12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250910002.1
Qualification of RFAB using qualified Process Technology, Datasheet, Die Revision, additional Assembly site and options for select devices

Change Notification / Sample Request

Date: September 10, 2025
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) process.

TI 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, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 60 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

Changes outlined in this notification underscore our commitment to product longevity and supply continuity, as well as our continued efforts to transition to newer, more efficient manufacturing processes and technologies. Specifically, this particular notification is related to TI's multiyear transition plan for our two remaining 150-millimeter production lines (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). SFAB closure activities are expected to begin by the end of 2025. DFAB will remain open with a smaller set of 200mm technologies and GaN.

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. As always, we thank you for your continued business.

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

Change Management Team
SC Business Services

20250910002.1
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
TPS73633DBVT	TPS73633DBVT
TPS73225DBVT	NULL
TPS73618DBVT	TPS73618DBVT
TPS73233DBVR	NULL
TPS73118DBVR	NULL
TPS73201DBVR	NULL
TPS73118DBVT	NULL
TPS73250DBVR	NULL
TPS73250DBVT	NULL
TPS73133DBVT	NULL
TPS73130DBVR	NULL
TPS73133DBVR	NULL
TPS73218DBVR	NULL
TPS73233DBVT	NULL
TPS73225DBVR	NULL
TPS73101DBVR	NULL
TPS73150DBVR	NULL
TPS73601DBVR	TPS73601DBVR
TPS73630DBVR	TPS73630DBVR
TPS73633DBVR	TPS73633DBVR
TPS73230DBVR	NULL
TPS73625DBVR	TPS73625DBVR
TPS73201DBVT	NULL
TPS73601DBVT	TPS73601DBVT

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

PCN Number:	20250910002.1	PCN Date:	September 10, 2025
Title:	Qualification of RFAB using qualified Process Technology, Datasheet, Die Revision, additional Assembly site and options for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	December 09, 2025	Sample requests accepted until:	November 09, 2025*

***Sample requests received after November 09, 2025 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 addition of RFAB using the LBC9 qualified process technology and additional Assembly site for the devices listed below.

Current Fab Site			Additional Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
DFAB	LBC4	150 mm	RFAB	LBC9	300 mm

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

Construction differences are as follows:

	Current	Current	Additional
Assembly Site	TFME	UTL2	CDAT
Lead Finish	NiPdAu	NiPdAu	Matte Sn
Wire diam/type	Au; 1.3mil	Au; 1.3mil	Cu; 1 mil
Mount compound	SID#A-03	SID#PZ0013	4207123
Mold compound	SID#R-13	SID#CZ0096	4222198
Passivation layer material	Nitride	Nitride	Oxide, SiON
Marking Appearance	Stripe	Dot	Dot

TEXAS INSTRUMENTS — TPS736
SBVS038V – SEPTEMBER 2003 – REVISED SEPTEMBER 2024

Changes from Revision U (January 2015) to Revision V (September 2024) **Page**

- Updated the numbering format for tables, figures, and cross-references throughout the document ... 1
- Added M3 devices to document and added the M3 new silicon *Thermal Information* table ... 1
- Changed max output current ... 4
- Changed V_{FB} typical value ... 6
- Added M3 new silicon current limit ... 6
- Added new silicon plots to *Typical Characteristics* section ... 7
- Changed *Output current* value from *500 mA* to *400 mA* in *Design Parameters (Fixed-Voltage Version)* table ... 20
- Changed *Detailed Design Procedure* section: Changed dropout voltage value from *0.5 A* to *0.4 A*, changed maximum dropout voltage from an estimation to *200 mV* ... 20
- Added new silicon plots to *Application Curves* section ... 23
- Added *Layout Example for the DBV Package Adjustable Version* through *Layout Example for the DCQ Package Fixed Version* figures to *Layout Examples* section ... 25
- Added M3 information to *Device Nomenclature* section ... 28

TEXAS INSTRUMENTS — TPS732
SBVS037Q – AUGUST 2003 – REVISED SEPTEMBER 2024

Changes from Revision P (December 2015) to Revision Q (September 2024) **Page**

- Updated the numbering format for tables, figures, and cross-references throughout the document ... 1
- Changed *SON* to *VSON* throughout document ... 1
- Changed VFB typical value ... 6
- Added M3 ground pin current spec ... 6
- Added M3 shutdown current spec ... 6
- Added new silicon plots to *Typical Characteristics* ... 7
- Changed load current max source from *500mA* to *250mA* and dropout voltage from *250mV* to *150mV* in *Overview* section ... 16
- Changed *total ESR drops below 50nΩF* to *total ESR drops below 50nF × Ω* in *Input and Output Capacitor Requirements* section ... 21
- Added new silicon plots to *Application Curves* section ... 22
- Changed *Layout Guidelines* section ... 23
- Added DBV and DCQ layout figures to *Layout Examples* section ... 24
- Added M3 information to *Device Nomenclature* ... 27

