

PCN Number:	20240411002.1	PCN Date:	April 11, 2024
Title:	Qualification of FFAB using qualified Process Technology, Die Revision and additional Assembly BOM options for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	July 10, 2024	Sample requests accepted until:	May 11, 2024*
*Sample requests received after May 11, 2024 will not be supported.			
Change Type:			
<input type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Design
<input checked="" type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material
		<input type="checkbox"/>	Wafer Bump Process
		<input checked="" type="checkbox"/>	Wafer Fab Site
		<input checked="" type="checkbox"/>	Wafer Fab Material
		<input checked="" type="checkbox"/>	Wafer Fab Process
PCN Details			
Description of Change:			
Texas Instruments is pleased to announce the qualification of its FFAB fabrication facility as an additional Wafer Fab option in addition to a BOM option for the devices listed below.			
Current Fab Site			Additional Fab Site
Current Fab Site	Process	Wafer Diameter	Additional Fab Site
SFAB	JIBB	150 mm	FFAB
			BICOM3HV
			200 mm
The die was also changed as a result of the process change.			
Construction differences are as follows:			
	Current	Proposed	
Wire diam/type	1.2mil Au	1.0mil Cu	
Die Coat	4221706	None	
Mount compound	4205846	4147858	
Mold compound	4209640	4226323	
MSL level	3	2	
Qual details are provided in the Qual Data Section.			
Reason for Change:			
These changes are part of our multiyear plan to transition products from our 150-millimeter and 200-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.			
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	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

Changes to product identification resulting from this PCN:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
SH-BIP-1	SHE	USA	Sherman
FR-BIP-1	TID	DEU	Freising

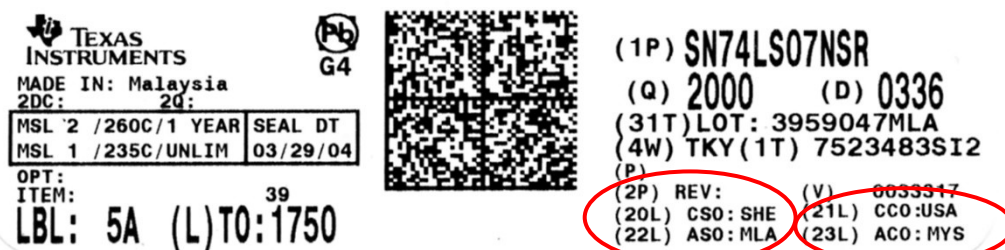
Die Rev:

Current

New

Die Rev [2P]	Die Rev [2P]
A	A

Sample product shipping label (not actual product label):



Product Affected:

OPA2130UA	OPA2130UA/2K5
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For alternate parts with similar or improved performance, please visit the product page on [TI.com](https://www.ti.com)

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: OPA2130UA/2K5	QBS Package Reference: INA849DR	QBS Product/Package Reference: OPA2145ID	QBS Process Reference: INA826AIDGK	QBS Process Reference: OPA209AID	QBS Process Reference: OPA827AIDGKR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	1/77/0	-	-	-
HAST	A2	Temperature Humidity Bias	85C/85%RH	1000 Hours	-	3/231/0	-	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	1/77/0	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	1/77/0	1/77/0	1/77/0	1/77/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	1/77/0	1/77/0	1/77/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	-	-	-	-
HTOL	B1	Life Test	100C ^A	300 Hours	-	1/77/0	-	-	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	-	1/77/0	1/77/0	1/74
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0

Type	#	Test Name	Condition	Duration	Qual Device: OPA2130UA/2K5	QBS Package Reference: INA849DR	QBS Product/Package Reference: OPA2145ID	QBS Process Reference: INA826AIDGK	QBS Process Reference: OPA209AID	QBS Process Reference: OPA827AIDGKR
ESD	E2	ESD HBM	-	1000 Volts	-	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/6/0	1/6/0	1/3/0	1/3/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0
FTY	E6	Final Test Yield	-	-	1/Pass	-	-	-	-	-

- QBS: Qual By Similarity
- Qual Device OPA2130UA/2K5 is qualified at MSL2 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/>

TI Qualification ID: R-CHG-2304-057

[A] Tj=150C

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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