12500 TI Boulevard, MS 8640, Dallas, Texas 75243

# PCN#20210720001.1
# Qualification of new Fab site (CFAB) using qualified Process Technology, Die Revision, Probe site, and additional Assembly site/BOM options for select devices

## Change Notification / Sample Request

**Date:** July 22, 2021
**To:** Newark/Farnell 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 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, 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 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's previous announcement to close our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

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_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

PCN Team
SC Business Services

**20210720001.1**
**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 twenty four (24) months. The corresponding customer part number is also listed, if available.

| DEVICE | CUSTOMER PART NUMBER |
|---|---|
| LM358DGKR | null |

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

| | | | |
|---|---|---|---|
| **PCN Number:** | 20210720001.1 | **PCN Date:** | July 22, 2021 |
| **Title:** | Qualification of new Fab site (CFAB) using qualified Process Technology, Die Revision, Probe site, and additional Assembly site/BOM options for select devices | | |
| **Customer Contact:** | PCN Manager | **Dept:** | Quality Services |
| **Proposed 1st Ship Date:** | Oct 22 2021 | **Estimated Sample Availability:** | Date provided at sample request |

**Change Type:**

| | | | | | |
|---|---|---|---|---|---|
| ☒ | Assembly Site | ☒ | Design | ☐ | Wafer Bump Site |
| ☐ | Assembly Process | ☐ | Data Sheet | ☐ | Wafer Bump Material |
| ☒ | Assembly Materials | ☐ | Part number change | ☐ | Wafer Bump Process |
| ☐ | Mechanical Specification | ☐ | Test Site | ☒ | Wafer Fab Site |
| ☐ | Packing/Shipping/Labeling | ☐ | Test Process | ☒ | Wafer Fab Materials |
| | | | | ☒ | Wafer Fab Process |

## PCN Details

**Description of Change:**

Texas Instruments is pleased to announce the qualification of a new fab & process technology, (CFAB, JI3), die revisions, probe site, and AT (FMX) site/BOM options for selected devices as listed below in the product affected section. Construction differences are noted below:

| Current Fab Site | | | Additional Fab Site | | |
|---|---|---|---|---|---|
| **Current Fab Site** | **Process** | **Wafer Diameter** | **Additional Fab Site** | **Process** | **Wafer Diameter** |
| SFAB | JI1 | 150 mm | CFAB | JI3 | 200 mm |

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

Construction differences are noted below:

**Group 1 CFAB/Process migration & additional BOM option in FMX for PDIP Devices:**

| | Current | Additional |
|---|---|---|
| Bond wire diameter | Cu, 0.96 mils | Cu, 0.80 mils |

**Group 2 CFAB/Process migration & HFTF as additional Assembly site for SOP Devices:**

| | ASESH | HNA | UTL2 | HFTF* |
|---|---|---|---|---|
| Mount Compound | SID#EY1000063 | SID#400180 | SID#PZ0013 | SID#A-18 |
| Mold Compound | SID#EN2000763 | SID#450179 | SID#CZ0094 | SID#R-30 |
| Lead finish | NiPdAu | NiPdAu | NiPdAu | Matte Sn |
| Bond wire diameter | Cu, 1.0 mils | Au, 1.0 mils | Au, 1.0 mils | Cu, 0.8 mils |

Note(*): In this group, only the LM358DGKR-JF, LM2904DGKR-JF, and LM2904DGKR-ND are new to HFTF.

