

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

# PCN# 20230209000.1 Qualification of DMOS6 as an additional Fab site option for select LBC9 devices Change Notification / Sample Request

**Date:** February 09, 2023

To: TOKYO ELECTRON DEVICE (DSTR) 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 www admin team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

PCN Team SC Business Services

## 20230209000.1 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         | <b>CUSTOMER PART NUMBER</b> |
|----------------|-----------------------------|
| TLV62568APDRLR | null                        |
| TLV62569APDRLR | null                        |
| TLV62568APDRLT | null                        |
| TLV62568ADRLT  | null                        |
| TLV62569ADRLR  | null                        |
| TLV62569ADRLT  | null                        |
| TLV62568ADRLR  | null                        |

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

| PCN Number:                         | 20230209000.1 <b>PCN Date:</b> February 09, 2023                                       |  |                   |                             | February 09, 2023 |                    |                       |                  |
|-------------------------------------|--|--|-------------------|-----------------------------|-------------------|--------------------|-----------------------|------------------|
| Title: Qualification of             | Title: Qualification of DMOS6 as an additional Fab site option for select LBC9 devices |  |                   |                             |                   |                    | LBC9 devices          |                  |
| <b>Customer Contact:</b>            |  | PCN  | <u>l Manager</u>  |                             | Dept:             |                    |                       | Quality Services |
| Proposed 1 <sup>st</sup> Ship Date: | 1  | I Mal/ U JII/3                             |                   | mple requests cepted until: |                   |                    | Mar 9, 2023*          |                  |
| *Sample requests recei              | ived a   | fte  | r March 9, 2023 w | ill no                      | t be s            | upp                | ortec                 | l.               |
| Change Type:                        |  |  |                   |                             |                   |                    |                       |                  |
| Assembly Site                       |  | Assembly Process                           |                   |                             |                   | Assembly Materials |                       |                  |
| Design                              |  | ☐ Electrical Specification                 |                   |                             |                   | Mec                | hanical Specification |                  |
| ☐ Test Site                         |  | ☐ Packing/Shipping/Labeling ☐ Test Process |                   | Process                     |                   |                    |                       |                  |
| ☐ Wafer Bump Site                   |  | ☐ Wafer Bump Material ☐ Wafer Bump Process |                   |                             | er Bump Process   |                    |                       |                  |
|                                     | □ Wafer Fab Materials □ Wafer Fab Process  |  |                   |                             |                   |                    |                       |                  |
| ☐   Part_number_change              |  |  |                   |                             |                   |                    |                       |                  |
| PCN Details                         |  |  |                   |                             |                   |                    |                       |                  |
| <b>Description of Change:</b>       | Description of Change:   |  |                   |                             |                   |                    |                       |                  |

Texas Instruments is pleased to announce the qualification of its DMOS6 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<br>Site | Process | Wafer<br>Diameter   | New Fab<br>Site | Process | Wafer<br>Diameter |
| RFAB                | LBC9    | 300mm               | DMOS6           | LBC9    | 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):

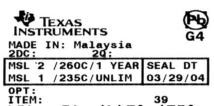
None

# Changes to product identification resulting from this PCN:

# **Fab Site Information:**

| Chip Site | Chip Site Origin Code (20L) | Chip Site Country Code (21L) | Chip Site City |
|-----------|-----------------------------|------------------------------|----------------|
| RFAB      | RFB                         | USA                          | Richardson     |
| DMOS6     | DM6                         | USA                          | Dallas         |

Sample product shipping label (not actual product label)





(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483\$12 (P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO: USA (22L) ASO: MLA (23L) ACO: MYS

## **Product Affected:**

| TLV62568ADRLR | TLV62568APDRLR | TLV62569ADRLR | TLV62569APDRLR |
|---------------|----------------|---------------|----------------|
| TLV62568ADRLT | TLV62568APDRLT | TLV62569ADRLT | TLV62569APDRLT |

## Qualification Report

#### Approve Date 02-Feb-2023

#### **Qualification Results**

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

| Туре | Test Name / Condition         | Duration                 | Qual Device:<br>TLV62568APDRLR | QBS Process Reference:<br>TLV62569DBVR | QBS Product and Package<br>Reference: BQ25150YFPT |
|------|-------------------------------|--------------------------|--------------------------------|--|---|
| AC   | Autoclave 121C                | 96 Hours                 | -                              | 3/231/0                                | 3/231/0   |
| ED   | Electrical Characterization   | Per Datasheet Parameters | 1/30/0                         | 3/90/0                                 | Pass  |
| ELFR | Early Life Failure Rate, 125C | 48 Hours                 | -                              | 3/2400/0                               | 3/3000/0  |
| HAST | Biased HAST, 130C/85%RH       | 96 Hours                 | -                              | 3/231/0                                | 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               | -                              | 3/231/0                                | -   |
| HTOL | Life Test, 150C               | 300 Hours                |                                | -                                      | 3/231/0   |
| HTSL | High Temp. Storage Bake, 150C | 1000 Hours               | -                              | 3/231/0                                | -   |
| HTSL | High Temp. Storage Bake, 170C | 420 Hours                | -                              | -                                      | 3/231/0   |
| LU   | Latch-up                      | (per JESD78)             | 1/6/0                          | 1/6/0                                  | -   |
| TC   | Temperature Cycle, -65/150C   | 500 Cycles               | -                              | 3/231/0                                | 3/231/0   |

- QBS: Qual By Similarity
- Qual Device TLV62568APDRLR 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

For questions regarding this notice, e-mails can be sent to the contact shown below, or you can contact your local Field Sales Representative.

| Location                  | E-Mail                        |
|---------------------------|-------------------------------|
| WW Change Management Team | PCN ww admin team@list.ti.com |

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