12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20220520000.1
Qualification of additional Fab site (AIZU) and Assembly site (UTL3) and material change for select devices
Change Notification / Sample Request

Date: June 02, 2022
To: PREMIER 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 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

20220520000.1
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
OPA2188AID	null
OPA2188AIDGKR	null

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

PCN Number:	20220520000.1	PCN Date:	June 02, 2022
Title:	Qualification of additional Fab site (AIZU) and Assembly site (UTL3) and material change for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Sep 2, 2022	Sample requests accepted until:	July 2, 2022*

***Sample requests received after July 2, 2022 will not be supported.**

Change Type:

☒	Assembly Site	☐	Assembly Process	☐	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☒	Wafer Bump Material	☐	Wafer Bump Process
☒	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

This change notification is to announce the qualification of Aizu as an additional wafer fab site and UTL-3 as additional assembly site options for select devices in the HPA07 technology. Additionally, this notification announces the qualification of a Polyimide die coat addition for the selected devices listed in Group 3 of the "Product Affected" section.

Current Sites			Additional Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DP1DM5	HPA07	200mm	AIZU	HPA07	200mm

In Group 2, there are no construction differences of the devices between the two assembly sites.

Die Coat Differences (Group 3 devices only):

Current Die Coat	New Die Coat
None	**PI**

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

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:

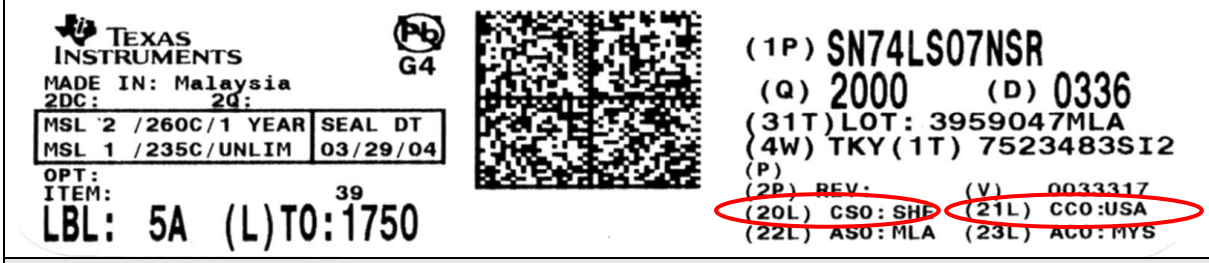
Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DP1DM5	DM5	USA	Dallas
AIZU	**CU2**	**JPN**	**Aizuwakamatsu-shi**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
UTL1	NSE	THA	Bangkok
UTL3	**UT3**	**THA**	**Bangpakong**

Sample product shipping label (not actual product label)



Product Affected:

Group 1: Adding Aizu as an additional Wafer Fab site			
ADS1013IDGSR	ADS1296CZXGR	ADS8548SRGCR	OPA1678IDGKR
ADS1013IDGST	ADS1296CZXGT	ADS8548SRGCT	OPA1678IDGKT
ADS1013IRUGR	ADS1296IPAG	ADS8568SPM	OPA1678IDR
ADS1014IDGSR	ADS1296IPAGR	ADS8568SPMR	OPA1678IDRGR
ADS1014IDGST	ADS1296RIZXGR	ADS8568SRGCR	OPA1678IDRGT
ADS1014IRUGR	ADS1296RIZXGT	ADS8568SRGCT	OPA2180ID
ADS1015IDGSR	ADS1298CZXGR	AMC7812BSPAP	OPA2180IDGK
ADS1015IDGST	ADS1298CZXGT	AMC7812BSPAPR	OPA2180IDGKR
ADS1015IRUGR	ADS1298IPAG	AMC7812BSRGCR	OPA2180IDR
ADS1015IRUGT	ADS1298IPAGR	AMC7812BSRGCT	OPA2188AID
ADS1018IDGSR	ADS1298RIZXGR	DAC7750IPWP	OPA2188AIDGKR
ADS1018IDGST	ADS1298RIZXGT	DAC7750IPWPR	OPA2188AIDGKT
ADS1018IRUGR	ADS131E04IPAG	DAC7750IRHAR	OPA2188AIDR
ADS1113IDGSR	ADS131E04IPAGR	DAC7750IRHAT	OPA2314AID
ADS1113IDGST	ADS131E06IPAG	DAC7760IPWP	OPA2314AIDGK
ADS1113IRUGT	ADS131E06IPAGR	DAC7760IPWPR	OPA2314AIDGKR
ADS1114IDGSR	ADS131E08IPAG	DAC7760IRHAR	OPA2314AIDR
ADS1114IDGST	ADS131E08IPAGR	DAC7760IRHAT	OPA2314AIDRBR
ADS1114IRUGR	ADS8353IPW	DAC8750IPWP	OPA2314AIDRBT
ADS1115IDGSR	ADS8353IPWR	DAC8750IPWPR	OPA314AIDBVR

