



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20240628012.1

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

Date: June 28, 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

20240628012.1
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
INA125UA	NULL
INA126UA	NULL
INA154U	NULL
INA2134UA	NULL
OPA140AID	NULL
OPA1611AID	NULL
OPA177GS	NULL
OPA211AID	NULL
OPA2170AID	NULL
OPA2376AID	NULL
OPA4171AIDR	NULL
OPA551UA	NULL
OPA604AU	NULL
OPA827AID	NULL
REF02AU	NULL
REF102AU	NULL

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

PCN Number:	20240628012.1			PCN Date:	June 28, 2024
Title:	Qualification alternate Mount & Mold Compound material for select devices				
Customer Contact:	Change Management team		Dept:	Quality Services	
Proposed 1st Ship Date:	September 26, 2024		Sample Requests accepted until:	July 28, 2024*	
*Sample requests received after July 28, 2024 will not be supported.					
Change Type:					
<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
PCN Details					
Description of Change:					
This PCN is to inform of an alternate Mount & Mold Compound material set for the list of devices in the product affected sections below.					
Group 1: Additional Mount compound qualification only					
What		Current		Additional	
Mount Compound		4205846		4147858	
Group 2: Additional Mold compound and mount compound qualification					
What		Current		Additional	
Mount Compound		4205846		4147858	
Mold Compound		4209640		4211880	
Group 3: Additional Mold compound qualification					
What		Current		Additional	
Mold Compound		4209640		4211880	
Qualification results are shown below					
Reason for Change:					
Standardization					
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	
<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change	
Changes to product identification resulting from this PCN:					
None					
Product Affected:					
Group 1 Device list (Mount Compound Qualification only):					

BQ2040SN-C408	SN1106046D	SN65HVD11HD	TPS40200HD
BQ2040SN-D111	SN1106046DR	SN65HVD233HD	BQ2040SN-D111TR

Group 2 Device list (Mold Compound and Mount Compound qualification)

ADS1286UB	OPA1642AID	OPA2691I-14DR	OPA694IDR
ADS1286UL/2K5	OPA1642AIDR	OPA2691ID	OPA695IDR
BQ2010SN-D107	OPA1644AID	OPA2691IDR	OPA703UA
BQ2010SN-D107TR	OPA1644AIDR	OPA2694ID	OPA703UA/2K5
BQ2011SN-D118TR	OPA1688ID	OPA2703UA	OPA705UA
BQ2012SN-D107	OPA1688IDR	OPA2703UA/2K5	OPA725AID
BQ2012SN-D107TR	OPA170AID	OPA2704UA	OPA725AIDR
BQ2013HSN-A514	OPA170AIDR	OPA2704UA/2K5	OPA726AID
BQ2013HSN-A514TR	OPA171AID	OPA2705UA	OPA820ID
BQ2014HSN	OPA171AIDR	OPA2725AID	OPA820IDR
BQ2014HSNTR	OPA172ID	OPA2725AIDR	OPA827AID
BQ2014SN-D120	OPA172IDR	OPA2727AID	OPA827AIDR
BQ2014SN-D120TR	OPA177GS	OPA2727AIDR	OPA830ID
BQ2050HSN-A508	OPA177GS/2K5	OPA2822U	OPA830IDR
BQ2050HSN-A508TR	OPA180ID	OPA2822U/2K5	OPA832ID
BQ2050SN-D119	OPA180IDR	OPA340UA	OPA842ID
BQ2050SN-D119TR	OPA188AID	OPA340UA/2K5	OPA842IDR
BQ2052SN-A515	OPA188AIDR	OPA3684ID	OPA843ID
BQ2204ASN	OPA191ID	OPA3684IDR	OPA843IDR
BQ2204ASN-N	OPA191IDR	OPA3690ID	OPA846ID
BQ2204ASNTR	OPA192ID	OPA3691ID	OPA846IDR
BUF634U	OPA192IDR	OPA3692ID	OPA847ID
BUF634U/2K5	OPA196ID	OPA376AID	OPA847IDR
DAC8043U	OPA196IDR	OPA376AIDR	REF02AU
DAC8043U/2K5	OPA197ID	OPA377AID	REF02AU/2K5
DAC8043UC	OPA197IDR	OPA377AIDR	REF02BU
DAC8043UC/2K5	OPA209AID	OPA4134UA	REF02BU/2K5
DRV135UA	OPA209AIDR	OPA4134UA/2K5	REF102BU
DRV135UA/2K5	OPA2107AU	OPA4140AID	REF102CU
INA125U	OPA2107AU/2K5	OPA4140AIDR	REF200AU
INA125UA	OPA211AID	OPA4141AID	REF200AU/2K5
INA128HD	OPA211AIDR	OPA4141AIDR	REF5010AID
INA133U	OPA211ID	OPA4170AID	REF5010AIDR
INA133UA	OPA211IDR	OPA4170AIDR	REF5010ID
INA133UA/2K5	OPA2140AID	OPA4171AID	REF5020AID
INA134UA	OPA2140AIDR	OPA4171AIDR	REF5020AIDR
INA134UA/2K5	OPA2141AID	OPA4172ID	REF5020ID
INA137UA	OPA2141AIDR	OPA4172IDR	REF5020IDR
INA137UA/2K5	OPA2170AID	OPA4180ID	REF5025AID
INA143UA/2K5	OPA2170AIDR	OPA4180IDR	REF5025AIDR
INA149AID	OPA2171AID	OPA4188AID	REF5025ID

