12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20180607001.1
Qualification of RFAB as an additional Fab site option for select devices
Change Notification / Sample Request

Date: June 11, 2018
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.

We request you acknowledge 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 you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

PCN Team
SC Business Services

20180607001.1
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
TPS562201DDCR	null
TPS562201DDCT	null
TPS562208DDCR	null
TPS563208DDCR	null
TPS563208DDCT	null

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

PCN Number:	20180607001.1	**PCN Date:**	Jun 11, 2018
Title:	Qualification of RFAB as an additional Fab site option for select devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Sep 11, 2018	**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	

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

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

Changes to product identification resulting from this PCN:

Current:

Current Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
MIHO8	MH8	JPN	Ibaraki

New Fab Site:

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
RFAB	**RFB**	**USA**	**Richardson**

Sample product shipping label (not actual product label)

Product Affected:

SN1709020DDCR	SN1711023DDCT	TPS562208DDCR	TPS563208DDCT
SN1709020DDCT	TPS562201DDCR	TPS562208DDCT	
SN1711023DDCR	TPS562201DDCT	TPS563208DDCR	

Qualification Report

Augusta-Next TPS563208DDC/TPS563201DDC Qualification
(RFAB, JCAP B2, JCET C3)
Approve Date 08-Apr-2018

Product Attributes

Attributes	Qual Device: TPS563201DDC	Qual Device: TPS563208DDC	QBS Product Reference: TPS563201DDC	QBS Process Reference: TPS65265RHB	QBS Process Reference: TPS65265RHB (A0)	QBS Package Reference: TPS27081ADDCR
Assembly Site	JCET C3	JCET C3	JCET C3	CLARK AT	CLARK AT	JCET C3
Package Family	SOT	SOT	SOT	QFN	QFN	SOT
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB	MIHO8
Wafer Process	LBC7	LBC7	LBC7	LBC7	LBC7	LBC7

- QBS: Qual By Similarity
- Qual Device TPS563208DDC, TPS563201DDC are qualified at LEVEL1-260C

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

Type	Test Name / Condition	Duration	Qual Device: TPS563201DDC	Qual Device: TPS563208DDC	QBS Product Reference: TPS563201DDC	QBS Process Reference: TPS65265RHB	QBS Process Reference: TPS65265RHB (A0)	QBS Package Reference: TPS27081ADDCR
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	-	Pass	-	-
HBM	ESD - HBM	3000V	-	1/3/0	1/3/0	-	-	-
CDM	ESD - CDM	1500 V	-	1/3/0	1/3/0	1/3/0	3/9/0	-
LU	Latch-up	(per JESD78)	-	1/6/0	1/6/0	1/6/0	3/18/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	1/77/0	3/231/0	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-	-	3/231/0
HTSL	High Temp Storage Bake, 170C	420 Hours	-	-	3/231/0	-	-	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	-	-	3/231/0
AC	Autoclave, 121C	96 Hours	-	-	-	-	3/231/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	1/77/0	3/231/0	-	3/231/0	3/246/0
TS	Thermal Shock, -65/150C	500 Cycles	-	-	-	-	-	3/231/0
FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	--	-	-	-	-	-	3/15/0
FLAM	Flammability (UL-1694)	--	-	-	-	-	-	3/15/0
LI	Lead Fatigue	Leads	-	-	-	-	-	3/66/0
LI	Lead Pull	Leads	-	-	-	-	-	3/66/0
PD	Physical Dimensions	(per mechanical drawing)	-	-	-	-	-	3/15/0
SBS	Bump-shear	50 bumps from minimum of 5 units	-	-	-	-	-	3/150/0
SD	Solderability	Post 8 Hours Steam Age	-	-	-	-	-	3/66/0

- 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

Augusta-Next TPS562201DDC/ TPS562208DDC Qualification
(RFAB, JCAP B2, JCET C3)
Approve Date 28-May-2018

Product Attributes

Attributes	Qual Device: TPS562201DDC	Qual Device: TPS562208DDC	QBS Product Reference: TPS563208DDC	QBS Product Reference: TPS563201DDC	QBS Process Reference: TPS65265RHB	QBS Process Reference: TPS65265RHB (A0)	QBS Package Reference: TPS27081ADDCR
Assembly Site	JCET C3	JCET C3	JCET C3	JCET C3	CLARK AT	CLARK AT	JCET C3
Package Family	SOT	SOT	SOT	SOT	QFN	QFN	SOT
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	MIHO8
Wafer Process	LBC7	LBC7	LBC7	LBC7	LBC7	LBC7	LBC7

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

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HBM	ESD - HBM	3000V	1/3/0	1/3/0	1/3/0	1/3/0	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	3/9/0	-
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FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	--	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL-1694)	--	-	-	-	-	-	-	3/15/0
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LI	Lead Pull	Leads	-	-	-	-	-	-	3/66/0
PD	Physical Dimensions	(per mechanical drawing)	-	-	-	-	-	-	3/15/0
SBS	Bump-shear	50 bumps from minimum of 5 units	-	-	-	-	-	-	3/150/0
SD	Solderability	Post 8 Hours Steam Age	-	-	-	-	-	-	3/66/0

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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 regional contacts shown below, or you can contact your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com