



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN#20250212007.1**

**Qualification of RFAB as an additional Fab site, Die Revision, Data sheet  
and BOM options for select devices  
Change Notification / Sample Request**

**Date:** February 13, 2025

**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 60 days of the date of this notice. Lack of acknowledgement of this notice within 60 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 60 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.

TI values customer engagement and feedback related to TI changes. Customers should contact TI if there are questions or concerns regarding a change notification.

Sincerely,

Change Management Team  
SC Business Services

**20250212007.1**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
LMR14050SDDAR	LMR14050SDDAR
LV14340DDAR	NULL
LMR14030SDDA	LMR14030SDDA
LMR14030SDDAR	LMR14030SDDAR
LMR14020SDDA	LMR14020SDDA
LV14240DDAR	NULL
LMR14020SDDAR	LMR14020SDDAR
LMR14050SDDA	LMR14050SDDA
LV14540DDAR	NULL

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

<b>PCN Number:</b>	20250212007.1	<b>PCN Date:</b>	February 13, 2025
<b>Title:</b>	Qualification of RFAB as an additional Fab site, Die Revision, Data sheet & BOM options for select devices		
<b>Customer Contact:</b>	Change Management team	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	May 14, 2025	<b>Sample requests accepted until:</b>	April 14, 2025*
April 14, 2025 will not be supported.			
<b>Change Type:</b>			
<input type="checkbox"/> Assembly Site	<input checked="" type="checkbox"/> Design	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/> Assembly Process	<input checked="" type="checkbox"/> Data Sheet	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input checked="" type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Site	<input checked="" type="checkbox"/>	Wafer Fab Materials
<input checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input checked="" type="checkbox"/>	Wafer Fab Process

### PCN Details

#### Description of Change:

Texas Instruments is pleased to announce the addition of RFAB using the LBC9 qualified process technology and BOM options for the devices listed below.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DP1DM5	LBC5	200 mm	RFAB	LBC9	300 mm

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

Construction differences are as follows:

	Current	Proposed
Wire diam/type	2.0mil Au	1.98mil Cu
Mount compound	EY1000063	4147858
Mold compound	EN2000509	4211880
Pin 1 ID	Stripe	Dimple

Qual details are provided in the Qual Data Section.



LV14540

SNVSAD8B – JUNE 2015 – REVISED DECEMBER 2024

#### Changes from Revision A (February 2024) to Revision B (December 2024)

Page

- Added approved nouns after the SIMPLE SWITCHER trademark throughout the document.....1
- Changed the MAX voltage rating for BOOT to SW from 6.5V to 5.5V, and FB to GND from 7V to 5.5V.....4
- Changed thermal metrics of DDA package,  $R_{\theta JA}$  from 42.5 to 43.2,  $\psi_{JT}$  from 9.9 to 5.2,  $\psi_{JB}$  25.4 to 16.4,  $R_{\theta JC(\text{top})}$  from 56.1 to 52.1,  $R_{\theta JC(\text{bot})}$  from 3.8 to 7.8,  $R_{\theta JB}$  from 25.5 to 16.4.....5
- Deleted the test condition of " BOOT to SW = 5.8 V " on parameter  $R_{DS\_ON}$  .....5
- Deleted the test condition of " BOOT to SW = 5.8 V " on parameter  $T_{ON\_MIN}$  .....6



LV14240

SNVSAD8B – JUNE 2015 – REVISED DECEMBER 2024

#### Changes from Revision A (July 2023) to Revision B (December 2024)

Page

- Changed the MAX voltage rating for BOOT to SW from 6.5V to 5.5V, and FB to GND from 7V to 5.5V.....4
- Changed thermal metrics of DDA package,  $R_{\theta JA}$  from 42.5 to 43.2,  $\psi_{JT}$  from 9.9 to 5.2,  $\psi_{JB}$  25.4 to 16.4,  $R_{\theta JC(\text{top})}$  from 56.1 to 52.1,  $R_{\theta JC(\text{bot})}$  from 3.8 to 7.8,  $R_{\theta JB}$  from 25.5 to 16.4.....5
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<b>Changes from Revision A (April 2015) to Revision B (December 2024)</b>	<b>Page</b>
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• Deleted the test condition of " BOOT to SW = 5.8 V " on parameter $T_{ON\_MIN}$ .....	6
• Add the <i>Device Functional Modes</i> section.....	16

<b>Changes from Revision A (March 2015) to Revision B (December 2024)</b>	<b>Page</b>
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<b>Product Folder</b>	<b>Current Datasheet Number</b>	<b>New Datasheet Number</b>	<b>Link to full datasheet</b>
LV14540	SNVSAD8A	<b>SNVSAD8B</b>	<a href="http://www.ti.com/product/LV14540">http://www.ti.com/product/LV14540</a>
LV14240	SNVSAD6A	<b>SNVSAD6B</b>	<a href="http://www.ti.com/product/LV14240">http://www.ti.com/product/LV14240</a>
LV14340	SNVSAD7B	<b>SNVSAD7C</b>	<a href="http://www.ti.com/product/LV14340">http://www.ti.com/product/LV14340</a>

LMR14030	SNVSA81A	<b>SNVSA81B</b>	<a href="http://www.ti.com/product/LMR14030">http://www.ti.com/product/LMR14030</a>
LMR14050	SNVSAA6A	<b>SNVSAA6B</b>	<a href="http://www.ti.com/product/LMR14050">http://www.ti.com/product/LMR14050</a>
LMR14020	SNVSAA5A	<b>SNVSAA5B</b>	<a href="http://www.ti.com/product/LMR14020">http://www.ti.com/product/LMR14020</a>

## Reason for Change:

## Supply Continuity

**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.

<b>RoHS</b>	<b>REACH</b>	<b>Green Status</b>	<b>IEC 62474</b>
<input checked="" type="checkbox"/> 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
DP1DM5	DM5	USA	Dallas
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

Current	New
Die Rev [2P]	<b>Die Rev [2P]</b>
A	<b>A</b>

Sample product shipping label (not actual product label)



## Product Affected:

LMR14020SDDA	LMR14050SDDA	LV14340DDAR
LMR14020SDDAR	LMR14050SDDAR	LV14540DDAR
LMR14030SDDA	LV14240DDAR	
LMR14030SDDAR	LV14340DDA	

## Qualification Report

Approve Date 23-October-2024

### Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: <u>LMR14050SDDAR</u>	QBS Reference: <u>DRV8873SPWPRQ1</u>	QBS Reference: <u>LMR14050SDDAR</u>
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	3/135/0	3/231/0
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	1/77/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/2400/0	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	3/30/0	-
ESD	E2	ESD CDM	-	1500 Volts	-	-	1/3/0
ESD	E2	ESD HBM	-	4000 Volts	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/6/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30	3/90/0	3/90/0
FTY	E6	Final Test Yield	-	-	1/1/0	-	-

QBS: Qual By Similarity, also known as Generic Data

Qual Device LMR14050SDDAR is qualified at MSL2 260C

Qual Device LMR14020SDDAR is qualified at MSL2 260C

Qual Device LMR14030SDDAR is qualified at MSL2 260C

Qual Device LV14240DDAR is qualified at MSL2 260C

Qual Device LV14340DDAR is qualified at MSL2 260C

Qual Device LV14540DDAR is qualified at MSL2 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/>

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

### IMPORTANT NOTICE AND DISCLAIMER

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