ADS1115IDGST	ADS8353IRTER	DAC8750IRHAR	OPA314AIDBVT
ADS1115IRUGR	ADS8353IRTET	DAC8750IRHAT	OPA314AIDCKR
ADS1115IRUGT	ADS8354IPW	DAC8760IPWP	OPA314AIDCKT
ADS1118IDGSR	ADS8354IPWR	DAC8760IPWPR	SN1504010ZXGR
ADS1118IDGST	ADS8354IRTER	DAC8760IRHAR	TLV2314IDGKR
ADS1118IRUGR	ADS8354IRTET	DAC8760IRHAT	TLV2314IDGKT
ADS1294CZXGR	ADS8528SPM	OPA1652AID	TLV2314IDR
ADS1294CZXGT	ADS8528SPMR	OPA1652AIDGK	TLV314IDBVR
ADS1294IPAG	ADS8528SRGCR	OPA1652AIDGKR	TLV314IDBVT
ADS1294IPAGR	ADS8528SRGCT	OPA1652AIDR	TLV314IDCKR
ADS1294RIZXGR	ADS8548SPM	OPA1652AIDRGR	TLV314IDCKT
ADS1294RIZXGT	ADS8548SPMR	OPA1652AIDRGT	

Group 2: Adding Aizu Wafer Fab and UTL3 as an additional Assembly site			
ADS1013IRUGT	ADS1018IRUGT	ADS1114IRUGT	SN1507032RUGR
ADS1014IRUGT	ADS1113IRUGR	ADS1118IRUGT	

Group 3: Adding Aizu Wafer Fab and Polyimide Die Coat			
ADS7250IRTER	ADS7253IRTER	ADS7851IRTER	ADS7853IRTET
ADS7250IRTET	ADS7253IRTET	ADS7851IRTET	ADS7854IPW
ADS7251IRTER	ADS7254IPW	ADS7853C6RTER	ADS7854IPWR
ADS7251IRTET	ADS7254IPWR	ADS7853C6RTET	ADS7854IRTER
ADS7253C6RTER	ADS7254IRTER	ADS7853IPW	ADS7854IRTET
ADS7253C6RTET	ADS7254IRTET	ADS7853IPWR	ADS8350IRTER
ADS7253IPW	ADS7850IRTER	ADS7853IRTER	ADS8350IRTET
ADS7253IPWR	ADS7850IRTET		

Qualification Report
Approve Date 31-Dec-2011
Qualification Results
Data Displayed as: Number of lots / Total sample size / Total failed

	Type	Test Name / Condition	Duration	Qual Device: BUF12840AIRGE	Qual Device: INA210AIDCK	Qual Device: INA219AIDCN	Qual Device: OPA2376AIDGK
	HTOL	Life Test, 150C	300 Hours	1/77/0	1/77/0	1/77/0	-
	HBM	ESD - HBM	2500 V	1/3/0	1/3/0	1/3/0	-
	CDM	ESD - CDM	1000 V	1/3/0	1/3/0	1/3/0	-
	LU	Latch-up	Per JESD78	1/6/0	1/6/0	1/6/0	-
	ED	Electrical Characterization	Per Datasheet Parameters	1/Pass	1/Pass	1/Pass	1/Pass
	HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	1/77/0	-
	HTSL	High Temp Storage Bake, 170C	420 Hours	1/77/0	1/77/0	1/77/0	-
	TC	Temperature Cycle -65/150C	500 Cycles	1/77/0	1/77/0	1/77/0	-
	UHAST	Unbiased HAST, 130C/85%RH	96 Hours	1/77/0	1/77/0	1/77/0	-
	YLD	FTY and Bin Summary	-	1/Pass	1/Pass	1/Pass	1/Pass

