



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250226002.1

Qualification of FFAB using qualified Process Technology, Die Revision, Datasheet, and additional Assembly BOM options for select devices
Change Notification / Sample Request

Date: February 26, 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

20250226002.1
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 |
|---------------|-----------------------------|
| OPA4830IPWR | NULL |

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

| | | | |
|--|---|--|---------------------|
| PCN Number: | 20250226002.1 | PCN Date: | February 26, 2025 |
| Title: | Qualification of FFAB using qualified Process Technology, Die Revision, Datasheet, and additional Assembly BOM options for select devices | | |
| Customer Contact: | Change Management Team | Dept: | Quality Services |
| Proposed 1st Ship Date: | May 27, 2025 | Sample requests accepted until: | April 27, 2025* |
| *Sample requests received after April 27, 2025 will not be supported. | | | |
| Change Type: | | | |
| <input 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 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 qualification of its FFAB fabrication facility as an additional Wafer Fab option in addition to 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 |
| SFAB | CBC10 | 150 mm | FFAB | BICOMHD | 200 mm |

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

Construction differences are as follows:

| | Current | New |
|----------------|---------------|------------------------|
| Wire diam/type | 0.96mil Au | 1.0mil Cu |
| ECAT | Include Value | Remove |
| TI Bug | Include | Replace with "TI" text |
| Pin 1 ID | Embossed | Dot |
| Mold Unit ID | None | With |
| Example | | |

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.



SBOS350B – DECEMBER 2006 – REVISED DECEMBER 2024

OPA4830

Changes from Revision A (May 2008) to Revision B (December 2024)

Page

- Changed CDM from 1500V to 1000V in *ESD Ratings* 4
- Updated all *Electrical Characteristics* to match device performance..... 5

| Product | Current | New | Link to full datasheet |
|---------|---------|-----|------------------------|
|---------|---------|-----|------------------------|

| Folder | Datasheet Number | Datasheet Number | |
|---------|------------------|------------------|---|
| OPA4830 | SBOS350A | SBOS350B | http://www.ti.com/product/OPA4830 |

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-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):

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 |
|---|---|---|---|

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 |
| FR-BIP-1 | TID | DEU | Freising |

Die Rev:

Current

New

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

Sample product shipping label (not actual product label)



Product Affected:

OPA4830IPWR

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: <u>OPA4830IPWR</u> | QBS Product Reference: <u>OPA2830IDR</u> | QBS Product Reference: <u>OPA2830IDGKR</u> | QBS Process Reference: <u>THS3491IDDAR</u> | QBS Process Reference: <u>OPA2810IDGKR</u> | QBS Package Reference: <u>SN3257QPWRQ1</u> | QBS Package Reference: <u>OPA4991QPWRQ1</u> |
|-------|----|-------------------------------|-------------|-------------|------------------------------------|---|---|---|---|---|--|
| HAST | A2 | Biased HAST | 110C/85%RH | 264 Hours | - | - | - | - | - | - | 1/77/0 |
| HAST | A2 | Biased HAST | 130C | 96 Hours | - | - | - | - | - | 3/231/0 | - |
| HAST | A2 | Biased HAST | 130C/85%RH | 96 Hours | - | - | - | 3/231/0 | 3/231/0 | - | - |
| UHAST | A3 | Autoclave | 121C/15psig | 96 Hours | - | - | - | - | - | 3/231/0 | 3/231/0 |
| UHAST | A3 | Unbiased HAST | 130C/85%RH | 96 Hours | - | - | - | 3/231/0 | 3/231/0 | - | - |
| TC | A4 | Temperature Cycle | -55/150C | 1000 Cycles | - | - | - | - | - | 3/231/0 | - |
| TC | A4 | Temperature Cycle | -65C/150C | 500 Cycles | - | - | - | 3/231/0 | 3/231/0 | - | 1/77/0 |
| HTSL | A6 | High Temperature Storage Life | 150C | 1000 Hours | - | - | - | - | - | - | 1/45/0 |
| HTSL | A6 | High Temperature Storage Life | 170C | 420 Hours | - | - | - | 3/231/0 | 3/231/0 | - | - |
| HTSL | A6 | High Temperature Storage Life | 175C | 500 Hours | - | - | - | - | - | 3/135/0 | - |

| Type | # | Test Name | Condition | Duration | Qual Device: <u>OPA4830IPWR</u> | QBS Product Reference: <u>OPA2830IDR</u> | QBS Product Reference: <u>OPA2830IDGKR</u> | QBS Process Reference: <u>THS3491IDDAR</u> | QBS Process Reference: <u>OPA2810IDGKR</u> | QBS Package Reference: <u>SN3257QPWRQ1</u> | QBS Package Reference: <u>OPA4991QPWRQ1</u> |
|------|----|-------------------------|---|------------|------------------------------------|---|---|---|---|---|--|
| HTOL | B1 | Life Test | 125C | 1000 Hours | - | - | - | - | 3/231/0 | - | - |
| HTOL | B1 | Life Test | 150C | 300 Hours | - | - | - | - | - | 3/231/0 | 3/231/0 |
| HTOL | B1 | Life Test | 70C Vcc Max (Self heating brings Tj up to 150C) | 300 Hours | - | - | - | 3/231/0 | - | - | - |
| ELFR | B2 | Early Life Failure Rate | 125C | 48 Hours | - | - | - | - | 3/3000/0 | - | - |
| ELFR | B2 | Early Life Failure Rate | 70C (self heating brings Tj up to 150C) | 24 Hours | - | - | - | 3/3000/0 | - | - | - |
| 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 | - |
| PD | C4 | Physical Dimensions | Cpk>1.67 | - | - | - | - | - | - | 3/30/0 | 1/10/0 |
| ESD | E2 | ESD CDM | - | 1500 Volts | - | - | - | - | - | 1/3/0 | 1/3/0 |
| ESD | E2 | ESD CDM | - | 250 Volts | 1/3/0 | 1/3/0 | 1/3/0 | 3/9/0 | 3/9/0 | - | - |
| ESD | E2 | ESD HBM | - | 1000 Volts | - | 1/3/0 | - | 3/9/0 | 3/9/0 | - | - |
| ESD | E2 | ESD HBM | - | 4000 Volts | - | - | - | - | - | - | 1/3/0 |
| ESD | E2 | ESD HBM | - | 5000 Volts | - | - | - | - | - | 1/3/0 | - |
| LU | E4 | Latch-Up | Per JESD78 | - | - | 1/3/0 | - | 3/18/0 | 3/9/0 | 1/6/0 | 3/18/0 |

| Type | # | Test Name | Condition | Duration | Qual Device: OPA4830IPWR | QBS Product Reference: OPA2830IDR | QBS Product Reference: OPA2830IDGKR | QBS Process Reference: THS3491IDDAR | QBS Process Reference: OPA2810IDGKR | QBS Package Reference: SN3257QPWRQ1 | QBS Package Reference: OPA4991QPWRQ1 |
|------|----|-----------------------------|--------------------------|----------|---|--|--|--|--|--|---|
| CHAR | E5 | Electrical Characterization | Per Datasheet Parameters | - | - | 1/30/0 | 1/30/0 | 3/90/0 | 3/90/0 | 3/90/0 | 3/90/0 |

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device OPA4830IPWR 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-2402-152

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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