



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20230516003.1

**Qualification of RFAB as an additional Fab site option for select HPA07 devices
Change Notification / Sample Request**

Date: May 17, 2023

To: TOKYO ELECTRON DEVICE (DSTR) 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 of the 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 PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

PCN Team
SC Business Services

20230516003.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
ADS1298RIZXGT	null
ADS1299IPAG	null
ADS1294RIZXGT	null

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

PCN Number:	20230516003.1		PCN Date:	May 17, 2023																			
Title:	Qualification of RFAB as an additional Fab site option for select HPA07 devices																						
Customer Contact:	PCN Manager		Dept:	Quality Services																			
Proposed 1st Ship Date:	Aug 16, 2023		Sample Requests accepted until:	Jun 16, 2023*																			
*Sample requests received after June 16, 2023 will not be supported.																							
Change Type:																							
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials																		
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification																		
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process																		
<input type="checkbox"/>	Wafer Bump Site	<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 Materials	<input type="checkbox"/>	Wafer Fab Process																		
		<input type="checkbox"/>	Part number change																				
PCN Details																							
Description of Change:																							
Texas Instruments is pleased to announce the addition of RFAB as an additional Wafer Fab site option for the products listed in the "Product Affected" section of this document.																							
<table border="1"> <thead> <tr> <th colspan="3">Current Fab Site</th> <th colspan="3">New Fab Site</th> </tr> <tr> <th>Current Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> <th>New Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> </tr> </thead> <tbody> <tr> <td>DP1DM5</td> <td>HPA07</td> <td>200mm</td> <td>RFAB</td> <td>HPA07</td> <td>300mm</td> </tr> </tbody> </table>						Current Fab Site			New Fab Site			Current Fab Site	Process	Wafer Diameter	New Fab Site	Process	Wafer Diameter	DP1DM5	HPA07	200mm	RFAB	HPA07	300mm
Current Fab Site			New Fab Site																				
Current Fab Site	Process	Wafer Diameter	New Fab Site	Process	Wafer Diameter																		
DP1DM5	HPA07	200mm	RFAB	HPA07	300mm																		
Qual details are provided in the Qual Data Section.																							
Reason for Change:																							
Continuity of supply																							
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																							
None																							
Changes to product identification resulting from this PCN:																							
Fab Site Information:																							
<table border="1"> <thead> <tr> <th>Chip Site</th> <th>Chip Site Origin Code (20L)</th> <th>Chip Site Country Code (21L)</th> <th>Chip Site City</th> </tr> </thead> <tbody> <tr> <td>DP1DM5</td> <td>DM5</td> <td>USA</td> <td>Dallas</td> </tr> <tr> <td>RFAB</td> <td>RFB</td> <td>USA</td> <td>Richardson</td> </tr> </tbody> </table>						Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City	DP1DM5	DM5	USA	Dallas	RFAB	RFB	USA	Richardson						
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City																				
DP1DM5	DM5	USA	Dallas																				
RFAB	RFB	USA	Richardson																				
Sample product shipping label (not actual product label)																							
Product Affected:																							
ADS1294RIZXGR	ADS1296RIZXGT	ADS1299-4PAG	ADS1299-6PAGR																				
ADS1294RIZXGT	ADS1298RIZXGR	ADS1299-4PAGR	ADS1299IPAG																				
ADS1296RIZXGR	ADS1298RIZXGT	ADS1299-6PAG	ADS1299IPAGR																				

Qualification Report
Approve Date 06-April-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: ADS1299-4PAGR	Qual Device: ADS1299IPAGR	QBS Process Reference: CD3232A1YFFR	QBS Process Reference: CD3232A1YFFR	QBS Process Reference: AMC7836IPAP	QBS Process Reference: INA231A1YFDR	QBS Process Reference: INA231B1YFDR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0	3/231/0	-	-	-
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	-	3/231/0	3/231/0	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0	3/231/0	-	1/77/0	2/154/0
HTOL	B1	Life Test	140C	480 Hours	-	-	1/77/0	2/154/0	-	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	-	-	1/77/0	1/77/0	2/154/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	1/1000/0	2/2000/0	-	1/1000/0	2/2000/0
ESD	E2	ESD CDM	-	200 Volts	-	-	-	3/9/0	-	-	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	1/3/0	-	2/6/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	3/9/0	3/9/0	1/3/0	1/3/0	2/6/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	3/9/0	3/9/0	1/3/0	1/6/0	2/12/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	1/30/0	1/30/0	1/30/0	1/30/0	2/60/0
FTY	E6	Final Test Yield	-	-	1/Pass	1/Pass	-	-	-	-	-

- QBS: Qual By Similarity
- Qual Device ADS1299-4PAGR is qualified at MSL3 260C
- Qual Device ADS1299IPAGR is qualified at MSL3 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

Qualification Report
Approve Date 17-April-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: ADS1298RIZXGT	QBS Process Reference: CD3232A1YFFR	QBS Process Reference: CD3232A1YFFR	QBS Process Reference: INA231AIYFDR	QBS Process Reference: INA231BIYFDR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	-
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	3/231/0	3/231/0	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	3/231/0	1/77/0	2/154/0
HTOL	B1	Life Test	140C	480 Hours	-	1/77/0	2/154/0	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	-	1/77/0	2/154/0
ELFR	B2	ELFR	125C	48 Hours	-	1/1000/0	2/2000/0	1/1000/0	2/2000/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	2/6/0
ESD	E2	ESD CDM	-	350 Volts	-	-	-	1/3/0	2/6/0
ESD	E2	ESD CDM	-	500 Volts	1/3/0	-	-	-	-
ESD	E2	ESD HBM	-	1000 Volts	-	3/9/0	3/9/0	-	-
ESD	E2	ESD HBM	-	1500 Volts	-	-	-	1/3/0	2/6/0
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	3/9/0	3/9/0	1/6/0	2/12/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	1/30/0	2/60/0
FTY	E6	Final Test Yield	-	-	1/Pass	-	-	-	-

- QBS: Qual By Similarity
- Qual Device ADS1298RIZXGT is qualified at
 - 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

For questions regarding this notice, e-mails can be sent to the contact shown below or your local Field Sales Representative.

Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com

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