**Marking differences:**

| Current | Proposed |
|---|---|
| Topside Symbol<br>YM TI<br>M5P<br>O<br>Backside Symbol<br>YMS<br>LLLL<br>TI = TI LETTERS<br>YM = YEAR MONTH DATE CODE<br>LLLL = ASSEMBLY LOT CODE<br>**S** = ASSEMBLY SITE CODE<br>O = PIN 1 INDICATOR | Topside Symbol<br>YMLL<br>M5P<br>O<br>YM = YEAR MONTH DATE CODE<br>LL = LAST 2 DIGIT IN ASSEMBLY LOT CODE<br>O = PIN 1 INDICATOR |

**Group 3 CFAB/Process migration & Additional BOM Option qualification:**

| | Current | Additional |
|---|---|---|
| Bond wire diameter | Cu, 0.96 mils | Cu, 0.80 mils |
| Pin one designator | Stripe | dot |

**Group 4 Matte Sn lead finish option added:**

| | Current | Additional |
|---|---|---|
| Lead finish | NiPdAu | Matte Sn |

Other versions of this device family are included in EOL notice PDN#20210720003.3.

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-milimeter 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):**

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 |
|---|---|---|---|
| ☒ 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 |
|---|---|---|---|
| SH-BIP-1 | SHE | USA | Sherman |
| **CFAB** | **CU3** | **CHN** | **Chengdu** |

**Die Rev:**

| Current | New |
|---|---|
| Die Rev [2P] | **Die Rev [2P]** |
| E, F, H, C | **B** |

**Assembly Site Information:**

| Assembly Site | Assembly Site Origin (22L) | Assembly Country Code (23L) | Assembly City |
|---|---|---|---|
| ASESH | ASH | CNN | Shanghai |
| HNA | HNT | THA | Ayutthaya |
| UTL2 | NS2 | UT3 | Bangpakong, Chachoengsao |
| **HFTF** | **HFT** | **CHN** | **Hefei** |

Sample product shipping label (not actual product label)


**Product Affected:**

**Group 1 Device list: CFAB/Process migration & additional BOM option in FMX for PDIP Devices:**

| | | | |
|---|---|---|---|
| LM258P | LM358AP | LM258APE4 | LM358P-P2 |
| LM358P | MC1458P | LM2904PE4 | MC1458PE4 |
| LM258AP | LM258PE4 | LM358APE4 | LM2904P-JF |
| LM2904P | LM358PE4 | LM358P-JF | |

**Group 2 Device list: CFAB/Process migration & HFTF as additional Assembly site for SOP Devices:**

| | | | |
|---|---|---|---|
| LM258DGKR | LM258ADGKR | LM358ADGKR | LM2904DGKR-JF |
| LM358DGKR | LM2904DGKR | LM358DGKR-JF | LM2904DGKR-ND |