INA149AIDR	OPA2171AIDR	OPA4188AIDR	REF5025IDR
INA154U	OPA2172ID	OPA4191ID	REF5030AID
INA154UA	OPA2172IDR	OPA4191IDR	REF5030AIDR
INA163UA	OPA2180ID	OPA4192ID	REF5030ID
INA163UA/2K5	OPA2180IDR	OPA4192IDR	REF5030IDR
INA166UA/2K5	OPA2191ID	OPA4196ID	REF5040AID
INA2126UA/2K5	OPA2191IDR	OPA4196IDR	REF5040AIDR
INA2133U	OPA2192ID	OPA4197ID	REF5040ID
INA2133UA	OPA2192IDR	OPA4197IDR	REF5040IDR
INA2134UA	OPA2196ID	OPA4340UA	REF5045AID
INA2134UA/2K5	OPA2196IDR	OPA4340UA/2K5	REF5045AIDR
INA2137UA	OPA2197ID	OPA4344UA	REF5045IDR
INA2137UA/2K5	OPA2197IDR	OPA4344UA/2K5	REF5050AID
INA2143U	OPA2209AID	OPA4350UA	REF5050AIDR
INA2143UA	OPA2209AIDR	OPA4350UA/2K5	REF5050ID
INA826AID	OPA2237UA	OPA445AU	REF5050IDR
INA826AIDR	OPA2237UA/2K5	OPA445AU/2K5	SN1272DR
INA828ID	OPA2244UA/2K5	OPA4684ID	SN1501007D
INA828IDR	OPA2320AID	OPA4684IDR	SN1501007DR
IVC102U	OPA2320AIDR	OPA4703UA	THS4521HD
IVC102U/2K5	OPA2322AID	OPA4704UA	THS4531AID
LOG101AID	OPA2322AIDR	OPA4820ID	THS4531AIDR
LOG101AIDR	OPA2325ID	OPA4820IDR	TLV170IDR
LOG104AID	OPA2325IDR	OPA551UA	TLV171IDR
LOG112AID	OPA2333HD	OPA551UA/2K5	TLV172IDR
LOG112AIDR	OPA2340UA	OPA552UA	TLV2170IDR
MSP430G2210ID	OPA2340UA/2K5	OPA552UA/2K5	TLV2171IDR
MSP430G2210IDR	OPA2350UA	OPA602AU	TLV2172IDR
MSP430G2230ID	OPA2350UA/2K5	OPA602AU/2K5	TLV2369IDR
MSP430G2230IDR	OPA237UA	OPA604AU	TLV4170ID
OPA134UA	OPA237UA/2K5	OPA604AU/2K5	TLV4170IDR
OPA134UA/2K5	OPA2604AU	OPA627AU	TLV4171ID
OPA140AID	OPA2604AU/2K5	OPA627AU/2K5	TLV4171IDR
OPA140AIDR	OPA2613ID	OPA627NIBU/2K5	TLV4172IDR
OPA141AID	OPA2613IDR	OPA637AU	TMP107BIDR
OPA141AIDR	OPA2614ID	OPA637AU/2K5	TMP512AIDR
OPA145ID	OPA2614IDR	OPA683ID	TMP513AIDR
OPA145IDR	OPA2652U	OPA683IDR	TPS40200HDR
OPA1602AID	OPA2652U/2K5	OPA684ID	VCA810AID
OPA1602AIDR	OPA2677U	OPA684IDR	VCA810AIDR
OPA1604AID	OPA2677U/2K5	OPA690ID	VCA810ID
OPA1604AIDR	OPA2683ID	OPA690IDR	VCA810IDR
OPA1611AID	OPA2684ID	OPA691ID	VFC32KU
OPA1611AIDR	OPA2690I-14D	OPA691IDR	VFC32KU/2K5
OPA1612AID	OPA2690I-14DR	OPA692ID	XTR105UA/2K5

