

PCN Number:	20220503003.1			PCN Date:	May 04, 2022
Title:	Qualification of HFTF as an alternate Assembly site for select devices				
Customer Contact:	PCN Manager	Dept:	Quality Services		
Proposed 1st Ship Date:	Aug 4, 2022	Estimated Sample Availability:	Date provided at sample request		
Change Type:					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process
PCN Details					
Description of Change:					
Texas Instruments Incorporated is announcing the qualification of HFTF as an additional Assembly site for select devices. Construction differences are as follows:					
		UTL2	HANA	HFTF	
Mount Compound		SID#PZ0013	SID#400180	SID#A-18	
Mold Compound		SID#CZ0094	SID#450179	SID#R-30	
Lead finish		NiPdAu	NiPdAu	Matte Sn	
Bond wire composition/Diameter		Au, 1.0 mil	Au, 1.0 mil	Cu, 0.8 mil	
Upon expiry of this PCN TI will combine lead free solutions in a single <u>standard part number</u> . For example; <u>TS5A23157DGSR</u> – can ship with both Matte Sn and NiPdAu.					
Example:					
– Customer order for 7500 units of TS5A23157DGSR 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		
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change		

Changes to product identification resulting from this PCN:			
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
HANA	HNT	THA	Ayutthaya
UTL2	NS2	THA	Bangpakong, Chachoengsao
HFTF	HFT	CHN	Hefei

Sample product shipping label (not actual product label)

(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: (V) 0033317
 (20L) CSO: SHE (21L) CCO:USA
 (22L) ASO: MLA (23L) ACO: MYS

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

OPT:
ITEM: 39
LBL: 5A (L)T0:1750

Product Affected:

TS5A23157DGSR	TS5A623157DGSR
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TI Information
Selective Disclosure

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

Type	Test Name / Condition	Duration	Qual Device: TS5A23157DGS	Qual Device: TS5A623157DGS	QBS Package Reference: TPS62842DGR
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0
CDM	ESD - CDM	1500 V	3/9/0	3/9/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	3/231/0
LI	Lead Fatigue	Wires	-	-	3/66/0
LI	Lead Pull	Wires	-	-	3/18/0
LU	Latch-up	Post Stress	-	-	1/3/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	-
MSL	Moisture Sensitivity, JEDEC	Level 1-260C	1/15/0	1/12/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	-
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	-
YLD	Yield Evaluation	(per mfg. Site specification)	Pass	Pass	-

- QBS: Qual By Similarity
- Qual Device TS5A623157DGS is qualified at LEVEL1-260C
- Qual Device TS5A23157DGS is qualified at LEVEL1-260C

- 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: 20200623-134703

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_ww_admin_team@list.ti.com

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