



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20190822002.1

**Qualification of RFAB as an additional Wafer Fab Site option for select HPA07 devices
Change Notification / Sample Request**

Date: August 23, 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

20190822002.1
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
TPS78001DDCT	null
TPS78001DRVR	null
TPS780180300DRVR	null
TPS780300250DRVT	null
TPS780330200DDCT	null
TPS780330220DDCT	null
TPS780330220DRVT	null
TPS78101DDCR	null
TPS78218DDCT	null
TPS78218DRVT	null
TPS78222DRVR	null
TPS78223DDCT	null
TPS78225DDCR	null
TPS78225DDCT	null
TPS78225DRVT	null
TPS78227DDCT	null
TPS78228DDCR	null
TPS78228DDCT	null
TPS78230DDCT	null
TPS78230DRVR	null
TPS78230DRVT	null
TPS78233DDCR	null
TPS78233DDCT	null
TPS78236DRVT	null
TPS78001DDCR	null
TPS780330220DDCR	null
TPS78227DDCR	null
TPS78230DDCR	null

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

PCN Number:	20190822002.1		PCN Date:	Aug 23, 2019	
Title:	Qualification of RFAB as an additional Wafer Fab Site option for select HPA07 devices in HPA07 Technology				
Customer Contact:	PCN Manager		Dept:	Quality Services	
Proposed 1st Ship Date:	Nov 23, 2019	Estimated Sample Availability:	Date provided at sample request.		
Change Type:					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<input checked="" type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
		<input type="checkbox"/>	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 "Product Affected" section.

Current Sites			Additional Sites		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DP1DM5	HPA07	200mm	RFAB	HPA07	300mm

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

Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City
DP1DM5	DM5	USA	Dallas

New Fab Site

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

Sample product shipping label (not actual product label)



MADE IN: Malaysia
2DC: 20:

MSL 2 / 260C / 1 YEAR	SEAL DT
MSL 1 / 235C / UNLIM	03/29/04

OPT:
ITEM: 39

LBL: 5A (L)T0:1750





(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483S12
(P)
(2P) REV: (Y) 0033317
(20L) CS0: SHE (21L) CCO: USA
(22L) AS0: MLA (23L) ACO: MYS

Product Affected Group:

TPS78001DDCR	TPS780330220DDCR	TPS78218DDCT	TPS78228DDCR
TPS78001DDCRG4	TPS780330220DDCT	TPS78218DRVR	TPS78228DDCT
TPS78001DDCT	TPS780330220DRVR	TPS78218DRVT	TPS78228DRVR
TPS78001DRVR	TPS780330220DRVT	TPS78222DRVR	TPS78228DRVRG4

TPS78001DRVRG4	TPS78101DDCR	TPS78222DRVT	TPS78228DRVT
TPS78001DRVT	TPS78101DDCT	TPS78223DDCR	TPS78230DDCR
TPS780180300DRVR	TPS78101DRVR	TPS78223DDCT	TPS78230DDCT
TPS780180300DRVT	TPS78101DRVT	TPS78225DDCR	TPS78230DRVR
TPS780230300DRVR	TPS781250200DDCR	TPS78225DDCT	TPS78230DRVT
TPS780230300DRVT	TPS781250200DDCT	TPS78225DRVR	TPS78233DDCR
TPS780270200DDCR	TPS781330220DDCR	TPS78225DRVT	TPS78233DDCT
TPS780270200DDCT	TPS781330220DDCRG4	TPS78227DDCR	TPS78236DDCR
TPS780300250DRVR	TPS781330220DDCT	TPS78227DDCT	TPS78236DDCT
TPS780300250DRVT	TPS781330220DRVR	TPS78227DRVR	TPS78236DRVR
TPS780330200DDCR	TPS781330220DRVT	TPS78227DRVT	TPS78236DRVT
TPS780330200DDCT	TPS78218DDCR		

Qualification Report

Approve Date 14-August-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS78218DRVR	Qual Device: TPS78233DDCR	QBS Process Reference: CD3232A1YFFR
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	Pass
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	3/3000/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HBM	ESD - HBM	2000 V	1/3/0	-	3/9/0
CDM	ESD - CDM	500 V	1/3/0	-	3/9/0
HTOL	Life Test, 125C	1000 Hours	1/77/0	-	-
HTOL	Life Test, 140C	480 Hours	-	-	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	-	3/18/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
MQ	Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	-	Pass
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0

- QBS: Qual By Similarity

- Qual Devices TPS78218DRVR and TPS78233DDCR are 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

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
WW PCN Team	PCN_ww_admin_team@list.ti.com

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