OPA1612AIDR	OPA2690ID	OPA692IDR	XTR115UA/2K5
OPA1641AID	OPA2690IDR	OPA694ID	XTR116UA/2K5
OPA1641AIDR	OPA2691I-14D		

Group 3 Device list (Mold Compound qualification)

INA126U	OPA187ID	OPA210IDT	OPA388ID
INA126U/2K5	OPA187IDR	OPA2187ID	OPA388IDR
INA126UA	OPA189ID	OPA2187IDR	OPA4205ADR
INA126UA/2K5	OPA189IDR	OPA2205ADR	OPA4205ADT
INA188ID	OPA202ID	OPA2205ADT	OPA814DR
INA188IDR	OPA202IDR	OPA2206ADR	REF102AU
INA2126U	OPA205ADR	OPA2206ADT	REF102AU/2K5
INA2126UA	OPA205ADT	OPA2376AID	SN5552DR
INA823DR	OPA206ADR	OPA2376AIDR	TLV2376IDR
INA823DT	OPA206ADT	OPA2377AID	TLV376IDR
INA849DR	OPA210IDR	OPA2377AIDR	TPS5405DR
JFE2140DR			

TI Information
Selective Disclosure

Qualification Report

Non-Automotive SOIC D Non UBOM to UBOM on Hyde
Approve Date 27-May-2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: MSP430G2230QDREP	Qual Device: OPA2727AIDR	Qual Device: OPA4340UA/2K5	Qual Device: REF5950MDREP	Qual Device: REF102AU/2K5	Qual Device: MC102U/2K5	Qual Device: OPA2107AU/2K5	Qual Device: OPA862AU/2K5	Qual Device: REF200AU	Qual Device: BUF634U/2K5	Qual Device: SN150100
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	-	-	-	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	-	-	-	-	-	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	-	-	-	-	-	-	-
SD	C3	Pb Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	-	-	-	-	-	-	-	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	-	-	-	-	-	-	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/300	1/300	1/300	1/300	1/300	1/300	1/300	1/300	1/300	1/300	1/300

- QBS: Qual By Similarity
- Qual Device MSP430G2230QDREP is qualified at MSL3 260C
- Qual Device OPA2727AIDR is qualified at MSL3 260C
- Qual Device OPA4340UA/2K5 is qualified at MSL3 260C
- Qual Device REF5950MDREP is qualified at MSL2 260C
- Qual Device REF102AU/2K5 is qualified at MSL2 260C
- Qual Device MC102U/2K5 is qualified at MSL3 260C
- Qual Device OPA2107AU/2K5 is qualified at MSL3 260C
- Qual Device OPA862AU/2K5 is qualified at MSL3 260C
- Qual Device REF200AU is qualified at MSL3 260C
- Qual Device BUF634U/2K5 is qualified at MSL3 260C
- Qual Device SN1501007DR is qualified at MSL1 260C
- Qual Device DAC8043UC/2K5 is qualified at MSL3 260C
- Qual Device INA163UA/2K5 is qualified at MSL3 260C
- Qual Device OPA2171AIDR is qualified at MSL2 260C
- Qual Device BQ2050SN-D119TR is qualified at MSL2 260C

- Preconditioning was performed for Autoclave, Unbiased HAST, THD/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-CHG-2402-048

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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.