



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN20230327001.1B
Qualify additional Assembly site for select SOT-23 Package devices
Change Notification / Sample Request

Date: November 15, 2023
To: Newark/Farnell PCN

Dear Customer:

The purpose of Revision B is to retract devices which was included in error. We apologize for the inconvenience this may have caused.

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 and approval of this 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 change management team.

For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

Change Management Team
SC Business Services

20230327001.1B
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 |
|---------------|-----------------------------|
| OPA365AIDBVR | null |

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

| | | | | | |
|---|--|--|--------------------|--------------------------|---------------------|
| PCN Number: | 20230327001.1B | | PCN Date: | November 15, 2023 | |
| Title: | Qualify additional Assembly site for select SOT-23 Package devices | | | | |
| Customer Contact: | Change Management team | Dept: | Quality Services | | |
| Proposed 1st Ship Date: | June 28, 2023 | Sample requests accepted until: | N/A | | |
| *Sample requests received after (Apr. 28, 2023) will not be supported. | | | | | |
| Change Type: | | | | | |
| <input checked="" type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Design | <input type="checkbox"/> | Wafer Bump Material |
| <input checked="" type="checkbox"/> | Assembly Process | <input type="checkbox"/> | Data Sheet | <input type="checkbox"/> | Wafer Bump Process |
| <input checked="" type="checkbox"/> | Assembly Materials | <input type="checkbox"/> | Part number change | <input type="checkbox"/> | Wafer Fab Site |
| <input type="checkbox"/> | Mechanical Specification | <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Wafer Fab Materials |
| <input checked="" type="checkbox"/> | Packing/Shipping/Labeling | <input type="checkbox"/> | Test Process | <input type="checkbox"/> | Wafer Fab Process |
| PCN Details | | | | | |
| Description of Change: | | | | | |
| The purpose of Revision B is to retract devices which was included in error. The retracted device is highlighted in the Product Affected Section in bold font with a strikethrough . | | | | | |
| Texas Instruments Incorporated is announcing the qualification of additional Assembly sites for devices listed below in the product affected section. Construction differences and current assembly sites are as follows: | | | | | |
| SOT-23 | | | | | |
| Assembly Sites | TFME, PHI, HNA, HFTFAT, ASEWH, CDAT, TIEMA | | | | |
| Lead Finish | NiPdAu, NiPdAuAg, Matte Sn | | | | |
| Mount Compound | A-09 A-03 4207123 400180 1120999A2 1120999A1 A-20 | | | | |
| Mold Compound | 450207 R-04 R-17 450413 4222198 450042 8097131 | | | | |
| Bond wire type | Au, Cu | | | | |
| Bond wire diameter | 15.24 UM (0.6 MIL) 20.3 UM (0.8 MIL) 25.4 UM (1.0 MIL) 33 UM (1.3 MIL) 50.8 UM (2.0 MIL) | | | | |
| Reason for Change: | | | | | |
| Continuity of Supply | | | | | |
| Anticipated impact on Fit, Form, 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.

| RoHS | REACH | Green Status | IEC 62474 |
|---|---|---|---|
| <input checked="" type="checkbox"/> No Change | <input checked="" type="checkbox"/> No Change | <input checked="" type="checkbox"/> No Change | <input checked="" type="checkbox"/> No Change |

Changes to product identification resulting from this PCN:

| Assembly Site | | |
|----------------|----------------------------|----------|
| TFME | Assembly Site Origin (22L) | ASO: NFM |
| TI Philippines | Assembly Site Origin (22L) | ASO: PHI |
| Hana | Assembly Site Origin (22L) | ASO: HNT |
| ASEWH | Assembly Site Origin (22L) | ASO: AWH |
| HFTFAT | Assembly Site Origin (22L) | ASO: HFT |
| TI Chengdu | Assembly Site Origin (22L) | ASO: CDA |
| TI Melaka | Assembly Site Origin (22L) | ASO: CU6 |

Sample product shipping label (not actual product label)

Product Affected:

