



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250618006.1

**Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet and additional Assembly site (CDAT) and BOM options for select devices
Change Notification / Sample Request**

Date: June 18, 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

20250618006.1
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 |
|---------------|-----------------------------|
| TPS79301DBVR | NULL |
| TPS79201DBVR | NULL |

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

| | | | |
|---|--|--|---------------------|
| PCN Number: | 20250618006.1 | PCN Date: | June 18, 2025 |
| Title: | Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet and additional Assembly site (CDAT) and BOM options for select devices | | |
| Customer Contact: | Change Management Team | Dept: | Quality Services |
| Proposed 1st Ship Date: | September 16, 2025 | Sample requests accepted until: | August 17, 2025* |
| *Sample requests received after August 17, 2025 will not be supported. | | | |
| Change Type: | | | |
| <input checked="" 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 Material |
| <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 additional assembly site (CDAT) and assembly 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 |
| DFAB | LBC3 | 200 mm | RFAB | LBC9 | 300 mm |

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

Construction differences are as follows:

| | TFME | CDAT |
|---------------------|-----------|-----------|
| Bond wire diam/type | 1.3mil Au | 0.8mil Cu |
| Mount compound | SID# A-03 | 4226215 |
| Mold compound | SID#R-13 | 4222198 |
| Lead finish | NiPdAu | Matte Sn |
| Pin 1 ID marking | Stripe | Dot |

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 links to the revised datasheets are available in the table below:



TPS793

SLVS348N – JULY 2001 – REVISED JANUARY 2025

Changes from Revision M (December 2024) to Revision N (January 2025) Page

- Added New Chip to Layout Example (DBV Package) figure caption..... 27

Changes from Revision L (March 2015) to Revision M (December 2024) 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 M3 devices to document 1
- Added NC/NR pin 3
- Updated Pin Description table to include new chip and legacy chip descriptions 3
- Added suggestion to look at TPS7A20 for lower noise performance 3
- Updated Layout section image 25

| Product Folder | Current Datasheet Number | New Datasheet Number | Link to full datasheet |
|----------------|--------------------------|----------------------|------------------------|
| TPS793 | SLVS348L | SLVS348M | |

For more information on the performance of the LBC9 die and any differences with LBC3 die, please consult the datasheet (rev. [SLVS337E](#)) for TPS792. For TPS793 please consult the datasheet (rev. [SLVS348N](#)). An example of that comparison is shown below:

5.5 Electrical Characteristics

over recommended operating temperature range, $T_J = -40^\circ\text{C}$ to $+125^\circ\text{C}$ $V_{EN} = V_{IN}$, $V_{IN} = V_{O(\text{typ})} + 1\text{V}^{(1)}$ $I_{OUT} = 1\text{ mA}$, $C_{OUT} = 10\text{ }\mu\text{F}$, $C_{NR} = 0.01\text{ }\mu\text{F}$ (Legacy Chip) (unless otherwise noted). All typical values at $T_J = 25^\circ\text{C}$.

| PARAMETER | | TEST CONDITIONS | | MIN | TYP | MAX | UNIT |
|---------------------------------|---------------------------------|---|---|----------|---------------------|-------|---------------|
| V_{IN} | Input voltage range | | | 2.7 | | 5.5 | V |
| I_{OUT} | Continuous output current | | | 0 | | 200 | mA |
| V_{OUT} | Output voltage range | TPS79301 | | V_{FB} | $5.5 - V_{DROPOUT}$ | | V |
| | | TPS79318 | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $2.8\text{V} < V_{IN} < 5.5\text{V}$ | 1.764 | 1.8 | 1.836 | |
| | | TPS79325 | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $3.5\text{V} < V_{IN} < 5.5\text{V}$ | 2.45 | 2.5 | 2.55 | |
| | | TPS79328 | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $3.8\text{V} < V_{IN} < 5.5\text{V}$ | 2.744 | 2.8 | 2.856 | |
| | | TPS793285 (Legacy chip only) | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $3.85\text{V} < V_{IN} < 5.5\text{V}$ | 2.793 | 2.85 | 2.907 | |
| | | TPS79330 | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $4\text{V} < V_{IN} < 5.5\text{V}$ | 2.94 | 3 | 3.06 | |
| | | TPS79333 | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $4.3\text{V} < V_{IN} < 5.5\text{V}$ | 3.234 | 3.3 | 3.366 | |
| | | TPS793475 (Legacy chip only) | $0\mu\text{A} < I_{OUT} < 200\text{mA}$, $5.25\text{V} < V_{IN} < 5.5\text{V}$ | 4.655 | 4.75 | 4.845 | |
| I_{GND} | Quiescent current (GND current) | $0\mu\text{A} \leq I_O \leq 200\text{mA}$ (Legacy Chip) | | 170 | 220 | | μA |
| | | $0\mu\text{A} \leq I_O \leq 200\text{mA}$ (New Chip) | | 250 | 1000 | | |
| $\Delta V_{OUT}/\Delta I_{OUT}$ | Load regulation | $0\mu\text{A} \leq I_{OUT} \leq 200\text{mA}$ | | 5 | | | mV |
| $\Delta V_{OUT}/\Delta V_{IN}$ | Line regulation | $V_{OUT} + 1\text{V} \leq V_{IN} \leq 5.5\text{V}$ | | 0.05 | 0.12 | | %/V |

