PCN Number:	20170928005	**PCN Date:**	Oct. 2, 2017

Title:	Qualification of Hefei Tongfu Microelectronic Co. Ltd (HFTF) as additional Assembly and Test Site for Select Devices

Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Jan. 2, 2018	**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:

Texas Instruments is pleased to announce the Qualification of Hefei Tongfu Microelectronic Co. Ltd (HFTF) as additional Assembly and Test Site for Select Devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.

Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City
NFME	NFM	CHN	Chongchuan
HFTF	**HFT**	**CHN**	**Hefei**

Material Differences:

	NFME	**HFTF**
Lead finish	NiPdAu	Matte Sn
Mold compound	R-07	R-27

Upon expiration of this PCN, TI will combine lead free solutions in a single ***standard part number***, for example; ***SN74AHC1G00DCKR***– can ship with both Matte Sn and NiPdAu. When available customers may specify NiPdAu finish by ordering the part with the G4 suffix, e.g. ***SN74AHC1G00DCKRG4.″***

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

Reason for Change:

Continuity of supply.

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

None

Anticipated impact on Material Declaration

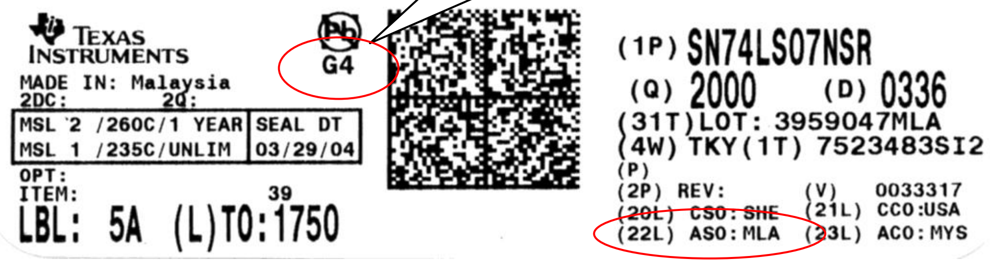
☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI Eco-Info website. There is no impact to the material meeting current regulatory compliance requirements with this PCN change.

Changes to product identification resulting from this PCN:

Assembly Site			
NFME	Assembly Site Origin (22L)	ASO: NFM	ECAT: G4
HFTF	Assembly Site Origin (22L)	ASO: HFT	ECAT: G3

Sample product shipping label (not actual product label)

ECAT: G4 = NiPdAu
ECAT: G3 = Matte Sn


TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC:
2Q:
MSL 2 /260C/1 YEAR SEAL DT
MSL 1 /235C/UNLIM 03/29/04
OPT:
ITEM: 39
LBL: 5A (L)TO:1750
Pb
G4
(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

ASSEMBLY SITE CODES: NFME = E, HFTF = J

Product Affected: Group 1

SN74AHC1G00DCKR	SN74AHCT1G32DCKR	SN74LVC1G10DCKR	SN74LVC1G58DCKR
SN74AHC1G00DCKT	SN74AHCT1G32DCKT	SN74LVC1G11DCKR	SN74LVC1G66DCKR
SN74AHC1G02DCKR	SN74AHCT1G86DCKR	SN74LVC1G125DCKR	SN74LVC1G66DCKT
SN74AHC1G02DCKT	SN74AHCT1G86DCKT	SN74LVC1G125DCKT	SN74LVC1G79DCKR
SN74AHC1G04DCKR	SN74AUP1G125DCKR	SN74LVC1G126DCKR	SN74LVC1G79DCKT
SN74AHC1G04DCKT	SN74AUP1G125DCKT	SN74LVC1G126DCKT	SN74LVC1G80DCKR
SN74AHC1G08DCKR	SN74CB3T1G125DCKR	SN74LVC1G132DCKR	SN74LVC1G80DCKT
SN74AHC1G08DCKT	SN74CBT1G125DCKR	SN74LVC1G132DCKT	SN74LVC1G86DCKR
SN74AHC1G09DCKR	SN74CBT1G125DCKT	SN74LVC1G14DCKR	SN74LVC1G86DCKT
SN74AHC1G125DCKR	SN74CBT1G384DCKR	SN74LVC1G14DCKT	SN74LVC1G97DCKR
SN74AHC1G125DCKT	SN74CBT1G384DCKT	SN74LVC1G175DCKR	SN74LVC1G97DCKT
SN74AHC1G126DCKR	SN74CBTD1G125DCKR	SN74LVC1G175DCKT	SN74LVC1G98DCKR
SN74AHC1G126DCKT	SN74CBTD1G125DCKT	SN74LVC1G17DCKR	SN74LVC1G98DCKT
SN74AHC1G14DCKR	SN74CBTD1G384DCKR	SN74LVC1G17DCKT	SN74LVC1GU04DCKR
SN74AHC1G14DCKT	SN74CBTD1G384DCKT	SN74LVC1G18DCKR	SN74LVC1GU04DCKT
SN74AHC1G32DCKR	SN74CBTLV1G125DCKR	SN74LVC1G19DCKR	SN74LVC1GX04DCKR
SN74AHC1G32DCKT	SN74LV1T00DCKR	SN74LVC1G240DCKR	SN74LVC1GX04DCKT
SN74AHC1G86DCKR	SN74LV1T02DCKR	SN74LVC1G240DCKT	SN74LVC2G04DCKR
SN74AHC1G86DCKT	SN74LV1T04DCKR	SN74LVC1G27DCKR	SN74LVC2G04DCKT
SN74AHC1GU04DCKR	SN74LV1T08DCKR	SN74LVC1G3157DCKR	SN74LVC2G06DCKR
SN74AHC1GU04DCKT	SN74LV1T125DCKR	SN74LVC1G3208DCKR	SN74LVC2G07DCKR
SN74AHCT1G00DCKR	SN74LV1T126DCKR	SN74LVC1G3208DCKT	SN74LVC2G07DCKT
SN74AHCT1G00DCKT	SN74LV1T32DCKR	SN74LVC1G32DCKR	SN74LVC2G14DCKR
SN74AHCT1G02DCKR	SN74LV1T34DCKR	SN74LVC1G32DCKT	SN74LVC2G14DCKT
SN74AHCT1G02DCKT	SN74LV1T86DCKR	SN74LVC1G332DCKR	SN74LVC2G17DCKR
SN74AHCT1G04DCKR	SN74LVC1G00DCKR	SN74LVC1G34DCKR	SN74LVC2G17DCKT
SN74AHCT1G04DCKT	SN74LVC1G00DCKT	SN74LVC1G34DCKT	SN74LVC2G34DCKR

