January 24, **PCN Number:** 20250124001.1 **PCN Date:** 2025 Oualification of additional BOM materials for selected devices Title: **Quality Services Customer Contact:** Change Management team Dept: **Sample Requests Proposed 1<sup>st</sup> Ship Date:** April 24, 2025 March 25, 2025\* accepted until: \*Sample requests received after March 25, 2025 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:**

This PCN is to inform of the qualification of an additional BOM materials for the list of devices in the product affected sections below.

What	Current	Additional
Mount Compound	4042500	4147858
Mold Compound	4206193	4211471

Qualification results are shown below

### **Reason for Change:**

Standardization

## 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	<b>Green Status</b>	IEC 62474		
No Change	No Change	No Change	No Change		

# Changes to product identification resulting from this PCN:

None

# **Product Affected:**

ADS1282HIPW	MSP430FR2110IPW16R	MSP430G2212IPW20	MSP430G2433IPW20R
ADS1282HIPWR	MSP430FR2111IPW16	MSP430G2212IPW20R	MSP430G2452IPW20
ADS8327IBPW	MSP430FR2111IPW16R	MSP430G2213IPW20	MSP430G2452IPW20R
ADS8328IBPW	MSP430FR2310IPW16	MSP430G2213IPW20R	MSP430G2453IPW20
ADS8329IBPW	MSP430FR2310IPW16R	MSP430G2232IPW20	MSP430G2453IPW20R
ADS8330IBPW	MSP430FR2310IPW20	MSP430G2232IPW20R	MSP430G2513IPW20
BQ76200PW	MSP430FR2310IPW20R	MSP430G2233IPW20	MSP430G2513IPW20R
BQ76200PWR	MSP430FR2311IPW16	MSP430G2233IPW20R	MSP430G2533IPW20
BQ7692000PW	MSP430FR2311IPW16R	MSP430G2252IPW20	MSP430G2533IPW20R

BQ7692000PWR	MSP430FR2311IPW20	MSP430G2252IPW20R	MSP430G2553IPW20
BQ7692003PW	MSP430FR2311IPW20R	MSP430G2253IPW20	MSP430G2553IPW20R
BQ7692003PWR	MSP430FR5720IPW	MSP430G2253IPW20R	MSP430V376IPWR
BQ7692006PW	MSP430FR5720IPWR	MSP430G2302IPW20	MSP430V378IPWR
BQ7692006PWR	MSP430FR5722IPW	MSP430G2302IPW20R	MSP430V389IPW20R
DAC1282AIPW	MSP430FR5724IPW	MSP430G2303IPW20	MSP430V391IPW14R
DAC1282AIPWR	MSP430FR5724IPWR	MSP430G2303IPW20R	MSP430V403IPWR
DAC8164IAPW	MSP430FR5726IPW	MSP430G2312IPW20	MSP430V590IPW14R
DAC8564IAPW	MSP430FR5728IPW	MSP430G2312IPW20R	PCM1808PW
DAC8564ICPW	MSP430FR5728IPWR	MSP430G2313IPW20	PCM1808PWR
DAC8565IAPW	MSP430FR5730IPW	MSP430G2313IPW20R	RF430CL330HCPWR
DAC8565ICPW	MSP430FR5732IPW	MSP430G2332IPW20	RF430CL331HIPWR
DIR9001PW-P	MSP430FR5734IPW	MSP430G2332IPW20R	SN63202PW
DIR9001PWR-P	MSP430FR5734IPWR	MSP430G2333IPW20	SN63202PWR
DPA02260IPWR	MSP430FR5736IPW	MSP430G2333IPW20R	SN63204PW
DRV632PW	MSP430FR5738IPW	MSP430G2352IPW20	SN63204PWR
DRV632PWR	MSP430FR5738IPWR	MSP430G2352IPW20R	SN65LVCP23PW
DRV642PW	MSP430G2102IPW20	MSP430G2353IPW20	SN65LVCP23PWR
DRV642PWR	MSP430G2102IPW20R	MSP430G2353IPW20R	SN65LVDS391PW-P
DRV8860APWR	MSP430G2112IPW20	MSP430G2402IPW20	SN65LVDT390PW-P
DRV8860PWR	MSP430G2132IPW20	MSP430G2402IPW20R	SN7692003PW
MPD23770PWR	MSP430G2132IPW20R	MSP430G2403IPW20	SN7692003PWR
MSP430F122IPW	MSP430G2152IPW20	MSP430G2403IPW20R	TDC7200PW
MSP430F122IPWR	MSP430G2152IPW20R	MSP430G2412IPW20	TDC7200PWR
MSP430F2003IPWR	MSP430G2153IPW20	MSP430G2412IPW20R	TLV5630IPW
MSP430F2003TPWR	MSP430G2153IPW20R	MSP430G2413IPW20	TLV5630IPWR
MSP430FR2000IPW16	MSP430G2202IPW20	MSP430G2413IPW20R	TLV5639IPW
MSP430FR2000IPW16R	MSP430G2202IPW20R	MSP430G2432IPW20	TLV5639IPWR
MSP430FR2100IPW16	MSP430G2203IPW20	MSP430G2432IPW20R	TPS3600D25PW
MSP430FR2100IPW16R	MSP430G2203IPW20R	MSP430G2433IPW20	TPS3610U18PW
MSP430FR2110IPW16			



TI Information Selective Disclosure

#### Qualification Results

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

Туре	#	Test Name	Condition	Duration	Qual Device: DAC8564IAPW	QBS Reference: LDC5072A0PWQ1	QBS Reference: TLC59116ITPWRQ1	QBS Reference: SN36A0801GPWRQ
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	3/231/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	175C	1000 Hours	-	3/231/0	-	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	1/45/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	3/231/0
HTOL	B1	Life Test	125C	408 Hours	-	-	1/77/0	-
HTOL	B1	Life Test	150C	3053 Hours	-	3/231/0	-	-
HTOL	B1	Life Test	160C	500 Hours	-	3/231/0	-	-
ELFR	B2	Early Life Failure Rate	150C	48 Hours	-	3/2400/0	-	-
SD	С3	PB Solderability	Precondition w.155C Steam Age (8 hrs +/- 15 minutes)	-	-	1/15/0	-	-

Туре	#	Test Name	Condition	Duration	Qual Device: DAC8564IAPW	QBS Reference: LDC5072A0PWQ1	QBS Reference: TLC59116ITPWRQ1	QBS Reference: SN36A0801GPWRQ
SD	C3	PB-Free Solderability	Precondition w.155C Steam Age (8 hrs +/- 15 minutes)	-	-	1/15/0	-	-
SD	С3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB- Free Solder;	-	1/22/0	-	-	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	1/10/0
ESD	E2	ESD CDM	-	1500 Volts	-	1/3/0	1/3/0	-
ESD	E2	ESD CDM	-	500 Volts	-	-	-	1/3/0
ESD	E2	ESD CDM	-	750 Volts	-	1/3/0	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	1/3/0	1/3/0
ESD	E2	ESD HBM	-	4000 Volts	-	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	-	1/6/0	1/6/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	3/90/0	-	-	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	3/90/0	3/90/0

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device DAC8564IAPW is qualified at MSL1 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: <a href="http://www.ti.com/">http://www.ti.com/</a> TI Qualification ID: R-CHG-2412-019

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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