8.1.2 Device Nomenclature

Table 8-1. Ordering Information ^{(1) (2)}

| PRODUCT | V_{OUT} |
|------------------|---|
| TPS793xx yyyM3 z | <p>XX(X) is the nominal output voltage (for example, 28 = 2.8 V; 285 = 2.85 V; 01 = adjustable version). YYY is the package designator.</p> <p>M3 is a suffix designator for the devices that only use the latest manufacturing flow (CSO:RFB). Devices without this suffix can ship with the legacy chip (CSO:DLN) or the new chip (CSO:RFB). The reel packaging label provides CSO information to distinguish which chip is being used.</p> <p>Z is the package quantity. R is for reel (3000 pieces), T is for tape (250 pieces).</p> |

5.5 Electrical Characteristics

over recommended operating temperature range, $T_J = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ $V_{EN} = V_{IN}$, $V_{IN} = V_{O(\text{typ})} + 1\text{V}$, $I_{OUT} = 1\text{ mA}$, $C_{OUT} = 10\text{ }\mu\text{F}$, $C_{NR} = 0.01\text{ }\mu\text{F}$ (Legacy Chip) (unless otherwise noted). All typical values at $T_J = 25^{\circ}\text{C}$.

| PARAMETER | | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|-----------|---------------------------------|--|----------------|-----------|----------------|---------------|
| V_{OUT} | Output accuracy | TPS79201 (1) $0\mu\text{A} < I_{OUT} < 100\text{mA}$ $1.22\text{V} < V_{OUT} < 5.2\text{V}$ | 0.98 V_{OUT} | V_{OUT} | 1.02 V_{OUT} | V |
| | | TPS79225 (Legacy chip only) $0\mu\text{A} < I_{OUT} < 100\text{mA}$ $1.22\text{V} < V_{OUT} < 5.2\text{V}$ | 2.45 | 2.5 | 2.55 | V |
| | | TPS79228 (Legacy chip only) $0\mu\text{A} < I_{OUT} < 100\text{mA}$ $1.22\text{V} < V_{OUT} < 5.2\text{V}$ | 2.744 | 2.8 | 2.856 | V |
| | | TPS79230 $0\mu\text{A} < I_{OUT} < 100\text{mA}$, $4\text{V} < V_{IN} < 5.5\text{V}$ | 2.94 | 3 | 3.06 | V |
| I_{GND} | Quiescent current (GND current) | $0\mu\text{A} \leq I_O \leq 100\text{mA}$ (Legacy Chip) | | 170 | 250 | μA |
| | | $0\mu\text{A} \leq I_O \leq 100\text{mA}$ (New Chip) | | 250 | 1000 | |

8.1.2 Device Nomenclature

Table 8-1. Ordering Information

| PRODUCT | V_{OUT} |
|--------------------|--|
| TPS792xxxx yyyM3 z | $XX(X)$ is the nominal output voltage (for example, 28 = 2.8 V; 285 = 2.85 V; 01 = adjustable version). YYY is the package designator. M3 is a suffix designator for the devices that only use the latest manufacturing flow (CSO:RFB). Devices without this suffix can ship with the legacy chip (CSO:DLN) or the new chip (CSO:RFB). The reel packaging label provides CSO information to distinguish which chip is being used. Z is the package quantity. R is for reel (3000 pieces), T is for tape (250 pieces). |

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 200-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 LBC3 die and LBC9 die have been made in the data sheet using "Legacy chip" (LBC3) and "New chip" (LBC9).

