PCN Number:		2	20160317000						PCN Date:		3/21/2016		
Title: Qualify TI Cla			[Clark	ark as an additional Bump, Assembly, & Test site for the TPS22913CYZV.									
Cus	tom	er Contact	<u>PC</u>	N Ma	nager D	ept:	Quality Se	rvic	es				
Proposed 1 st Ship Date			Date	: 6	5/21/2016	Estin	nated Samp	ole	Availa	ability:	bility: Provided upon Request		
Change Type:													
\boxtimes	Asse	embly Site		Assembly Process Ass				Asse	embly Materials				
	Desi	gn			Electrical Specification				Mec	hanical Specification			
\boxtimes	Test	Site			Packing/Shipping/Labeling				Test	Process			
\boxtimes		er Bump Si	te		Wafer Bump Material					er Bump			
	Waf	er Fab Site			Wafer Fab Materials				Waf	er Fab P	roces	S	
					Part number change								
				PCN Details									
Des	cript	tion of Ch	ange:										
Asse the	Texas Instruments is pleased to announce the qualification of TI Clark as an alternate Bump, Assembly, and Test site for the devices shown below. The material set will be the same between the 2 sites. Test coverage, insertions, conditions will remain consistent with current testing and verified with												
		for Chang	Δ'										
		y of Suppl				_	=						
		ted impa	ct on I	Fit, F	orm, Function	n, Qເ	iality or Re	liat	ility (positiv	e / ne	egative):	
Non	ie												
Ant	icipa	ted impa	ct on I	Mate	rial Declarat	ion							
No Impact to the Material Declaration				Material Declarations or Product Conterproduction data and will be available for release. Upon production release the reobtained from the TI ECO website.					lowing t	he pro	oduction		
Cha	nge	s to produ	ct ide	ntifi	cation result	ing fr	om this PC	N:					
Assembly Site Ass		Assen	sembly Site Origin (22L)			Assembly Country Code (21L))	Assen	nbly City		
JCAP			JCP			CHN				Jia	ngsu		
TI Clark			QAB			PHL			•		es City, panga		

Sample product shipping label (not actual product label)



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



(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483SI2

(2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

Topside Device marking:

Assembly site code for JCP= P

Assembly site code for QAB = I

Product Affected

TPS22913CYZVR	TPS22913CYZVT
IFSZZSISCIZVK	IFSZZSISCIZVI



Selective Disclosure

Qualification Report

TP\$22913CYZVR (JCAP to CLARK) Approve Date 26-Jan-2016

Product Attributes

Attributes	QBS Product Reference: TPD12S015YFF	QBS Package Reference: SN74LVC1G04YZVR	QBS Package Reference: TXS0104EYZTR
Assembly Site	TI-CLARK	CLARK	CLARK
Package Family	-	WCSP	WCSP
Flammability Rating	-	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	FREISING (FFAB)	FREISING (FFAB)	FREISING (FFAB)
Wafer Process	LBC7	-	-

⁻ QBS: Qual By Similarity

Qualification Results

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

Туре	Test Name / Condition	Duration	QBS Product Reference: TPD12S015YFF	QBS Package Reference: SN74LVC1G04YZVR	QBS Package Reference: TXS0104EYZTR
AC	Autoclave 121C	96 Hours	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	-
EDR	EEPROM Data Retention, 150C	Post 1000 Hours	1/77/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HBM	ESD - HBM	2500 V	1/3/0	-	-
HBM	ESD - HBM -HIGH	15000 V	1/3/0	-	-
CDM	ESD - CDM	1000 V	1/3/0	-	-
HTOL	Life Test, 150C	300 Hours	1/77/0	-	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	-	-
PD	Physical Dimensions		-	Pass	Pass
SBS	Bump-shear	Bumps	-	1/50/0	3/150/0
TC	Temperature Cycle, -55/125C	1000 Cycles	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0

Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

Green/Pb-free Status: Qualified Pb-Free(SMT) and Green

Texas Instruments, Inc.

PCN#20160317000

⁻ Qual Device TPS22913CYZVR is qualified at LEVEL1-260C

⁻ 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/

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

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
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