



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20231219005.1

**Qualification of FFAB as an additional Fab site option, die revision, and BOM Options
for select devices
Change Notification / Sample Request**

Date: December 22, 2023

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) [process](#).

TI 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, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

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. As always, we thank you for your continued business.

Change Management Team
SC Business Services

20231219005.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
INA117KU	null
INA117KU/2K5	null

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

PCN Number:	20231219005.1		PCN Date:	December 22, 2023	
Title:	Qualification of FFAB as an additional Fab site option, die revision, and BOM Options for select devices				
Customer Contact:	Change Management Team		Dept:	Quality Services	
Proposed 1st Ship Date:	Mar 19, 2024		Sample requests accepted until:	Jan 20, 2024*	
*Sample requests received after Jan 20, 2024 will not be supported.					
Change Type:					
☒	Assembly Site	☒	Design	☐	Wafer Bump Material
☒	Assembly Process	☐	Data Sheet	☐	Wafer Bump Process
☒	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☒	Wafer Fab Material
☒	Packing/Shipping/Labeling	☐	Test Process	☒	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 and die revision in addition to Assembly site options for the devices listed below.					
Current Fab Site			Additional Fab site		
Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter
SFAB	J11	150mm	FFAB	BICOM3HV	200mm
The die was also changed as a result of the process change.					
BOM option qualification is shown below:					
		Current	Additional		
Bond wire composition, diameter		Au, 1.2 mil	Cu, 1.0 mil		
Mount compound		4205846	4147858		
MSL		3	2		
Reason for Change:					
These changes are part of our multiyear plan to transition products from our 150-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		
☒ No Change	☒ No Change	☒ No Change	☒ 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]
C	A

Product Affected:

INA117KU	INA117KU/2K5	INA117KU/2K5G4
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For alternate parts with similar or improved performance, please visit the product page on [TI.com](https://www.ti.com)



TI Information
Selective Disclosure

Qualification Report
Approve Date 07-DECEMBER -2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: INA117KU/2K5	QBS Reference: INA828ID	QBS Reference: INA821ID	QBS Reference: OPA207ID	QBS Reference: INA149AID
HAST	A2	Biased HAST	130C	96 Hours	-	3/231/0	3/231/0	3/231/0	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	3/231/0	-
UHAST	A3	Unbiased HAST	130C	96 Hours	-	3/231/0	3/231/0	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	3/231/0	-
TC	A4	Temperature Cycle	-65/150C	500 Cycles	-	3/231/0	3/231/0	3/231/0	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	3/231/0	1/77/0
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	-
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	3/231/0	3/231/0	-
HTOL	B1	Life Test	90C	300 Hours	-	-	-	-	1/77/0
ESD	E2	ESD CDM	-	1000 Volts	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	1000 Volts	-	1/3/0	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	1500 Volts	-	-	-	-	1/6/0

Type	#	Test Name	Condition	Duration	Qual Device: INA117KU/2K5	QBS Reference: INA828ID	QBS Reference: INA821ID	QBS Reference: OPA207ID	QBS Reference: INA149AID
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/6/0	1/6/0	1/3/0	1/6/0
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	1/30/0	3/90/0	3/90/0	1/30/0	1/30/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	3/90/0	3/90/0	1/30/0	1/30/0

- QBS: Qual By Similarity
- Qual Device INA117KU/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-2303-035

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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