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 |
|-------------|-----------------------------|------------------------------|-------------------|
| DL-LIN | DLN | USA | Dallas |
| RFAB | RFB | USA | Richardson |

Die Rev:

Current

New

| | |
|--------------|---------------------|
| Die Rev [2P] | Die Rev [2P] |
| A | A |

Assembly Site Information:

| Assembly Site | Assembly Site Origin (22L) | Assembly Country Code (23L) | Assembly City |
|---------------|----------------------------|-----------------------------|---------------------------|
| TFME | NFM | CHN | Economic Development Zone |
| CDAT | CDA | CHN | Chengdu |

Sample product shipping label (not actual product label):

| | | | | | | | | |
|---|----------------|---|--|--|---------------|----------------|---------------|----------------|
|  TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2G 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) 7523483SI2 (P) (2P) REV: (V) 0053317 (20L) CS0: SHE (21L) CCO:USA (22L) AS0: MLA (23L) ACO: MYS | | | | | |
| Product Affected: <table border="1"> <tr> <td>TPS79201DBVR*</td> <td>TPS79201DBVR.A</td> <td>TPS79301DBVR*</td> <td>TPS79301DBVR.A</td> </tr> </table> | | | | | TPS79201DBVR* | TPS79201DBVR.A | TPS79301DBVR* | TPS79301DBVR.A |
| TPS79201DBVR* | TPS79201DBVR.A | TPS79301DBVR* | TPS79301DBVR.A | | | | | |

*G4 part numbers are available and will remain on NiPdAu flows. This PCN does not apply to existing G4 materials. Please visit TI's [labeling and symbolization](#) page for more information on material designators.

For alternate parts with similar or improved performance, please visit the product page on [TI.com](#)

Qualification Results

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

| Type | # | Test Name | Condition | Duration | Qual Device: TPS79301DBVRM3 | Qual Device: TPS79201DBVRM3 | Process QBS Reference: S1508017C1PLNR | Package QBS Reference: TLV9061DBVR | Package QBS Reference: LMC7101QM5X/NOPB |
|-------|----|-------------------------------|------------|------------|---|---|---|--|---|
| HAST | A2 | Biased HAST | 130C/85%RH | 96 Hours | - | - | 3/231/0 | 3/231/0 | 1/77/0 |
| UHAST | A3 | Unbiased HAST | 130C/85%RH | 96 Hours | - | - | 3/231/0 | 3/231/0 | 1/77/0 |
| TC | A4 | Temperature Cycle | -65C/150C | 500 Cycles | - | - | 3/231/0 | 3/231/0 | 1/77/0 |
| HTSL | A6 | High Temperature Storage Life | 170C | 420 Hours | - | - | - | 3/231/0 | - |
| HTSL | A6 | High Temperature Storage Life | 175C | 500 Hours | - | - | 3/135/0 | - | 1/77/0 |
| HTOL | B1 | Life Test | 125C | 1000 Hours | - | - | 3/231/0 | - | - |
| HTOL | B1 | Life Test | 150C | 300 Hours | - | - | - | 3/231/0 | 1/77/0 |
| ELFR | B2 | Early Life Failure Rate | 125C | 48 Hours | - | - | 3/2400/0 | - | - |

| Type | # | Test Name | Condition | Duration | Qual Device: TPS79301DBVRM3 | Qual Device: TPS79201DBVRM3 | Process QBS Reference: S1508017C1PLNR | Package QBS Reference: TLV9061DBVR | Package QBS Reference: LMC7101QMSX/NOPB |
|------|----|-----------------------------|---|------------|--|--|--|---|--|
| 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 | 3/66/0 | 1/15/0 |
| ESD | E2 | ESD CDM | - | 500 Volts | 1/3/0 | - | 1/3/0 | - | 1/3/0 |
| ESD | E2 | ESD HBM | - | 2000 Volts | 1/3/0 | - | 1/3/0 | - | 1/3/0 |
| LU | E4 | Latch-Up | Per JESD78 | - | 1/3/0 | - | 1/6/0 | - | 1/3/0 |
| CHAR | E5 | Electrical Characterization | Per Datasheet Parameters | - | 1/30/0 | - | 3/90/0 | - | 3/90/0 |
| FTY | E6 | Final Test Yield | - | - | 1/AII/0 | 1/AII/0 | - | 3/AII/0 | - |

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device [TPS79301DBVRM3](#) is qualified at MSL1 260C
- Qual Device [TPS79201DBVRM3](#) 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-2407-003

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.

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