**Group 3 Device list: CFAB/Process migration & Additional BOM Option qualification**

| | | |
|---|---|---|
| MC1458DR | MC1458DRE4 | MC1458DRG4 |

**Group 4 Device list: Matte Sn Lead finish option added**

| | | | |
|---|---|---|---|
| LM358BIDGKR | LM2904BIDGKR | LM358BAIDGKR | LM2904BAIDGKR |

**Group 1 Qual Memos:**

## Qualification Report

## Approve Date 18-May-2021

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

| Type | Test Name / Condition | Duration | Qual Device: LM358P | QBS Product Reference: LM358BIPWR | QBS Process / Package Reference: LM358BIDR | QBS Package Reference: NE5532P | QBS Package Reference: TLC339IN |
|---|---|---|---|---|---|---|---|
| PC | Preconditioning, L1 | Level 1-260C | 1/77/0 | - | - | - | - |
| PC | Preconditioning, L2 | Level 2-260C | - | - | 3/1499/10 (1) | - | - |
| ED | Electrical Characterization | Per Datasheet Parameters | - | 1/30/0 | 3/90/0 | - | - |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | - | 2/231/0 | 3/231/0 | - |
| AC | Autoclave 121C | 96 Hours | - | - | - | - | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | - | - | 2/231/0 | - | - |
| TC | Temperature Cycle, -65/150C | 500 Cycles | 1/77/0 | - | 2/231/0 | - | 3/231/0 |
| HTSL | High Temp Storage Bake 170C | 420 Hours | - | - | - | - | 3/231/0 |
| HTSL | High Temp Storage Bake 175C | 500 Hours | - | - | 2/231/0 | - | - |
| HTOL | Life Test, 150C | 300 Hours | - | - | 3/231/0 | 3/231/0 | - |
| HBM | ESD - HBM - Q100 | 2000 V | - | 1/3/0 | - | - | - |
| HBM | ESD - HBM - Q100 | 2500 V | - | - | 1/3/0 | - | - |
| CDM | ESD - CDM - Q100 | 1500 V | - | 1/3/0 | 3/9/0 | - | - |
| HTOL | Life Test, 150C | 300 Hours | - | - | 3/231/0 | 3/231/0 | - |
| LU | Latch-up | Per JESD78 | - | 1/6/0 | 3/18/0 | - | - |
| WBP | Wire Bond Pull (Cpk>1.67) | Wires | - | 1/76/0 | 3/228/0 | 3/228/0 | 3/228/0 |
| WBP | Wire Bond Shear (Cpk>1.67) | Wires | - | 1/76/0 | 3/228/0 | 3/228/0 | 3/228/0 |
| SD | Solderability | 8 Hours Steam Age | - | - | - | 3/66/0 | 3/66/0 |

- QBS: Qual By Similarity
- Qual Device LM358P 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
Note (1): Fails due to crystallographic defects.

## Group 2 & 3 Qual Memo:

## Qualification Report

## Approve Date 18-Jun-2021

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

| Type | Test Name / Condition | Duration | Qual Device: LM358BIDGKR | QBS Product Reference: LM358BIDGKR | QBS Process Reference: LM2904BQDRQ1 | QBS Package Reference: LM2904BQDGKRQ1 | QBS Package Reference: TCA9803DGK |
|---|---|---|---|---|---|---|---|
| PC | Preconditioning Level 1 | Level 1-260C | - | - | - | 3/1305/0 | - |
| PC | Preconditioning Level 2 | Level 2-260C | - | - | 3/1499/10 (1) | - | - |
| ED | Electrical Characterization | Per Datasheet Parameters | - | 1/30/0 | 3/90/0 | 3/90/0 | - |
| HAST | Biased HAST, 110C/85%RH | 264 Hours | - | - | - | 3/231/0 | - |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | - | 3/231/0 | - | - |
| TC | Temperature Cycle, -65/150C | 500 Cycles | - | - | 3/231/0 | 3/231/0 | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | - | - | 3/231/0 | - | - |
| AC | Autoclave 121C | 96 Hours | - | - | - | 3/231/0 | 3/231/0 |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | - | - | - | 3/135/0 | - |
| HTSL | High Temp Storage Bake 170C | 420 Hours | - | - | - | - | 3/231/0 |
| HTSL | High Temp Storage Bake 175C | 500 Hours | - | - | 3/135/0 | - | - |
| HTOL | Life Test, 150C | 408 Hours | - | - | 3/231/0 | 3/231/0 | - |
| ELFR | Early Life Failure Rate, 125C | 48 Hours | - | - | 3/2400/4 (1) | - | - |
| HBM | ESD - HBM | 2000 V | - | 1/3/0 | 3/9/0 | 1/3/0 | - |
| CDM | ESD - CDM | 1500 V | - | 1/3/0 | 3/9/0 | 1/3/0 | 3/9/0 |
| LU | Latch-up | Per JESD78 | - | 1/6/0 | 3/18/0 | 1/6/0 | - |
| MSL | Moisture Sensitivity, JEDEC | Level 1-260C | 1/12/0 | - | - | - | 1/12/0 |
| WBP | Bond Pull | Wires | 1/76/0 | 1/76/0 | 3/90/0 | 3/90/0 | 3/228/0 |
| WBS | Ball Bond Shear | Wires | 1/76/0 | 1/76/0 | 3/90/0 | 3/90/0 | 3/228/0 |

- QBS: Qual By Similarity
- Qual Device LM358BIDGKR 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

Note (1): Precon and ELFR fails due to a defect screenable at production test.

