



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

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

**Date:** March 21, 2023  
**To:** TOKYO ELECTRON DEVICE (DSTR) 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_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
OPA2227UA	null
OPA2227UA/2K5	null
OPA2227UG4	null
OPA227U	null
OPA228UA	null
OPA2228U	null
OPA227UA	null
OPA227UA/2K5	null
OPA228U	null
OPA4228UA	null
OPA4228UA/2K5	null
OPA228P	null
OPA4227UA	null
OPA2227U	null
OPA2228UA	null
OPA2228UA/2K5	null
OPA227U/2K5	null
OPA4227UA/2K5	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>			
<p>Texas Instruments Incorporated is announcing an information only notification.  The product datasheet(s) is being updated as summarized below.</p>			
		<p style="text-align: right;"> <b>OPA227, OPA2227, OPA4227</b>  <b>OPA228, OPA2228, OPA4228</b>  <small>SBOS110C – MAY 1998 – REVISED MARCH 2023</small> </p>	
<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 Characteristics 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.  
<http://www.ti.com/product/OPA227>

**Reason for Change:**

To accurately reflect device characteristics.

**Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):**

Electrical specification performance changes as indicated above.

**Changes to product identification resulting from this PCN:**

None.

**Product Affected:**

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.

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

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