Changes from Revision N (December 2015) to Revision O (August 2025) **Page**

- Updated the numbering format for tables, figures, and cross-references throughout the document ... 1
- Changed entire document to align with current family format ... 1
- Added new silicon (M3) devices to document ... 1
- Added nomenclature distinguishing between new silicon and legacy silicon information throughout document ... 1
- Changed *Applications* ... 1
- Added new silicon DBV thermals ... 4
- Changed VFB typical value ... 5
- Added new silicon ground pin current spec ... 5
- Added new silicon shutdown current spec ... 5
- Added new silicon curves to *Typical Characteristics* section ... 6
- Added V_{EN} above 1.7V discussion to *Enable Pin and Shutdown* section ... 17
- Added new silicon curves to *Application Curves* section ... 20
- Changed *Layout Guidelines* section ... 20
- Changed *JEDEC low- and high-K boards* to *JEDEC boards* in *Power Dissipation* section ... 21
- Added *Layout Example for the Fixed-Output Version (DBV Package)* figure to *Layout Examples* ... 21
- Changed *Device Nomenclature* ... 22

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
TPS736	SBVS038U	SBVS038V	http://www.ti.com/product/TPS736
TPS732	SBVS037P	SBVS037Q	http://www.ti.com/product/TPS732
TPS731	SBVS034N	SBVS034O	http://www.ti.com/product/TPS731

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 datasheet also provides more information on the performance differences between the LBC9 chip (new silicon) and the LBC4 chip (legacy silicon). See below example for TPS731:

5.5 Electrical Characteristics

Over operating temperature range (T_J = –40°C to 125°C), V_{IN} = $V_{OUT(nom)}$ + 0.5V[1] , I_{OUT} = 10mA, V_{EN} = 1.7V, and C_{OUT} = 0.1µF (unless otherwise noted). Typical values are at T_J = 25°C

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT
V_{IN}	Input voltage range[1]			1.7		5.5	V
V_{FB}	Internal reference (TPS73101)	T_J = 25°C		1.198	1.204	1.210	V
V_{OUT}	Output voltage range (TPS73101)[2]			V_{FB}		5.5 - V_{DO}	V
	Accuracy[1] [3]	Nominal	T_J = 25°C	–0.5		0.5	%
		V_{IN}, I_{OUT}, and T	V_{OUT} + 0.5V ≤ V_{IN} ≤ 5.5V; 10mA ≤ I_{OUT} ≤ 150mA	–1	±0.5	1	
$\Delta V_{OUT(\Delta VIN)}$	Line regulation [1]	$V_{OUT(nom)}$ + 0.5V ≤ V_{IN} ≤ 5.5V			0.01		%/V
$\Delta V_{OUT(\Delta IOUT)}$	Load regulation	1mA ≤ I_{OUT} ≤ 150mA			0.002		%/mA
$\Delta V_{OUT(\Delta IOUT)}$	Load regulation	10mA ≤ I_{OUT} ≤ 150mA			0.0005		%/mA
V_{DO}	Dropout voltage[4] (V_{IN} = $V_{OUT(NOM)}$ - 0.1V)	I_{OUT} = 150mA			30	100	mV
$Z_{O(DO)}$	Output impedance in dropout	1.7V ≤ V_{IN} ≤ V_{OUT} + V_{DO}			0.25		Ω
I_{CL}	Output current limit	V_{OUT} = 0.9 × $V_{OUT(nom)}$		150	360	500	mA
I_{SC}	Short-circuit current	V_{OUT} = 0V			200		mA
I_{REV}	Reverse leakage current[5] (-I_{IN})	V_{EN} ≤ 0.5V, 0V ≤ V_{IN} ≤ V_{OUT}			0.1	10	µA
I_{GND}	Ground pin current	I_{OUT} = 10mA (I_Q), legacy silicon			400	550	µA
		I_{OUT} = 10mA (I_Q), new silicon			400	630	

8.1.2 Device Nomenclature

Table 8-1. Available Options

PRODUCT[1]	DESCRIPTION
TPS731**xx yyy z (M3)**	**xx** is the nominal output voltage (for example, 25 = 2.5V; 01 = Adjustable). **yyy** is the package designator. **z** is the package quantity. **M3** is a suffix designator for devices that only use the latest manufacturing flow (CSO: RFB). Devices without this suffix ship with the *legacy silicon* (CSO: DLN) or the *new silicon* (CSO: RFB). The reel packaging label provides CSO information to distinguish which silicon is used. Device performance for new and legacy silicon is denoted throughout the document.