## Group 4 Qual Memos:

## Qualification Report

## Approve Date 14-Jan-2021

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

| Type | Test Name / Condition | Duration | Qual Device: MC1458DR | QBS Product Reference: LM358BIDR | QBS Process Reference: LM2904BQDRQ1 | QBS Package Reference: LM393BIDR | QBS Package Reference: SN65HVDA1040AQDRQ1 |
|---|---|---|---|---|---|---|---|
| PC | Preconditioning, L2 | Level 2-260C | - | 3/1499/10 (1) | 3/1499/10 (1) | - | - |
| PC | Preconditioning, L1 | Level 1-260C | - | - | - | 4/420/0 | 8/1597/0 |
| ED | Electrical Characterization | Per Datasheet Parameters | - | 3/90/0 | 3/90/0 | - | 3/90/0 |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | 2/231/0 | 3/231/0 | 1/77/0 | 3/231/0 |
| AC | Autoclave 121C | 96 Hours | - | - | - | - | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | - | 2/231/0 | 3/231/0 | 1/76/0 | - |
| TC | Temperature Cycle, -65/150C | 500 Cycles | - | 2/231/0 | 3/231/0 | 1/77/0 | 3/231/0 |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | - | - | - | 1/77/0 | 3/135/0 |
| HTSL | High Temp Storage Bake 175C | 500 Hours | - | 3/231/0 | 3/135/0 | - | - |
| HTOL | Life Test, 125C | 1000 Hours | - | - | - | - | 3/231/0 |
| HTOL | Life Test, 150C | 300 Hours | - | 3/231/0 | - | - | - |
| HTOL | Life Test, 150C | 408 Hours | - | - | 3/231/0 | - | - |
| ELFR | Early Life Failure Rate, 125C | 48 Hours | - | - | 4/2400/4 (1) | - | 3/2400/0 |
| HBM | ESD - HBM - Q100 | 2000 V | - | 2/6/0 | 3/9/0 | - | - |
| HBM | ESD - HBM - Q100 | 2500 V | - | 1/3/0 | - | - | - |
| CDM | ESD – CDM – Q100 | 1500 V | - | 3/9/0 | 3/9/0 | 1/3/0 | - |
| LU | Latch-up | Per JESD78 | - | 3/18/0 | 3/18/0 | - | - |
| MSL | Automotive Moist Sens. L2 | Level 2-260C | - | - | 3/36/0 | - | - |
| PD | Physical Dimensions | Cpk>1.67 | - | - | 3/30/0 | - | 3/30/0 |
| SD | Surface Mount Solderability | Pb Free | - | - | 1/15/0 | - | 1/15/0 |

| Type | Test Name / Condition | Duration | Qual Device: MC1458DR | QBS Product Reference: LM358BIDR | QBS Process Reference: LM2904BQDRQ1 | QBS Package Reference: LM393BIDR | QBS Package Reference: SN65HVDA1040AQDRQ1 |
|---|---|---|---|---|---|---|---|
| SD | Surface Mount Solderability | Pb | - | - | 1/15/0 | - | 1/15/0 |
| DS | Die Shear | QSS 009-009 | 1/10/0 | 1/10/0 | 1/10/0 | - | 1/10/0 |
| WBP | Bond Pull Cpk>1.67 | Wires | 1/76/0 | 3/228/0 | 3/90/0 | - | 3/90/0 |
| WBS | Wire Bond Shear Cpk>1.67 | Wires | 1/76/0 | 3/228/0 | 3/90/0 | - | 3/90/0 |

- QBS: Qual By Similarity
- Qual Device MC1458DR 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

Note (1): Precon and ELFR fails due to a defect screenable at production test.