| | | | |
|---------------------|------------------|--------------------|----------------|
| INA138NA/250 | SN74LVC2G14DBVR | LM3880MFX-1AA/NOPB | DRV5021A2QDBZT |
| INA138NA/3K | SN74LVC2G17DBVR | LM3880MFX-1AB/NOPB | DRV5021A3QDBZR |
| INA168NA/250 | SN74LVC2G34DBVR | LM3880MFX-1AC/NOPB | DRV5021A3QDBZT |
| INA168NA/3K | SN74LVC2GU04DBVR | LM3880MFX-1AD/NOPB | DRV5023AJQDBZR |
| INA193AIDBVR | SN74LVC2GU04DBVT | LM3880MFX-1AE/NOPB | DRV5023AJQDBZT |
| INA193AIDBVT | TLV61220DBVR | LM3880MFX-1AF/NOPB | DRV5023BIQDBZR |
| INA194AIDBVR | TLV61220DBVT | INA181A1IDBVR | DRV5023BIQDBZT |
| INA194AIDBVT | TMP100NA/250 | INA181A1IDBVT | DRV5032AJDBZR |
| INA195AIDBVT | TMP100NA/3K | INA181A2IDBVR | DRV5032AJDBZT |
| INA196AIDBVR | TPD4E1U06DBVR | INA181A2IDBVT | DRV5032DUDBZR |
| INA196AIDBVT | TPS22917LDBVR | INA181A3IDBVR | DRV5032DUDBZT |
| INA197AIDBVR | TPS2513ADBVR | INA181A3IDBVT | DRV5032FADBZR |
| INA197AIDBVT | TPS2513ADBVT | INA181A4IDBVR | DRV5032FADBZT |
| INA198AIDBVT | TPS2513DBVR | INA181A4IDBVT | DRV5032FBDBZR |
| OPA340NA/250 | TPS2513DBVT | LM2776DBVR | DRV5032FBDBZT |
| OPA340NA/3K | TPS2514ADBVR | LM2776DBVT | DRV5032FCDBZR |
| OPA365AIDBVR | TPS2514ADBVT | OPA322SAIDBVR | DRV5032FCDBZT |
| OPA365AIDBVT | TPS2552DBVR-1 | OPA322SAIDBVT | DRV5032ZEDBZR |
| OPA376AIDBVR | TPS2552DBVT-1 | REG710NA-3.3/250 | DRV5032ZEDBZT |
| OPA376AIDBVT | TXS0101DBVR | REG710NA-3.3/3K | DRV5033AJQDBZR |
| SN74AUP1G04DBVR | TXS0101DBVT | REG710NA-5/250 | DRV5033AJQDBZT |

| | | | |
|--------------------|--------------------|------------------|------------------|
| SN74AUP1G06DBVR | UCC27511DBVR | REG710NA-5/3K | DRV5033FAQDBZR |
| SN74AUP1G07DBVR | UCC27511DBVT | SN1511002DBVR | DRV5053CAQDBZR |
| SN74AUP1G17DBVR | UCC27531DBVR | SN74AUP1G57DBVR | DRV5053CAQDBZT |
| SN74LVC1G02DBVR | UCC27531DBVT | SN74AUP1G57DBVT | DRV5053EAQDBZR |
| SN74LVC1G02DBVT | UCC27532DBVR | SN74AUP1G58DBVR | DRV5053EAQDBZT |
| SN74LVC1G14DBVR | UCC27532DBVT | SN74AUP1G58DBVT | DRV50530AQDBZR |
| SN74LVC1G17DBVR | UCC27538DBVR | SN74AUP1G97DBVR | DRV50530AQDBZT |
| SN74LVC1G34DBVR | UCC27538DBVT | SN74AUP1G97DBVT | DRV5053PAQDBZR |
| TPS60400DBVR | UCC28704DBVR-1 | SN74AUP1G98DBVR | DRV5053PAQDBZT |
| TPS60400DBVT | UCC28704DBVT-1 | SN74AVC1T45DBVR | DRV5053RAQDBZR |
| TPS60401DBVR | UCC28742DBVR | SN74AVCH1T45DBVR | DRV5053RAQDBZT |
| TPS60401DBVT | UCC28742DBVT | SN74LVC1G11DBVR | DRV5053VAQDBZR |
| TPS60402DBVR | DRV5011ADDBZR | SN74LVC1G175DBVR | DRV5053VAQDBZT |
| TPS60402DBVT | DRV5011ADDBZT | SN74LVC1G19DBVR | DRV5056A6QDBZR |
| TPS60403DBVR | DRV5013ADEDDBZR | SN74LVC1G19DBVT | DRV5056A6QDBZT |
| TPS60403DBVT | DRV5013ADQDBZR | SN74LVC1G27DBVR | REF3020AIDBZR |
| TPS7A0218DBVR | DRV5013ADQDBZT | SN74LVC1G332DBVR | REF3020AIDBZT |
| TPS7A0228DBVR | DRV5013AGQDBZR | SN74LVC1G373DBVR | REF3025AIDBZR |
| TPS7A0233DBVR | DRV5013AGQDBZT | SN74LVC1G374DBVR | REF3025AIDBZT |
| LM3880MF-1AA/NOPB | DRV5013BCQDBZR | SN74LVC1G57DBVR | REF3030AIDBZR |
| LM3880MF-1AB/NOPB | DRV5013BCQDBZT | SN74LVC1G58DBVR | REF3030AIDBZT |
| LM3880MF-1AC/NOPB | DRV5013FAQDBZR | SN74LVC1G97DBVR | REF3033AIDBZR |
| LM3880MF-1AD/NOPB | DRV5015A1QDBZR | SN74LVC1G98DBVR | REF3033AIDBZT |
| LM3880MF-1AE/NOPB | DRV5015A1QDBZT | SN74LVC1G98DBVT | REF3040AIDBZR |
| LM3880MF-1AF/NOPB | DRV5015A2QDBZR | SN74LVC1GX04DBVR | REF3040AIDBZT |
| LM3880MFE-1AA/NOPB | DRV5015A2QDBZT | SN74LVC1GX04DBVT | TLV803EA30DBZR |
| LM3880MFE-1AB/NOPB | DRV5015A3QDBZR | SN74LVC1T45DBVR | TLV809EA17DBZR |
| LM3880MFE-1AC/NOPB | DRV5015A3QDBZT | SN74LVC1T45DBVT | TMAG5231B1DQDBZR |
| LM3880MFE-1AD/NOPB | DRV5021A1QDBZR | SN74LVC2G04DBVR | |
| LM3880MFE-1AE/NOPB | DRV5021A1QDBZT | SN74LVC2G06DBVR | |
| SN74LVC2G07DBVR | LM3880MFE-1AF/NOPB | DRV5021A2QDBZR | |