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

Any differences/changes between the LBC4 die and LBC9 die have been made in the data sheet using “Legacy silicon” (LBC4) and “New silicon” (LBC9).

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
DFAB	DLN	USA	Dallas
RFAB	**RFB**	**USA**	**Richardson**

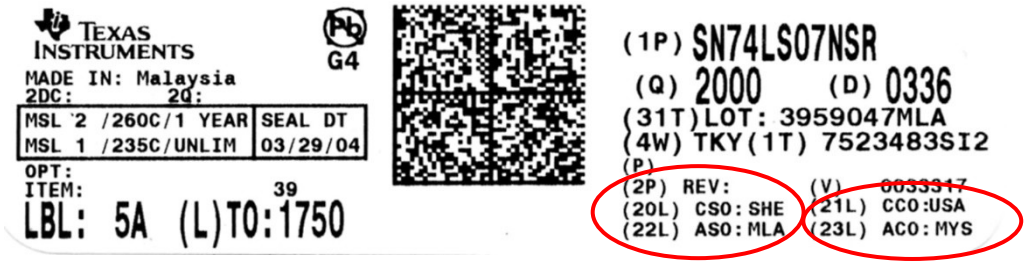
Die Rev:

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

Assembly Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
TFME	NFM	CHN	Economic Development Zone
UTL2	NS2	THA	Bangpakong, Chachoengsao
CDAT	**CDA**	**CHN**	**Chengdu**

Sample product shipping label (not actual product label):



Product Affected

TPS73101DBVR	TPS73133DBVR	TPS73225DBVT	TPS73618DBVR
TPS73101DBVT	TPS73133DBVT	TPS73230DBVR	TPS73618DBVT
TPS73115DBVR	TPS73150DBVR	TPS73233DBVR	TPS73625DBVR
TPS73118DBVR	TPS73150DBVT	TPS73233DBVT	TPS73625DBVT
TPS73118DBVT	TPS73201DBVR	TPS73250DBVR	TPS73630DBVR
TPS73125DBVR	TPS73201DBVT	TPS73250DBVT	TPS73632DBVR
TPS73125DBVT	TPS73218DBVR	TPS73601DBVR	TPS73633DBVR
TPS73130DBVR	TPS73219DBVR	TPS73601DBVT	TPS73633DBVT
TPS73130DBVT	TPS73225DBVR	TPS73615DBVR	

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TPS73601DBVRM3	QBS Process Reference: BQ79600PWRQ1	QBS Package Reference: TLV9061IDBVR	QBS Package Reference: LP2985A-50DBVRM3	QBS Package Reference: TLV74325PDBVR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	1/77/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0	1/77/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0	1/77/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/2400/0	-	-	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	-	-	3/228/0	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	-	-	3/228/0	-	-

Type	#	Test Name	Condition	Duration	Qual Device: TPS73601DBVRM3	QBS Process Reference: BQ79600PWRQ1	QBS Package Reference: TLV9061IDBVR	QBS Package Reference: LP2985A-50DBVRM3	QBS Package Reference: TLV74325PDBVR
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	-	3/66/0	-	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	3/15/0	-	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/6/0	-	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-	-

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device TPS73601DBVRM3 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-2504-145

For alternate parts with similar or improved performance, please visit the product page on TI.com

In performing change qualifications, Texas Instruments follows integrated circuit industry standards in performing defect mechanism analysis and failure mechanism-based accelerated environmental testing to ensure wafer fab process, assembly process and product quality and reliability. As encouraged by these standards, TI uses both product-specific and generic (family) data in qualifying its changes. For devices to be categorized as a 'product qualification family' for generic data purposes, they must share similar product, wafer fab process and assembly process elements. The applicability of generic data (also known at TI as Qualification by Similarity (QBS)) is determined by the Reliability Engineering function following these industry standards. Generic data is shown in the qualification report in columns titled "QBS Process" (for wafer fab process), "QBS Package" (for assembly process) and "QBS Product" (for product family).

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