SN74AHCT1G125DCKR	SN74LVC1G02DCKR	SN74LVC1G373DCKR	SN74LVC2GU04DCKR
SN74AHCT1G125DCKT	SN74LVC1G02DCKT	SN74LVC1G374DCKR	SN74LVC2GU04DCKT
SN74AHCT1G126DCKR	SN74LVC1G0832DCKR	SN74LVC1G386DCKR	TS5A1066DCKR
SN74AHCT1G126DCKT	SN74LVC1G0832DCKT	SN74LVC1G38DCKR	TS5A3157DCKR
SN74AHCT1G14DCKR	SN74LVC1G08DCKR	SN74LVC1G38DCKT	
SN74AHCT1G14DCKT	SN74LVC1G08DCKT	SN74LVC1G57DCKR	

Qualification Report

HFTF SOT: DCK Assy Site Qualification

Approve Date 26-Sep-2017

Product Attributes

Attributes	Qual Device: SN74AHC1G126DCKR	Qual Device: SN74CBT1G384DCKR	Qual Device: SN74LVC1G17DCKR	Qual Device: SN74LVC2G04DCKR
Assembly Site	HFTF	HFTF	HFTF	HFTF
Package Family	SC70	SC70	SC70	SC70
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	SFAB	SFAB	FFAB	FFAB
Wafer Process	EPIC1S1	EPIC1ZS	A3C10TPI/50B10.13_BOPO2	ASL3C

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260C: SN74CBT1G384DCKR, SN74AHC1G126DCKR, SN74LVC2G04DCKR, SN74LVC1G17DCKR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: SN74AHC1G126DCKR	Qual Device: SN74CBT1G384DCKR
AC	Autoclave 121C	96 Hours	1/77/0	1/77/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0
FLAM	Flammability (IEC 695-2-2)	--	-	-
FLAM	Flammability (UL 94V-0)	--	-	-
FLAM	Flammability (UL-1694)	--	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-
HTOL	Life Test, 150C	300 Hours	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	1/77/0	1/77/0
LI	Lead Fatigue	Leads	-	-
LI	Lead Pull to Destruction	Leads	-	-
PD	Physical Dimensions	--	-	-

SD	Solderability	Pb	-	-
SD	Solderability	Pb Free	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0
WBP	Bond Pull	Wires	1/76/0	1/76/0
WBS	Ball Bond Shear	--	1/76/0	1/76/0

Type	Test Name / Condition	Duration	Qual Device: SN74LVC1G17DCKR	Qual Device: SN74LVC2G04DCKR
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	3/90/0	3/90/0
FLAM	Flammability (IEC 695-2-2)	--	-	-
FLAM	Flammability (UL 94V-0)	--	3/15/0	3/15/0
FLAM	Flammability (UL-1694)	--	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0
HTOL	Life Test, 150C	300 Hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	3/231/0
LI	Lead Fatigue	Leads	3/66/0	3/66/0
LI	Lead Pull to Destruction	Leads	3/27/0	3/27/0
PD	Physical Dimensions	--	-	-
SD	Solderability	Pb	3/66/0	3/66/0
SD	Solderability	Pb Free	3/66/0	3/66/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
WBP	Bond Pull	Wires	3/228/0	3/228/0
WBS	Ball Bond Shear	--	3/228/0	3/228/0

- 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 regional contacts shown below or your local Field Sales Representative.

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