-024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TPS563208DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR	QBS Reference: TPS563201DDCR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-	1/77/0	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	3/231/0	-
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	1/77/0	-	1/77/0
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	-	-	3/231/0	3/231/0	-	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	1/77/0	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	3/231/0	3/231/0	-	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	3/231/0	1/77/0	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	-	-	-

Type	#	Test Name	Condition	Duration	Qual Device: TPS563208DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR	QBS Reference: TPS563201DDCR
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	3/66/0	3/66/0	-	-	1/22/0	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	-	1/5/0	-	-	-
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	-	-	-	1/3/0	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	-	-	1/3/0	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	-	1/3/0	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	3/90/0	1/30/0	-	1/30/0
FTY	E6	Final Test Yield	-	-	-	-	-	3/3/0	1/1/0	-	-

- QBS: Qual By Similarity
- Qual Device TPS563208DDCR is qualified at MSL1 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/

TI Qualification ID: R-NPD-2307-025

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TPS562201DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR	QBS Reference: TPS563201DDCR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-	1/77/0	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	3/231/0	-
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	-	-	-	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	1/77/0	-	1/77/0
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	-	-	3/231/0	3/231/0	-	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	1/77/0	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	3/231/0	3/231/0	-	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	3/231/0	1/77/0	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	-	-	-

Type	#	Test Name	Condition	Duration	Qual Device: TPS562201DDCR	QBS Reference: TPS563249DDCR	QBS Reference: TPS564201DDCR	QBS Reference: TPS51393RJER	QBS Reference: TPS563203DRLR	QBS Reference: TPS564201DDCR	QBS Reference: TPS563201DDCR
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	3/66/0	3/66/0	-	-	1/22/0	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	-	1/5/0	-	-	-
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	-	-	-	1/3/0	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	-	-	1/3/0	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	-	1/3/0	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	3/90/0	1/30/0	-	1/30/0
FTY	E6	Final Test Yield	-	-	-	-	-	3/3/0	1/1/0	-	-

- QBS: Qual By Similarity
- Qual Device TPS562201DDCR is qualified at MSL1 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/

TI Qualification ID: R-NPD-2307-012

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.