



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**Notification# 20230314000.1**  
**Datasheet for OPAx227, OPAx228**  
**Change Notification**

**Date:** March 21, 2023  
**To:** PREMIER FARNELL PCN

Dear Customer:

This is a notice of change to a product data sheet for 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.

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](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

PCN Team  
SC Business Services


## **Data Sheet Change Notification Attachments**

### **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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
OPA2227PA	null

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

<b>PCN Number:</b>	20230314000.1	<b>PCN Date:</b>	March 21, 2023
<b>Title:</b>	Datasheet for OPAx227, OPAx228		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	June 21, 2023		
<b>Change Type:</b>			
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Design	<input type="checkbox"/> Wafer Bump Site	
<input type="checkbox"/> Assembly Process	<input checked="" type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Material	
<input type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input 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	
<b>Notification Details</b>			
<b>Description of Change:</b>			
Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is being updated as summarized below.			
		<b>OPA227, OPA2227, OPA4227</b> <b>OPA228, OPA2228, OPA4228</b> <small>SBOS110C – MAY 1998 – REVISED MARCH 2023</small>	
<b>Changes from Revision B (April 2015) to Revision C (November 2022)</b>			
	<b>Page</b>		
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1		
• Added dual supply voltage in <i>Absolute Maximum Ratings</i> .....	5		
• Added symbol for output short circuit in <i>Absolute Maximum Ratings</i> .....	5		
• Added symbol for operating temperature in <i>Absolute Maximum Ratings</i> .....	5		
• Added symbol for junction temperature in <i>Absolute Maximum Ratings</i> .....	5		
• Changed HBM value in <i>ESD Ratings</i> .....	5		
• Added CDM in <i>ESD Ratings</i> .....	5		
• Changed to single supply voltage and dual supply voltage in <i>Recommended Operating Conditions</i> .....	5		
• Changed format of thermal information tables for better clarity.....	6		
• Changed package to P (PDIP) for OPA222xP and OPA222xPA devices in <i>Thermal Information</i> .....	6		
• Deleted redundant power supply voltage from <i>Electrical Characteristics of OPAx227</i> because same information already listed in <i>Recommended Operating Conditions</i> .....	7		
• Deleted redundant temperature from <i>Electrical Characteristics of OPAx227</i> because same information already listed in <i>Recommended Operating Conditions</i> .....	7		
• Deleted redundant power supply voltage from <i>Electrical Characteristics of OPAx228</i> because same information already listed in <i>Recommended Operating Conditions</i> .....	9		
• Deleted redundant temperature from <i>Electrical Characterisitcs of OPAx228</i> because same information already listed in <i>Recommended Operating Conditions</i> .....	9		
The datasheet number will be changing.			
Device Family	Change From:	Change To:	
OPAx227, OPAx228	SBOS110B	SBOS110C	
These changes may be reviewed at the datasheet links provided. <a href="http://www.ti.com/product/OPA227">http://www.ti.com/product/OPA227</a>			
<b>Reason for Change:</b>			
To accurately reflect device characteristics.			
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>			
Electrical specification performance changes as indicated above.			

<b>Changes to product identification resulting from this PCN:</b>			
None.			
<b>Product Affected:</b>			
OPA228UA/2K5	OPA2227UAG4	OPA227U	OPA228UAG4
OPA2228UE4	OPA2227UE4	OPA227U/2K5	OPA228UG4
OPA2227P	OPA2227UG4	OPA227UA	OPA4227PA
OPA2227PA	OPA2228P	OPA227UA/2K5	OPA4227PAG4
OPA2227U	OPA2228PA	OPA227UA/2K5G4	OPA4227UA
OPA2227U/2K5	OPA2228PAG4	OPA228P	OPA4227UA/2K5
OPA2227UAE4	OPA2228PG4	OPA228PA	OPA4227UAG4
OPA2227U/2K5G4	OPA2228U	OPA228PAG4	OPA4228PA
OPA2227UA	OPA2228U/2K5	OPA228U	OPA4228PAG4
OPA2227UA/2K5	OPA2228UA	OPA4228UA/2K5	OPA4228UA
OPA2227UA/2K5E4	OPA2228UA/2K5	OPA228UA	

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

<b>Location</b>	<b>E-Mail</b>
WW PCN Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

### **IMPORTANT NOTICE AND DISCLAIMER**

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale ([www.ti.com/legal/termsofsale.html](http://www.ti.com/legal/termsofsale.html)) or other applicable terms available either on [ti.com](http://ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

