

PCN Number:	20210401003.1			PCN Date:	Apr 5, 2021												
Title:	Qualification of Hana as an alternate Assembly site for Select Devices																
Customer Contact:	PCN Manager	Dept:	Quality Services														
Proposed 1st Ship Date:	Jul 4, 2021	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 is pleased to announce the qualification of Hana as an Additional Assembly site for the list of devices shown below. Current assembly site and Material differences are as follows:																	
<table border="1"> <thead> <tr> <th></th> <th>TIEM</th> <th>Hana</th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>4223179</td> <td>SID#400194</td> </tr> <tr> <td>Mold Compound</td> <td>4213206</td> <td>SID#450207</td> </tr> <tr> <td>#Bond Wire/diameter</td> <td>Au, 1.3 mils or Cu, 1.3 mils</td> <td>Au, 1.3 mils</td> </tr> </tbody> </table>							TIEM	Hana	Mount Compound	4223179	SID#400194	Mold Compound	4213206	SID#450207	#Bond Wire/diameter	Au, 1.3 mils or Cu, 1.3 mils	Au, 1.3 mils
	TIEM	Hana															
Mount Compound	4223179	SID#400194															
Mold Compound	4213206	SID#450207															
#Bond Wire/diameter	Au, 1.3 mils or Cu, 1.3 mils	Au, 1.3 mils															
# applies to LV2862* devices only																	
Reason for Change:																	
Continuity of Supply																	
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																	
None																	
Anticipated impact on Material Declaration																	
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	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 at the site link below http://www.ti.com/quality/docs/materialcontentsearch.tsp														
Changes to product identification resulting from this PCN:																	
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City														
TIEM	CU6	MYS	Melaka														
HANA	HNT	THA	Ayutthaya														
Sample product shipping label (not actual product label)																	



MADE IN: Malaysia
2DC: 20:

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

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



(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

Product Affected:

LMP8640MK-F/NOPB	LMP8640MKE-T/NOPB	LMR14010ADDCR	LV2862XLVDDCR
LMP8640MK-H/NOPB	LMP8640MKX-F/NOPB	LMR14010ADDCT	LV2862XLVDDCT
LMP8640MK-T/NOPB	LMP8640MKX-H/NOPB	LV2843DDCR	LV2862YDDCR
LMP8640MKE-F/NOPB	LMP8640MKX-T/NOPB	LV2843DDCT	LV2862YDDCT
LMP8640MKE-H/NOPB			



**TI Information
Selective Disclosure**

Approve Date: 23 March 2021

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LMP8640QMKX- T/GFAB	Qual Device: LMP8640QMKX- T/MFAB	Qual Device: LV2862XLVDDCR
PC	Auto Preconditioning	Level 1-260C	2/552/0	1/276/0	-
PC	Preconditioning	Level 1-260C	-	-	3/693/0
AC	**Auto Autoclave, 121C	96 Hours	2/154/0	1/77/0	-
AC	**Autoclave, 121C	96 Hours	-	-	3/231/0
BHST	**Auto Biased HAST, 130C	96 Hours	2/154/0	1/77/0	-
BHST	**Biased HAST, 130C	96 Hours	-	-	3/231/0
TC	**Auto T/C Grade 1, 65C/150C	500 Cycles	2/154/0	1/77/0	-
TC	**T/C, -65C/150C	500 Cycles	-	-	3/231/0
TC-BP	Auto Post TC Bond Pull	Ball bonds	2/60/0	1/30/0	-
ED	Auto Electrical Distributions	Cpk>1.67, three temp	2/60/0	1/30/0	-
HTOL	Auto High Temp Operating Life Grade 1, 125C, VCC max	1000 Hours	2/154/0	1/77/0	-
HTSL	**Auto High Temp. Storage Life Grade 1, 170C	420 Hours	2/90/0	1/45/0	-
SD	Auto Solderability (Pb and Pb- Free) with Bake Precon]	>95% Lead Coverage.	3/90/0	-	-
LF	Lead Fatigue	Leads, min. 3 units	3/66/0	-	-
LP	Lead Pull	Leads, min. 8 units	3/72/0	-	-
LFA	Lead Finish Adhesion	Leads, min. 3 units	3/45/0	-	-
MQ	Manufacturability (Auto Assembly)	(Per automotive requirements)	3/PASS	1/PASS	-
MQ	Manufacturability (Assembly)	(Per mfg. site specification)	-	-	3/PASS
DS	Die Shear	QSS 009-009	3/30/0	1/10/0	3/30/0
WBP	Bond Pull	Wires, min. 3 units	3/228/0	1/76/0	-
WBP	Bond Strength	Ball bonds, min. 3 units	-	-	3/228/0
WBS	Auto Wire Bond Shear	Wires, min. 5 units, Cpk > 1.67	3/90/0	1/30/0	-
XRAY	X-ray	(Top side only)	3/15/0	1/5/0	3/15/0
PD	Auto Physical Dimensions	Cpk>1.67	3/30/0	-	-
VM	Visual / Mechanical	(Per mfg. site specification)	-	-	3/30/0
MSL	Moisture Sensitivity	Level 1-260C	2/12/0	1/12/0	3/12/0
YLD	FTY and Bin Summary	-	3/PASS	1/PASS	3/PASS

- 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/1000 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/1000 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

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