



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20191010001.1
Qualification of new Bump site and BOM for select devices
Change Notification / Sample Request

Date: October 10, 2019
To: Newark/Farnell 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.

We request you acknowledge 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 you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated 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, contact your local Field Sales Representative or the PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your field sales representative.

Sincerely,

PCN Team
SC Business Services

20191010001.1
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 | CUSTOMER PART NUMBER |
|---------------|-----------------------------|
| ADS7886SBDBVT | null |
| ADS7883SBDBVT | null |
| ADS7883SDBVT | null |
| ADS7885SDBVT | null |
| ADS7886SDBVT | null |
| ADS7887SDBVT | null |
| ADS8319IBDGST | null |
| ADS8319IDGST | null |
| ADS8339IDGST | null |

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

| PCN Number: | 20191010001.1 | | PCN Date: | Oct 10 2019 | | | | | | | | | | | | | | | | | | |
|--|---|---------------------------------------|--|-------------------------------------|---------------------|---------|-----|------------------|-----|-------------|-------------------------|-------|----------------|-----------------|------|-----------|--|--------|-----------------|-------------|--------------|-----------------|
| Title: | Qualification of new Bump site and BOM for select devices | | | | | | | | | | | | | | | | | | | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | | | | | | | | | | | | | | | | | | | |
| Proposed 1st Ship Date: | Jan 10 2020 | Estimated Sample Availability: | Date provided at sample request | | | | | | | | | | | | | | | | | | | |
| Change Type: | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Design | <input checked="" type="checkbox"/> | Wafer Bump Site | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | Assembly Process | <input type="checkbox"/> | Data Sheet | <input checked="" type="checkbox"/> | Wafer Bump Material | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | Assembly Materials | <input type="checkbox"/> | Part number change | <input checked="" type="checkbox"/> | Wafer Bump Process | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | Mechanical Specification | <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Wafer Fab Site | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | Packing/Shipping/Labeling | <input type="checkbox"/> | Test Process | <input type="checkbox"/> | Wafer Fab Materials | | | | | | | | | | | | | | | | | |
| | | | | <input type="checkbox"/> | Wafer Fab Process | | | | | | | | | | | | | | | | | |
| PCN Details | | | | | | | | | | | | | | | | | | | | | | |
| Description of Change: | | | | | | | | | | | | | | | | | | | | | | |
| This PCN is to inform of a new bump site and BOM for the devices listed in the product affected section below as follows: | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">What</th> <th style="width: 25%;">Current</th> <th style="width: 25%;">New</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Bump Site</td> <td style="text-align: center;">AT5</td> <td style="text-align: center;">JCAP</td> </tr> <tr> <td style="text-align: center;">Bump Composition</td> <td style="text-align: center;">Hi Pb</td> <td style="text-align: center;">Cu/AgSn</td> </tr> <tr> <td style="text-align: center;">Die Coat</td> <td style="text-align: center;">None</td> <td style="text-align: center;">PI</td> </tr> <tr> <td style="text-align: center;">Lead finish (ADS7883/4/5, & DGS devices only)</td> <td style="text-align: center;">NiPdAu</td> <td style="text-align: center;">Matte Sn</td> </tr> <tr> <td style="text-align: center;">ECAT</td> <td style="text-align: center;">E3, G4 or E4</td> <td style="text-align: center;">G3 or G4</td> </tr> </tbody> </table> | | | | | What | Current | New | Bump Site | AT5 | JCAP | Bump Composition | Hi Pb | Cu/AgSn | Die Coat | None | PI | Lead finish (ADS7883/4/5, & DGS devices only) | NiPdAu | Matte Sn | ECAT | E3, G4 or E4 | G3 or G4 |
| What | Current | New | | | | | | | | | | | | | | | | | | | | |
| Bump Site | AT5 | JCAP | | | | | | | | | | | | | | | | | | | | |
| Bump Composition | Hi Pb | Cu/AgSn | | | | | | | | | | | | | | | | | | | | |
| Die Coat | None | PI | | | | | | | | | | | | | | | | | | | | |
| Lead finish (ADS7883/4/5, & DGS devices only) | NiPdAu | Matte Sn | | | | | | | | | | | | | | | | | | | | |
| ECAT | E3, G4 or E4 | G3 or G4 | | | | | | | | | | | | | | | | | | | | |
| Reason for Change: | | | | | | | | | | | | | | | | | | | | | | |
| Continuity of Supply | | | | | | | | | | | | | | | | | | | | | | |
| Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative): | | | | | | | | | | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | | | | | | | | | | |
| Anticipated impact on Material Declaration | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | No Impact to the Material Declaration | <input checked="" type="checkbox"/> | Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website . | | | | | | | | | | | | | | | | | | | |
| Changes to product identification resulting from this PCN: | | | | | | | | | | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | | | | | | | | | | |
| Product Affected: | | | | | | | | | | | | | | | | | | | | | | |
| ADS7883SBDBVR | ADS7886SBDCKR | ADS7888SDBVR | ADS8318IDRCTG4 | | | | | | | | | | | | | | | | | | | |
| ADS7883SBDBVT | ADS7886SBDCKT | ADS7888SDBVT | ADS8319IBDGSR | | | | | | | | | | | | | | | | | | | |
| ADS7883SDBVR | ADS7886SDBVR | ADS7888SDCKR | ADS8319IBDGST | | | | | | | | | | | | | | | | | | | |
| ADS7883SDBVT | ADS7886SDBVT | ADS7888SDCKT | ADS8319IBDRCR | | | | | | | | | | | | | | | | | | | |
| ADS7884SDBVR | ADS7886SDCKR | ADS8318IBDGSR | ADS8319IBDRCT | | | | | | | | | | | | | | | | | | | |