Qualification Report

Approve Date 17-Jun-2019

Qualification Results

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

	Type	Test Name / Condition	Duration	Qual Device: ADS1114IRUG	QBS Process Reference: ADS1115BQDGSRQ1	QBS Process Reference: INA215AQDCKRQ1	QBS Package Reference: ADS1115IRUG
	HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0	-
	HTOL	Life Test, 140C	480 Hours	-	1/77/0	-	-
	HBM	ESD - HBM	2000 V	1/3/0	1/3/0	-	-
	CDM	ESD - CDM	500 V	1/3/0	1/3/0	-	1/3/0
	HBM	ESD - HBM	2000 V	1/3/0	1/3/0	1/3/0	1/3/0
	CDM	ESD - CDM	500 V	1/3/0	1/3/0	-	1/3/0
	LU	Latch-up	Per JESD78	1/6/0	1/6/0	-	1/6/0
	ED	Electrical Characterization	Per Datasheet Parameters	1/Pass	3/Pass	-	1/Pass
	AC	Autoclave 121C	96 Hours	-	1/77/0	3/231/0	-
	HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	3/231/0	1/77/0
	HTSL	High Temp Storage Bake 150C	1000 hours	-	-	-	-
	HTSL	High Temp Storage Bake 175C	500 Hours	-	1/45/0	1/45/0	-
	TC	Temperature Cycle, -65/150C	500 Cycles	-	1/77/0	3/231/0	1/77/0

Approve Date 19-Nov-2013

Qualification Results

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

	Type	Test Name / Condition	Duration	Qual Device: OPA333AIDCK
	HTOL	Life Test, 150C	300 Hours	3/231/0
	ELFR	Early Life Failure Rate, 125C	48 Hours	3/2400/0
	HBM	ESD - HBM	2500 V	3/9/0
	CDM	ESD - CDM	1000 V	3/9/0
	LU	Latch-up	Per JEDEC78	3/18/0
	HAST	Biased HAST 130C/85%RH	96 Hours	3/231/0
	HTSL	High Temp Storage Bake, 170C	420 Hours	3/231/0
	TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0

Qualification Report

Approve Date 30-Jun-2020

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

	Type	Test Name / Condition	Duration	Qual Device: TLV2186IDSG	QBS Process Reference: OPA2333AIDGK	QBS Process Reference: TMP431ADGK	QBS Package Reference: OPA2333PIDSG
	HTOL	Life Test, 150C	300 Hours	-	1/77/0	2/154/0	-
	HBM	ESD - HBM	2500 V	-	-	1/3/0	-
	HBM	ESD - HBM	4000 V	1/3/0	1/3/0	-	1/3/0
	CDM	ESD - CDM	1000 V	-	1/3/0	1/3/0	1/3/0
	CDM	ESD - CDM	1500 V	1/3/0	-	-	-
	LU	Latch-up	(per JESD78)	1/6/0	1/6/0	1/6/0	1/6/0
	ED	Electrical Characterization	Per Datasheet Parameters	1/Pass	1/Pass	1/Pass	1/Pass
	HAST	Biased HAST 130C/85%RH	96 Hours	1/77/0	1/77/0	2/154/0	-
	HAST	Biased HAST, 110C/85%RH	264 Hours	-	-	-	3/231/0
	HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0
	TC	Temperature Cycle -65/150C	500 Cycles	1/77/0	1/77/0	2/154/0	3/231/0
	UHAST	Unbiased HAST 130C/85%RH	96 Hours	1/74/0	1/77/0	2/154/0	3/231/0

- QBS: Qual By Similarity

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

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

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