



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN#20231024001.1**

**Qualification of RFAB as an additional Fab site option and Assembly Site (PHI) and  
BOM Options for select devices  
Change Notification / Sample Request**

**Date:** October 24, 2023  
**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

**20231024001.1**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
INA219AIDCNR	null

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

<b>PCN Number:</b>	20231024001.1		<b>PCN Date:</b>	October 24, 2023																			
<b>Title:</b>	Qualification of RFAB as an additional Fab site option and Assembly Site (PHI) and BOM Options for select devices																						
<b>Customer Contact:</b>	Change Management Team		<b>Dept:</b>	Quality Services																			
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Jan 22, 2024		<b>Sample requests accepted until:</b>	Nov 24, 2023*																			
<b>*Sample requests received after Nov 24, 2023 will not be supported.</b>																							
<b>Change Type:</b>																							
<input checked="" type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material																		
<input checked="" 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 checked="" type="checkbox"/>	Wafer Fab Site																		
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input checked="" 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>																							
Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab option in addition to Assembly site (PHI) and BOM options for the devices listed below.																							
<table border="1"> <thead> <tr> <th colspan="3">Current Fab Site</th> <th colspan="3">Additional Fab site</th> </tr> <tr> <th>Current Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> <th>Additional Fab site</th> <th>Process</th> <th>Wafer Diameter</th> </tr> </thead> <tbody> <tr> <td>AIZU</td> <td>50HPA07</td> <td>200mm</td> <td>RFAB</td> <td>50HPA07</td> <td>300mm</td> </tr> </tbody> </table>						Current Fab Site			Additional Fab site			Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter	AIZU	50HPA07	200mm	RFAB	50HPA07	300mm
Current Fab Site			Additional Fab site																				
Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter																		
AIZU	50HPA07	200mm	RFAB	50HPA07	300mm																		
The die was also changed as a result of the process change to accommodate the change in Assembly technology																							
Construction differences are as follows:																							
<table border="1"> <thead> <tr> <th></th> <th>UTL2</th> <th>PHI</th> </tr> </thead> <tbody> <tr> <td>Bond wire composition, diameter diameter</td> <td>Au, 1.0 mil</td> <td>Cu, 0.8 mil</td> </tr> <tr> <td>Mount Compound</td> <td>SID#PZ0037</td> <td>SID#A-09</td> </tr> <tr> <td>Mold Compound</td> <td>SID#CZ0096</td> <td>4226215</td> </tr> <tr> <td>Assembly Technology</td> <td>Die Down</td> <td>Die Up</td> </tr> </tbody> </table>							UTL2	PHI	Bond wire composition, diameter diameter	Au, 1.0 mil	Cu, 0.8 mil	Mount Compound	SID#PZ0037	SID#A-09	Mold Compound	SID#CZ0096	4226215	Assembly Technology	Die Down	Die Up			
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Mold Compound	SID#CZ0096	4226215																					
Assembly Technology	Die Down	Die Up																					
<b>Reason for Change:</b>																							
Supply Continuity																							
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																							
None																							
<b>Impact on Environmental Ratings</b>																							
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.																							
<table border="1"> <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										
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<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
AIZU	CU2	JPN	Aizuwakamatsu-shi
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

**Die Rev:**

Current	New
Die Rev [2P] B	Die Rev [2P] D

**Assembly Site Information:**

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
UTL2	NS2	THA	Bangpakong, Chachoengsao
<b>TI Philippines</b>	<b>PHI</b>	<b>PHL</b>	<b>Baguio City</b>

Sample product shipping label (not actual product label):

(1P) SN74LS07NSR  
 (Q) 2000 (D) 0336  
 (31T) LOT: 3959047MLA  
 (4W) TKY(1T) 7523483SI2  
 (P)  
 (2P) REV: 0000017  
 (20L) CSO: SHE (21L) CCO:USA  
 (22L) ASO: MLA (23L) ACO: MYS

**Product Affected:**

INA219AIDCNR	INA219AIDCNT	INA219BIDCNR	INA219BIDCNT
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Qualification Report  
INA219 Redbull  
Approve Date 28-September-2023  
Qualification Results

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

Test #	Test Name	Condition	Duration	Qual Device Pass/Fail/Status	Qual Device Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	QMS Reference Pass/Fail/Status	
HAST A2	BIAS HAST	120C/85RH/8H	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HAST A2	Bias HAST	120C/85RH/8H	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UNHAST A3	Adhesion	120C/50RH/96	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UNHAST A3	Unbias HAST	120C/50RH/96	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TC A4	Temperature Cycle	65C/25C	768 Cycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TC A4	Temperature Cycle	65C/25C	768 Cycles	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-
HTSL A6	HIGH Temperature Storage Life	150C	1000 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL A6	HIGH Temperature Storage Life	150C	1000 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL B1	CL (P)	150C	420 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL B1	CL (P)	150C	1000 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL B1	CL (P)	150C	1000 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL B1	CL (P)	150C	1000 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL B1	Life Test	100C	268 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HTSL B1	Life Test	120C	1000 Hours	-	-	1/770	1/770	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-	1/770	-
HTSL B1	Life Test	140C	480 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ELR1 B2	ELR	120C	48 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ELR1 B2	Early Life Failure Rate	120C	48 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SD C3	PS Reliability	Shock Age 8 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SD C3	PS Reliability	Shock Age 8 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SD C3	PS Reliability	Precondition (Aging 200 hours at 150C) Base (0 to 150C) PS: 500000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SD C3	PS Reliability	Precondition (Aging 200 hours at 150C) Base (0 to 150C) PS: 500000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SD C3	PS Reliability	Shock Age 8 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SD C3	PS Reliability	Shock Age 8 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ES C4	Physical Dimensions	ESD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ES C4	Physical Dimensions	ESD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD COM	Cup-1.8T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD COM	200 Vals	1/30	-	3/50	1/50	1/50	1/50	1/50	1/50	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD COM	300 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD COM	200 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD COM	1000 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD COM	1500 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD HBM	1500 Vals	1/30	-	1/50	1/50	1/50	1/50	1/50	1/50	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD HBM	1000 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD HBM	2000 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ESD E2	ESD HBM	4000 Vals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LIV E4	LIV	Part #250278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LIV E4	Lacklip	Part #250278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CHMR E5	Electrical Characteristics	Cup-1.8T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CHMR E5	Electrical Characteristics	Cup-1.8T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CHMR E5	Electrical Characteristics	Min. Typ. Max Temp	1/500	1/500	1/500	1/500	1/500	1/500	1/500	1/500	-	-	-	-	-	-	-	-	-	-	-	-	
FTV E6	Fatigue Test	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

QMS Qual By Similarity  
 Qual Device IM2190R08R is qualified at HTSL 150C  
 Qual Device IM2190R08R is qualified at HTSL 120C  
 Preconditioning was performed for Adhesion, Unbias HAST, Bias HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable  
 The following are equivalent HTSL options based on an activation energy of 0.74 eV: 120C/48 Hours, 140C/24 Hours, 150C/12 Hours, and 150C/24 Hours  
 The following are equivalent Temperature Cycle options are: 65C/25C, 65C/25C/120C Cycles and 65C/25C/120C Cycles  
 Quality and Environmental Data is available at TI's external web site: [www.ti.com](http://www.ti.com)  
 TI Qualification ID: # AFD 2302-075  
 [1] Incoming deep trench etching that will be screen out by MP and SDCS  
 [2] Element 207

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