PCN Number:			20210806001.1					PCN Date:	August 12, 2021		
Title: Qualification				of TIPI as an additional Assembly and Test site for select devices							
Cus	tome	Contact:	PCN Manager		Dept: Quality Ser		rvic	vices			
Proposed 1 st Ship Date			e:	Nov 12, 2021		Estimated Sample Availability:			Date Provided at Sample request		
Cha	nge T	уре:									
\boxtimes	Asse	mbly Site		Design			Wafer Bum	p Site			
Assembly Process				☐ Data Sheet				Wafer Bum	p Material		
Assembly Materials			5	Part number change			Wafer Bum	p Process			
Mechanical Specific			atio	on		Test	Site			Wafer Fab	Site
Packing/Shipping/La			.abe	eling		Test	Process			Wafer Fab I	Materials
										Wafer Fab I	Process
PCN Details											
Des	Description of Change:										

Texas Instruments Incorporated is announcing the qualification TIPI (TI Philippines Inc.) as Additional Assembly 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
HANA	HNT	THA	Ayutthaya
ASEWH	AWH	CHN	Weihai
TFME	NFM	CHN	Chongchuan
TIPI	PHI	PHL	Baguio City

Material Differences:

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	HANA	ASEWH	TFME	TIPI		
Mount compound	400180	1120999A2	A-03	8095733		
Wire type	Au	Au	Cu	Cu		
Mold compound	450207	4020039A1	R-17	4222198		
Lead finish	NiPdAu	NiPdAu	Matte Sn	NiPdAu		

Reason for Change:

Continuity of supply.

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	$oxed{\boxtimes}$ No Change	$oxed{\boxtimes}$ No Change	No Change

Changes to product identification resulting from this PCN:

Assembly Site		
HANA	Assembly Site Origin (22L)	ASO: HNT
ASEWH	Assembly Site Origin (22L)	ASO: AWH
TFME	Assembly Site Origin (22L)	ASO: NFM
TIPI	Assembly Site Origin (22L)	ASO: PHI

Sample product shipping label (not actual product label)





(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483\$12 (P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

CN74LVC1C21E7DDVD	CNZ4LVC1C21EZDDVT
SN74LVC1G3157DBVR	SN74LVC1G3157DBVT

Qualification Report

Approve Date 28-Jun-2021

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: SN74LVC1G3157DBVR	QBS Package Reference: TPS76933DBVR
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	3/230/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0
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	Wires	3/228/0	3/228/0

- QBS: Qual By Similarity
- Qual Device SN74LVC1G3157DBVR 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 $0.7 \, \text{eV}$: $125 \, \text{C}/1 \, \text{k}$ Hours, $140 \, \text{C}/480$ Hours, $150 \, \text{C}/300$ Hours, and $155 \, \text{C}/240$ 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 Tl's external Web site: http://www.ti.com/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

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