PCN Numbe		nber:	20230328009.1							PCN Date:		March 29, 2023	
Title	Title: Qualification of HFTFAT as an alternate Assembly site for select devices												
Customer Contact: PCN Manager				-	Dept: Quality Services								
Proposed 1 st Ship Date: Jun 2				27, 2023 Sample Roaccepte						7, 2023*			
*Sa	*Sample requests received after April 27, 2023 will not be supported.												
Change Type:													
☐ Assembly Site			☐ Design ☐				Wafer Bump Site						
Assembly Process				☐ Data Sheet				Wafe	r Bump	Material			
☐ Assembly Materials					Part number change				Wafe	r Bump	Process		
■ Mechanical Specification				☐ Test Site				Wafe	r Fab S	Site			
☐ Packing/Shipping/Labeling					☐ Test Process			Wafer Fab Materials					
□ Wafer Fab Process							Process						
PCN Details													
Description of Change:													
Tex	Texas Instruments Incorporated is announcing the qualification of HFTF as an additional Assembly												

and test site for set of devices listed below. Construction differences are documented as follows:

| Hana | HIT | HFTFAT |

	Hana	HIT	HFTFAT	
Bond wire composition, diameter	Cu, 0.8 mil	Au, 0.8 mil	Cu, 1.0 or 0.8 mil	
Mold Compound	SID#450596	SID#G600K	SID#R-30	
Mount Compound	SID#400180	SID#RZ241C	SID#A-18	
Lead Finish	NiPdAu	NiPdAu	Matte Sn	

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ

Upon expiry of this PCN TI will combine lead free solutions in a single <u>standard part number</u>. For example; <u>SN74LVC1404DCTR</u> – can ship with both Matte Sn and NiPdAu.

Example:

- Customer order for 7500 units of SN74LVC1404DCTR with 2500 units SPQ (Standard Pack Quantity per Reel).
- TI can satisfy the above order in one of the following ways.
 - I. 3 Reels of NiPdAu finish.
 - II. 3 Reels of Matte Sn finish
 - III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish.
 - IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish.

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 N	No Change	No Change ■ No Change N

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City	
Hana	HNT	THA	Ayutthaya	
HIT	HTC	JPN	Kitatsugaru, Aomori	
HFTFAT	HFT	CHN	Hefei	

Sample product shipping label (not actual product label)



MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04

LBL: 5A (L)TO:1750



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483812 (P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO: USA (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

-				
	SN74AUC2G00DCTR	SN74AUP1G99DCTT	SN74LVC2G02DCTR	SN74LVC2G80DCTR
	SN74AUC2G02DCTR	SN74AXC2T45DCTR	SN74LVC2G08DCTR	SN74LVC2G86DCTR
	SN74AUC2G08DCTR	SN74LVC1404DCTR	SN74LVC2G125DCTR	SN74LVC3G04DCTR
	SN74AUC2G125DCTR	SN74LVC1G123DCTR	SN74LVC2G126DCTR	SN74LVC3G06DCTR
	SN74AUC2G126DCTR	SN74LVC1G123DCTT	SN74LVC2G132DCTR	SN74LVC3G07DCTR
	SN74AUC2G240DCTR	SN74LVC1G139DCTR	SN74LVC2G157DCTR	SN74LVC3G14DCTR
	SN74AUC2G241DCTR	SN74LVC1G139DCTT	SN74LVC2G240DCTR	SN74LVC3G17DCTR
	SN74AUC2G32DCTR	SN74LVC1G29DCTR	SN74LVC2G241DCTR	SN74LVC3G34DCTR
	SN74AUC2G79DCTR	SN74LVC1G74DCTR	SN74LVC2G32DCTR	SN74LVC3GU04DCTR
	SN74AUC2G80DCTR	SN74LVC1G99DCTR	SN74LVC2G38DCTR	TXS0102DCTR
	SN74AUC2G86DCTR	SN74LVC1G99DCTT	SN74LVC2G74DCTR	TXS0102DCTT
	SN74AUP1G99DCTR	SN74LVC2G00DCTR	SN74LVC2G79DCTR	

Qualification Report Approve Date 02-AUGUST -2022

Qualification Results

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

Туре	#	Test Name	Condition	Duration	Qual Device: <u>SN74LVC2T45DCTR</u>	Qual Device: TXS0102DCTR	Qual Device: <u>SN74AXC2T45DCTR</u>
UHAST	А3	Autoclave	121C/15psig	96 Hours	3/231/0	1/77/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	1/77/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	3/231/0	1/77/0	-

- · QBS: Qual By Similarity
- Qual Device SN74LVC2T45DCTR is qualified at MSL1 260C
- Qual Device TXS0102DCTR is qualified at MSL1 260C
- Qual Device SN74AXC2T45DCTR 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: http://www.ti.com/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: R-CHG-2205-079

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

Location	E-Mail			
WW Change Management Team	PCN www admin_team@list.ti.com			

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