| | | | |
|---------------|--------------|---------------|--------------|
| ADS7884SDBVT | ADS7886SDCKT | ADS8318IBDGST | ADS8319IDGSR |
| ADS7885SDBVR | ADS7887SDBVR | ADS8318IBDRCT | ADS8319IDGST |
| ADS7885SDBVT | ADS7887SDBVT | ADS8318IDGSR | ADS8319IDRCT |
| ADS7886SBDBVR | ADS7887SDCKR | ADS8318IDGST | ADS8339IDGSR |
| ADS7886SBDBVT | ADS7887SDCKT | ADS8318IDRCT | ADS8339IDGST |



TI Information
Selective Disclosure

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

| Type | Test Name / Condition | Duration | Qual Device: ADS7886SBDBVR | Qual Device: ADS7886SDCKR | Qual Device: ADS8318IBDGSR | QBS Process Reference: OPA300AID |
|-------|-----------------------------|--------------------------|-------------------------------|------------------------------|-------------------------------|-------------------------------------|
| AC | Autoclave 121C | 96 Hours | - | - | - | 3/231/0 |
| CDM | ESD CDM | 1000 V | - | - | - | 1/3/0 |
| ED | Electrical Characterization | Per Datasheet Parameters | Pass | - | Pass | Pass |
| HAST | Biased HAST, 110C/85%RH | 264 Hours | 1/77/0 | 1/77/0 | - | - |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | - | 1/77/0 | 3/231/0 |
| HBM | ESD HBM | 4000 V | - | - | - | 1/3/0 |
| HTOL | Life Test, 150C | 300 Hours | - | - | - | 3/231/0 |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | - | - | - | 3/135/0 |
| HTSL | High Temp Storage Bake 170C | 420 Hours | 1/77/0 | 1/77/0 | 3/231/0 | - |
| LU | Latch-up | (per JESD78) | - | - | - | 1/12/0 |
| TC | Temperature Cycle, -65/150C | 500 Cycles | 2/154/0 | 2/154/0 | 3/231/0 | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | 1/77/0 | 1/77/0 | 3/231/0 | - |
| YLD | Yield Analysis | - | Pass | Pass | Pass | - |

- 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 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 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

Change Number: C1806171
TI Qualification ID: 20180626-126214

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

| Type | Test Name / Condition | Duration | Qual Device: ADS8318IBDRCT | QBS Product Reference: ADS8318DGS | QBS Product Reference: ADS8318DRC | QBS Process Reference: OPA300AID |
|-------|-----------------------------------|-----------------------------|-------------------------------|---|---|--|
| AC | Autoclave 121C | 96 Hours | - | 3/231/0 | 3/231/0 | 3/231/0 |
| CDM | ESD - CDM | 1500 V | - | 1/3/0 | 1/3/0 | - |
| CDM | ESD CDM | 1000 V | - | - | - | 1/3/0 |
| ED | Electrical Characterization | Per Datasheet Parameters | Pass | Pass | Pass | Pass |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | 1/77/0 | 3/231/0 | 3/231/0 |
| HBM | ESD - HBM | 2500 V | - | - | 1/3/0 | 1/3/0 |
| HTOL | High Temp Operating Life, 155C | 240 Hours | - | 1/115/0 | 3/343/0 | - |
| HTOL | Life Test, 150C | 300 Hours | - | - | - | 3/231/0 |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | - | - | - | 3/135/0 |
| HTSL | High Temp Storage Bake 170C | 420 Hours | 3/228/0 | 3/231/0 | 3/231/0 | - |
| LU | Latch-up | (per JESD78) | - | - | - | 1/12/0 |
| TC | Temperature Cycle - 65/150C | 500 Cycles | 3/231/0 | - | - | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | 3/231/0 | - | - | - |

- 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 contacts shown below or your local Field Sales Representative.

| Location | E-Mail |
|--------------|--|
| USA | PCNAmericasContact@list.ti.com |
| Europe | PCNEuropeContact@list.ti.com |
| Asia Pacific | PCNAsiaContact@list.ti.com |
| WW PCN Team | PCN_ww_admin_team@list.ti.com |

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