

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20200803000.1 PBO to PI conversion for the OPA2211AIDDA/R device Change Notification / Sample Request

Date: August 03, 2020 **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 (<u>PCN_ww_admin_team@list.ti.com</u>). For sample requests or sample related questions, contact your field sales representative.

Sincerely, PCN Team SC Business Services

20200803000.1 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.

DEVICEOPA2211AIDDA

CUSTOMER PART NUMBER

null

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

PCN Number:		20200803000.1					ate:	Aug 03, 2020		
Title: PBO to PI conversion			ion for the OPA2211AIDDA/R device							
Customer Contact: PCN Manager Dept: Quality Services										
Proposed 1 st Ship Dat		n Date:	Nov 0	3, 2020		•		provided at		
				-,	Ava	ilability: sample request				
	Change Type:									
	Assembly Site			Design Data Sheet		_	Wafer Bump Site Wafer Bump Material			
✓ Assembly Process✓ Assembly Materials					Part number change			Wafer Bump Process		
Mechanical Specification			า	Test Sit		Wafer Fab Site				
Packing/Shipping/Lab		oing/Label			ocess	Wafer Fab Materials				
						Wafer Fab Process				
	PCN Details									
Descri	iption of Cl	hange:								
This notification is to announce the qualification of Polyimide as a replacement for the current PBO die coat for the OPA2211AIDDA/R device.										
			Cur	rrent	P	Proposed				
	Passivat	ion	P	ВО		PI	PI			
Leadframe		me N	iPdAu (N	Non-rough)	NiPdAu (Single Side Top Roughened)					
Reason for Change:										
Continuity of Supply										
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):										
None										
Anticipated impact on Material Declaration										
	Material Declaration production data and release. Upon production data and obtained at the site			a and will be availab production release t e site link below	ions or Product Content reports are driven from and will be available following the production roduction release the revised reports can be ite link below m/quality/docs/materialcontentsearch.tsp					
Changes to product identification resulting from this PCN:										
None										
Product Affected:										
OPA2211AIDDA OPA2211AIDDAR										

Qualification Data

Approved on 07/29/2020

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: OPA2211AIDDA	QBS Process Reference: INA826AIDGK	QBS Process Reference: OPA1612AID	QBS Process Reference: OPA209AID	QBS Process Reference: OPA827AIDGK
HTOL	Life Test, 150C	300 Hours	-	1/77/0	3/231/0	1/77/0	1/74/0
HBM	ESD - HBM	2500 V	-	1/3/0	1/3/0	1/3/0	1/3/0
CDM	ESD - CDM	1000 V	-	1/3/0	1/3/0	1/3/0	1/3/0
LU	Latch-up	Per JESD78	-	1/12/0	2/12/0	1/12/0	1/6/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	3/90/0	1/30/0	1/30/0
-	Pb Free Solderability	Pb Free/Solderability	3/66/0	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	3/90/0	1/30/0	1/30/0
HTSL	High Temp Storage Bake 170C	420 Hours	•	1/45/0	3/135/0	1/45/0	1/45/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	1/77/0	3/231/0	1/77/0	1/77/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	3/231/0	-	-	-	-

- QBS: Qual By Similarity
- Qual Device OPA2211AIDDA 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 Tl'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

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) or other applicable terms available either on 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.