Qualification Report (SOT-23)

Qualification Results

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

| | Stress Test | Duration | PHI TPS76933DBV | CDAT TLV90611DBV |
|--------|--|---|--------------------|---------------------|
| TC | Temperature Cycling -65/150C Or Temperature Cycling -55/150C Or Temperature Cycling -55/125C | 500 Cycles Or 1000 Cycles Or 700 Cycles | 3/231/0 | 3/231/0 |
| HAST/T | Biased HAST 130C/85%RH | 96 hours | 3/231/0 | 3/231/0 |

| | Stress Test | Duration | PHI TPS76933DBV | CDAT TLV90611DBV |
|---------------|---|---|--------------------|---------------------|
| HB | Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH | Or 264 hours Or 1000 hours | | |
| HTSL | High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C | 1000 hours Or 420 hours | 3/231/0 | 3/231/0 |
| AC/ UHA ST | Autoclave 121C Or Unbiased HAST, 130C/85%RH | 96 hours | 3/231/0 | 3/231/0 |
| SD | Solderability | 8 Hour Steam age or 155C Dry Bake | 3/66/0 | 3/66/0 |
| MQ | Manufacturability | - | Pass | Pass |

| | Stress Test | Duration | TFM E SN74AHC1G14DBV | HNA INA293A11DBV |
|---------------|--|---|-------------------------|-----------------------------|
| TC | Temperature Cycling -65/150C Or Temperature Cycling -55/150C Or Temperature Cycling -55/125C | 500 Cycles Or 1000 Cycles Or 700 Cycles | 3/231/0 | 3/231/0 |
| HAST/T HB | Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH | 96 hours Or 264 hours Or 1000 hours | 3/231/0 | 3/231/0 |
| HTSL | High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C | 1000 hours Or 420 hours | 3/231/0 | 3/231/0 |
| AC/ UHA ST | Autoclave 121C Or Unbiased HAST, 130C/85%RH | 96 hours | 3/231/0 | 3/231/0 |
| SD | Solderability | 8 Hour Steam age or 155C Dry Bake | 3/66/0 | 3/66/0 (SN74LVC1GU04DBV) |
| MQ | Manufacturability | - | Pass | Pass |

| | Stress Test | Duration | TIEMA DAC121S101CIM K | HFTAT TLV70333DBV | ASEWH TL431CDBV |
|--------------|--|---|--------------------------|----------------------|--------------------|
| TC | Temperature Cycling -65/150C Or Temperature Cycling -55/150C Or Temperature Cycling -55/125C | 500 Cycles Or 1000 Cycles Or 700 Cycles | 3/231/0 | 3/231/0 | 3/231/0 |
| HAST/T HB | Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH | 96 hours Or 264 hours Or 1000 hours | 3/231/0 | 3/231/0 | 3/231/0 |

| | Stress Test | Duration | TIEMA DAC121 S1 01CIM K | HFTAT TLV70333DBV | ASEWH TL431CDBV |
|---------------|--|--|----------------------------|--------------------------|--------------------|
| HTSL | High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C | 1000 hours Or 420 hours | 3/231/0 | 3/231/0 | 3/231/0 |
| AC/ UHA ST | Autoclave 121C Or Unbiased HAST, 130C/85%RH | 96 hours | 3/231/0 | 3/231/0 | 3/231/0 |
| SD | Solderability | 8 Hour Steam age or 155C Dry Bake | 3/66/0 (LM2660MM/NOPB) | 3/66/0 (TLV74333PDBV) | 3/66/0 |
| MQ | Manufacturability | - | Pass | Pass | Pass |

All qualification devices in the tables are qualified at L1-260C MSL rating.

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, and HTSL, as applicable
 - The following are equivalent HTSL options based on activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours
- 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 Change Management team or your local Field Sales Representative.

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