PCN Number:	20230815001.1	PCN Date:	August 15, 2023
Title:	Qualification of HFTF as an alternate Assembly site for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	Nov 13, 2023	Sample requests accepted until:	Sept 15, 2023

***Sample requests received after Sept 15, 2023 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:

Texas Instruments Incorporated is announcing the qualification of HFTF as an additional Assembly site for set of devices listed below. Construction differences are as follows:

	ASESH	HFTF
Mold Compound	SID#EN2000763	SID#R-32
Mount Compound	SID#EY1000063	SID#A-18

Reason for Change:

Supply continuity

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:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
ASESH	ASH	CHN	Shanghai
HFTF	**HFT**	**CHN**	**Hefei**

Sample product shipping label (not actual product label)

Product Affected:

TMAG5170A1QDGKR	TMAG5170A1QDGKT	TMAG5170A2QDGKR	TMAG5170A2QDGKT

TI Information
Selective Disclosure

Qualification Report

TMAG5170 A1/A2 ASESHAT to HFTFAT A/T offload
Approve Date 21-July-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TMAG5170A1QDGKR	Qual Device: TMAG5170A2QDGKR	QBS Reference: TMAG5170A1EDGKRQ1	QBS Reference: TMAG5170A2EDGKRQ1	QBS Reference: SN74AXC2T45QDCURQ1	QBS Reference: TLV7031QDBVRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-	3/231/0	2/154/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	-	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	-	-	2/154/0
TC	A4	Temperature Cycle	-55C/150C	2000 Cycles	-	-	2/154/0	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	-	-	-	3/231/0	2/154/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	3/135/0	-
HTSL	A6	High Temperature Storage Life	175C	1000 Hours	-	-	1/45/0	-	-	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	-	-	1/77/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	-	3/231/0	-
HTOL	B1	Life Test	150C	1000 Hours	-	-	3/231/0	-	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	-	-	-	1/77/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-	1/15/0	1/15/0

Type	#	Test Name	Condition	Duration	Qual Device: TMAG5170A1QDGKR	Qual Device: TMAG5170A2QDGKR	QBS Reference: TMAG5170A1EDGKRQ1	QBS Reference: TMAG5170A2EDGKRQ1	QBS Reference: SN74AXC2T45QDCURQ1	QBS Reference: TLV7031QDBVRQ1
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-	1/15/0	1/15/0
SD	C3	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	-	-	-	3/30/0	-	-	-
ESD	E2	ESD CDM	-	1000 Volts	-	-	-	-	-	1/3/0
ESD	E2	ESD CDM	-	1500 Volts	-	-	1/3/0	-	1/3/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	-	-	1/3/0
ESD	E2	ESD HBM	-	4000 Volts	-	-	1/3/0	-	-	-
ESD	E2	ESD HBM	-	7000 Volts	-	-	-	-	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	-	-	1/6/0	-	1/6/0	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-	-	-	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	3/90/0	1/30/0	3/90/0	3/90/0

- QBS: Qual By Similarity
- Qual Device TMAG5170A1QDGKR is qualified at MSL2 260C
- Qual Device TMAG5170A2QDGKR is qualified at MSL2 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/

TI Qualification ID: R-CHG-2301-011

For questions regarding this notice, e-mails can be sent to Change Management team or your local Field Sales Representative.

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