## Qualification Report

### Approve Date 12-Nov-2020

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

| Type | Test Name / Condition | Duration | Qual Device: MC1458DR | QBS Product Reference: LM358BIDR | QBS Process Reference: LM2904BQDRQ1 | QBS Package Reference: LM358DR | QBS Package Reference: TL494IDR |
|---|---|---|---|---|---|---|---|
| PC | PreCon Level 1 | Level 1-260C | 1/170/0 | - | - | - | - |
| PC | PreCon Level 2 | Level 2-260C | - | - | 3/1499/10 (1) | - | - |
| ED | Electrical Characterization | Per Datasheet Parameters | - | Pass | Pass | Pass | Pass |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | 2/231/0 | 3/231/0 | 1/77/0 | 3/229/0 |
| TS | Thermal Shock -65/150C | 500 Cycles | - | - | - | 3/231/0 | 3/231/0 |
| AC | Autoclave 121C | 96 Hours | 1/77/0 | - | - | 1/77/0 | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | - | 2/231/0 | 3/231/0 | - | - |
| TC | Temperature Cycle, -65/150C | 500 Cycles | 1/77/0 | 2/231/0 | 3/231/0 | 3/231/0 | 3/231/0 |
| HTSL | High Temp Storage Bake 170C | 420 Hours | - | - | - | 1/77/0 | 3/231/0 |
| HTSL | High Temp Storage Bake 175C | 500 Hours | - | 2/231/0 | 3/135/0 | - | - |
| HTOL | Life Test, 150C | 300 Hours | - | 3/231/0 | - | 1/77/0 | 3/231/0 |
| HTOL | Life Test, Grade-1, 150C | 408 Hours | - | - | 3/231/0 | - | - |
| ELFR | Early Life Failure Rate, 125C | 48 Hours | - | - | 8/3600/4 (1) | - | - |
| HBM | ESD - HBM - Q100 | 2000 V | - | 2/6/0 | 3/9/0 | - | - |
| HBM | ESD - HBM - Q100 | 2500 V | - | 1/3/0 | - | - | - |
| CDM | ESD - CDM - Q100 | 1500 V | - | 3/9/0 | 3/9/0 | - | - |
| LU | Latch-up | Per AEC-Q100-004 | - | - | 3/18/0 | - | - |
| LU | Latch-up | Per JESD78 | - | 3/18/0 | - | - | - |
| PD | Auto Physical Dimensions | Cpk>1.67 | - | - | 3/30/0 | - | - |
| SD | Surface Mount Solderability | Pb | - | - | 1/30/0 | - | - |
| SD | Surface Mount Solderability | Pb Free | - | - | 1/30/0 | - | - |
| FLAM | Flammability (IEC 695-2-2) | -- | - | - | - | - | 3/15/0 |

| Type | Test Name / Condition | Duration | Qual Device: MC1458DR | QBS Product Reference: LM358BIDR | QBS Process Reference: LM2904BQDRQ1 | QBS Package Reference: LM358DR | QBS Package Reference: TL494IDR |
|---|---|---|---|---|---|---|---|
| FLAM | Flammability (UL 94V-0) | -- | - | - | - | - | 3/15/0 |
| FLAM | Flammability (UL-1694) | -- | - | - | - | - | 3/15/0 |
| MSL | Moisture Sensitivity, JEDEC | Level 1-260C | 1/12/0 | - | - | 3/36/0 | 3/36/0 |
| MSL | Automotive Moist Sens. L2 | Level 2-260C | - | - | 3/36/0 | - | - |
| WBP | Bond Strength | Wires | - | 3/228/0 | 3/90/0 | 1/76/0 | 3/228/0 |
| WBS | Ball Bond Shear | Wires | - | 3/228/0 | 3/90/0 | - | - |

- QBS: Qual By Similarity
- Qual Device MC1458DR 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

Note (1): Precon and ELFR fails due to a defect screenable at production test.

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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