



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

**PCN#20240326001.1**

**Qualification alternate Mount Compound material for select devices  
Change Notification / Sample Request**

**Date:** March 27, 2024

**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.

Texas Instruments 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 and approval of this change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date 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 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.

Sincerely,

Change Management Team  
SC Business Services

**20240326001.1**  
**Change Notification / Sample Request**  
**Attachments**

**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
OPA188AIDBVT	NULL

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

<b>PCN Number:</b>	20240326001.1			<b>PCN Date:</b>	March 27, 2024								
<b>Title:</b>	Qualification of alternate mount compound material for select devices												
<b>Customer Contact:</b>	Change Management team		<b>Dept:</b>	Quality Services									
<b>Proposed 1<sup>st</sup> Ship Date:</b>	June 25, 2024		<b>Sample Requests accepted until:</b>	April 26, 2024*									
<b>*Sample requests received after April 26, 2024 will not be supported.</b>													
<b>Change Type:</b>													
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material								
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process								
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site								
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Material								
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process								
<b>PCN Details</b>													
<b>Description of Change:</b>													
<p>This PCN is to inform of an alternate Mount Compound material set for the list of devices in the product affected sections below.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>What</th> <th>Current</th> <th>Additional</th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>SID#A-09</td> <td>4226215</td> </tr> </tbody> </table> <p>Qualification results are shown below</p>						What	Current	Additional	Mount Compound	SID#A-09	4226215		
What	Current	Additional											
Mount Compound	SID#A-09	4226215											
<b>Reason for Change:</b>													
Standardization													
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>													
None													
<b>Impact on Environmental Ratings</b>													
<p>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.</p> <table style="width: 100%;"> <thead> <tr> <th>RoHS</th> <th>REACH</th> <th>Green Status</th> <th>IEC 62474</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> </tr> </tbody> </table>						RoHS	REACH	Green Status	IEC 62474	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change
RoHS	REACH	Green Status	IEC 62474										
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change										
<b>Changes to product identification resulting from this PCN:</b>													
None													
<b>Product Affected:</b>													
BQ500100DCKR	INA199A3DCKT	OPA180IDBVT	TPS71710DCKT										
BQ500100DCKT	INA199B1DCKR	OPA188AIDBVR	TPS71711DCKR										
DRV5053CAQDBZR	INA199B1DCKT	OPA188AIDBVT	TPS71711DCKT										
DRV5053EAQDBZR	INA199B2DCKR	OPA192IDBVR	TPS71712DCKR										
DRV5053OAQDBZR	INA199B2DCKT	OPA192IDBVT	TPS71712DCKT										
DRV5053PAQDBZR	INA199B3DCKR	OPA197IDBVR	TPS71713DCKR										
DRV5053RAQDBZR	INA199B3DCKT	OPA197IDBVT	TPS71713DCKT										
DRV5053VAQDBZR	INA199C1DCKR	OPA377AIDCKR	TPS71715DCKR										
INA186A1IDCKR	INA199C1DCKT	OPA377AIDCKT	TPS71715DCKT										
INA186A1IDCKT	INA199C2DCKR	TLV333IDCKR	TPS71718DCKR										

INA186A2IDCKR	INA210BIDCKR	TLV333IDCKT	TPS71718DCKT
INA186A2IDCKT	INA210BIDCKT	TLV70012DCKR	TPS71719DCKR
INA186A3IDCKR	INA211BIDCKR	TLV70012DCKT	TPS71719DCKT
INA186A3IDCKT	INA211BIDCKT	TLV70015DCKR	TPS71721DCKR
INA186A4IDCKR	INA211CIDCKR	TLV70015DCKT	TPS71721DCKT
INA186A4IDCKT	INA212AIDCKR	TLV70018DCKR	TPS71725DCKR
INA186A5IDCKR	INA212AIDCKT	TLV70018DCKT	TPS71725DCKT
INA190A1IDCKR	INA212BIDCKR	TLV70025DCKR	TPS71726DCKR
INA190A1IDCKT	INA212CIDCKR	TLV70025DCKT	TPS71726DCKT
INA190A2IDCKR	INA213BIDCKR	TLV70028DCKR	TPS71727DCKR
INA190A2IDCKT	INA213BIDCKT	TLV70028DCKT	TPS71727DCKT
INA190A3IDCKR	INA213CIDCKR	TLV70030DCKR	TPS717285DCKR
INA190A3IDCKT	INA213CIDCKT	TLV70030DCKT	TPS717285DCKT
INA190A4IDCKR	INA214BIDCKR	TLV70033DCKR	TPS71728DCKR
INA190A4IDCKT	INA214BIDCKT	TLV70033DCKT	TPS71728DCKT
INA190A5IDCKR	INA215AIDCKR	TMP126DCKR	TPS71729DCKR
INA190A5IDCKT	INA215AIDCKT	TMP126NDCKR	TPS71729DCKT
INA199A1DCKR	INA215BIDCKR	TPS62260DDCR	TPS71730DCKR
INA199A1DCKT	INA215BIDCKT	TPS71701DCKR	TPS71730DCKT
INA199A2DCKR	INA215CIDCKR	TPS71701DCKT	TPS71733DCKR
INA199A2DCKT	OPA180IDBVR	TPS71710DCKR	TPS71733DCKT
INA199A3DCKR	TPS62561DDCR		

TI Information  
Selective Disclosure

**Qualification Report**  
**Approve Date 01-MARCH -2023**

**Qualification Results**

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

Type	#	Test Name	Condition	Duration	Qual Device: OPA328DBVT	QBS Reference: OPA1671IDCKR	QBS Reference: OPA2328DGKR	QBS Reference: OPA3S328RGRR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	3/231/0	3/231/0	1/77/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	3/231/0	1/77/0	3/231/0
TC	A4	Temperature Cycle	-65/150C	500 Cycles	-	3/231/0	1/77/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	3/231/0	1/77/0	-
HTOL	B1	Life Test	150C	300 Hours	-	3/231/0	1/77/0	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/2397/0 <sup>1</sup>	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB Solder;	-	3/66/0	-	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	3/66/0	-	-	-

PD	C4	Physical Dimensions	(per mechanical drawing)	-	3/15/0	-	-	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	3/9/0	1/3/0	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	3/9/0	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/6/0	3/18/0	1/6/0	3/18/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	3/90/0	1/30/0	3/90/0

- QBS: Qual By Similarity
- Qual Device OPA328DBVT 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/>

**Green/Pb-free Status:**

Qualified Pb-Free(SMT) and Green

TI Qualification ID: R-NPD-2206-042

[1]-Lost 3 units.

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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