TEXAS INSTRUMENTS 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20191112001.1
Qualification of RFAB as an additional Fab site option for select devices and Datasheet Update
Change Notification / Sample Request

Date: November 18, 2019
To: Newark/Farnell 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

20191112001.1
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
TLV62080DSGR	null
TLV62084DSGR	null
TLV62084DSGT	null
TPS62080DSGT	null
TPS63020DSJR	null
TPS63020DSJT	null
TPS63021DSJR	null

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

PCN Number:	20191112001.1	**PCN Date:**	Nov 18, 2019
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:	Feb 18, 2020	**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

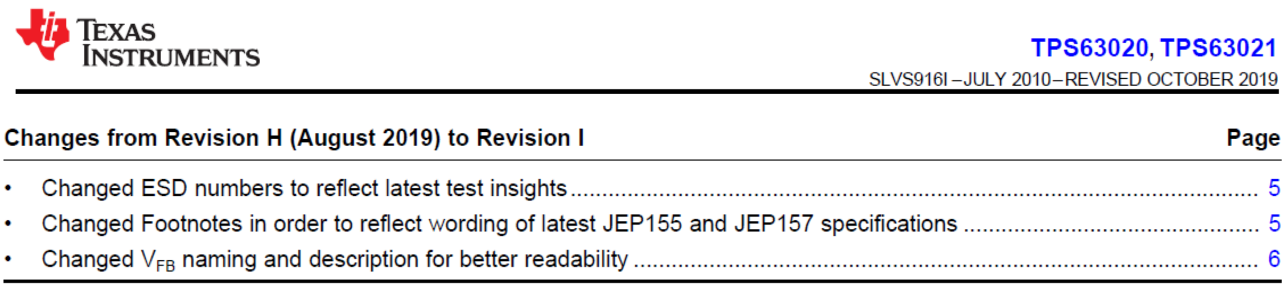
Description of Change:

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
FFAB	LBC7	200 mm	RFAB	LBC7	300 mm

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

Device Family	Change From:	Change To:
TPS63020, TPS63021	SLVS916H	SLVS916I



TEXAS INSTRUMENTS

TPS63020, TPS63021

SLVS916I – JULY 2010 – REVISED OCTOBER 2019

Changes from Revision H (August 2019) to Revision I	**Page**
- Changed ESD numbers to reflect latest test insights	5
- Changed Footnotes in order to reflect wording of latest JEP155 and JEP157 specifications	5
- Changed V_{FB} naming and description for better readability	6

These changes may be reviewed at the datasheet links provided.

http://www.ti.com/product/TPS63020

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
FR-BIP-1	TID	DEU	Freising
RFAB	**RFB**	**USA**	**Richardson**

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC: 2Q:
MSL 2 /260C/1 YEAR | SEAL DT
MSL 1 /235C/UNLIM | 03/29/04
OPT:
ITEM: 39
LBL: 5A (L)TO:1750

G4

(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T)LOT: 3959047MLA
(4W) TKY(1T) 7523483SI2
(P)
(2P) REV: (V) 0033317
(20L) CSO: SHE (21L) CCO:USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

Group 1: Adding RFAB as an additional site		
TLV62080DSGR	TLV62084DSGR	TPS62080DSGR
TLV62080DSGT	TLV62084DSGT	TPS62080DSGT

Group 2: Adding RFAB and Datasheet update			
TPS63020DSJR	TPS63020DSJT	TPS63021DSJR	TPS63021DSJT

Qualification Report

Approve Date 24-August-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS63020DSJR	QBS Process Reference: TPS2543QRTE	QBS Package Reference: SN1010017RSAR2	QBS Package Reference: TPS2546RTER
AC	Autoclave, 2 atm, 121C	96 Hours	-	3/231/0	3/231/0	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	3/231/0
HBM	ESD – HBM exclude pins VIN, VINA, L1	2000 V	1/3/0	-	-	-
HBM	ESD – HBM all pins	500 V	1/3/0	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	-	-	-
HTOL	Life Test, 150C	300 Hours	-	3/231/0	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0	1/77/0
HTSL	High Temp. Storage Bake, 175C	500 Hours	-	3/135/0	-	-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	-
TC	Temperature Cycle, -55/150C	700 Cycles	-	-	3/231/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	-	1/77/0

- QBS: Qual By Similarity
- Qual Device TPS63020DSJR 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

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 25-September-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TLV62080DSGR	QBS Process Reference: TPS2543QRTE	QBS Package Reference: TPS61021DSG	QBS Package Reference: TPS62170DSG
AC	Autoclave, 2 atm, 121C	96 Hours	-	3/231/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	-	
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0
HAST	Biased HAST, 110C/85%RH	264 Hours	-	3/231/0	3/231/0	-
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	-	-
CDM	ESD - CDM	500 V	1/3/0	1/3/0	-	-
HTOL	Life Test, 150C	300 Hours	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	2/90/0	2/90/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	3/231/0

- QBS: Qual By Similarity
- Qual Device TLV62080DSGR 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

Qualification Report

27-September-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TLV62084DSGR	QBS Process Reference: TPS2543QRTE	QBS Package Reference: TPS61021DSG	QBS Package Reference: TPS62170DSG
AC	Autoclave, 2 atm, 121C	96 Hours	-	3/231/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	-	
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0
HAST	Biased HAST, 110C/85%RH	264 Hours	-	3/231/0	3/231/0	-
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	-	-
CDM	ESD - CDM	500 V	1/3/0	1/3/0	-	-
HTOL	Life Test, 150C	300 Hours	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	2/90/0	2/90/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	3/231/0

- QBS: Qual By Similarity
- Qual Device TLV62084DSGR 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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