PCN Number:	20191010001.1A	**PCN Date:**	Feb 24 2020
Title:	Qualification of new Bump site and BOM for select devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Jan 10 2020	**Estimated Sample Availability:**	Date provided at sample request

Change Type:

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

PCN Details

Description of Change:

Revision A is to update/correct the description of change table to include a mold compound change for the DRC devices only. Updates are shown below in **bold yellow highlight**. The implementation date will be 90 days from this notice for these devices only.

This PCN is to inform of a new bump site and BOM for the devices listed in the product affected section below as follows:

What	Current	New
Bump Site	AT5	**JCAP**
Bump Composition	Hi Pb	**Cu/AgSn**
Die Coat	None	**PI**
Lead finish (ADS7883/4/5, & DGS devices only)	NiPdAu	**Matte Sn**
ECAT	E3, G4 or E4	**G3 or G4**
Mold Compound (DRC Devices only)	**SID#CZ0142**	**SID#CZ0334**

Reason for Change:

Continuity of Supply

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website.

Changes to product identification resulting from this PCN:

None

Product Affected:

ADS7883SBDBVR	ADS7886SBDCKR	ADS7888SDBVR	ADS8318IDRCTG4

ADS7883SBDBVT	ADS7886SBDCKT	ADS7888SDBVT	ADS8319IBDGSR
ADS7883SDBVR	ADS7886SDBVR	ADS7888SDCKR	ADS8319IBDGST
ADS7883SDBVT	ADS7886SDBVT	ADS7888SDCKT	ADS8319IBDRCR
ADS7884SDBVR	ADS7886SDCKR	ADS8318IBDGSR	ADS8319IBDRCT
ADS7884SDBVT	ADS7886SDCKT	ADS8318IBDGST	ADS8319IDGSR
ADS7885SDBVR	ADS7887SDBVR	ADS8318IBDRCT	ADS8319IDGST
ADS7885SDBVT	ADS7887SDBVT	ADS8318IDGSR	ADS8319IDRCT
ADS7886SBDBVR	ADS7887SDCKR	ADS8318IDGST	ADS8339IDGSR
ADS7886SBDBVT	ADS7887SDCKT	ADS8318IDRCT	ADS8339IDGST

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

Type	Test Name / Condition	Duration	Qual Device: ADS7886SBDBVR	Qual Device: ADS7886SDCKR	Qual Device: ADS8318IBDGSR	QBS Process Reference: OPA300AID
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0
CDM	ESD CDM	1000 V	-	-	-	1/3/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	Pass	Pass
HAST	Biased HAST, 110C/85%RH	264 Hours	1/77/0	1/77/0		-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	3/231/0
HBM	ESD HBM	4000 V	-	-	-	1/3/0
HTOL	Life Test, 150C	300 Hours	-	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	3/135/0
HTSL	High Temp Storage Bake 170C	420 Hours	1/77/0	1/77/0	3/231/0	-
LU	Latch-up	(per JESD78)	-	-	-	1/12/0
TC	Temperature Cycle, -65/150C	500 Cycles	2/154/0	2/154/0	3/231/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	1/77/0	1/77/0	3/231/0	-
YLD	Yield Analysis	-	Pass	Pass	Pass	-

- 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 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 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

Change Number: C1806171
TI Qualification ID: 20180626-126214

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

Type	Test Name / Condition	Duration	Qual Device: ADS8318IBDRCT	QBS Product Reference: ADS8318DGS	QBS Product Reference: ADS8318DRC	QBS Process Reference: OPA300AID
AC	Autoclave 121C	96 Hours	-	3/231/0	3/231/0	3/231/0
CDM	ESD - CDM	1500 V	-	1/3/0	1/3/0	-
CDM	ESD CDM	1000 V	-	-	-	1/3/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass
HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	3/231/0	3/231/0
HBM	ESD - HBM	2500 V	-	-	1/3/0	1/3/0
HTOL	High Temp Operating Life, 155C	240 Hours	-	1/115/0	3/343/0	-
HTOL	Life Test, 150C	300 Hours	-	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	3/135/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/228/0	3/231/0	3/231/0	-
LU	Latch-up	(per JESD78)	-	-	-	1/12/0
TC	Temperature Cycle - 65/150C	500 Cycles	3/231/0	-	-	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	3/231/0	-	-	-

- 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 contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN_ww_admin_team@list.ti.com

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring

your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (www.ti.com/legal/termsofsale.html) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.