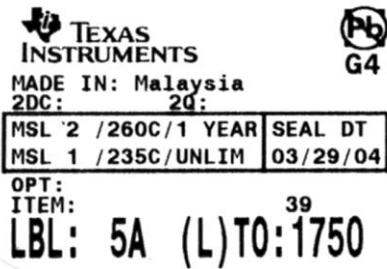


PCN Number:	20190116000.1		PCN Date:	Feb. 1, 2019												
Title:	Qualification of ASEN as Additional Assembly and Test Site for Select WSON Package Devices															
Customer Contact:	PCN Manager	Dept:	Quality Services													
Proposed 1st Ship Date:	May 1, 2019	Estimated Sample Availability:	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 checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site											
<input checked="" 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 ASEN as Additional Assembly and Test Site for select devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.																
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>UNIAT</td> <td>UNM</td> <td>MY</td> <td>Ipoh</td> </tr> <tr> <td>ASEN</td> <td>ASN</td> <td>CN</td> <td>Suzhou</td> </tr> </tbody> </table>					Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	UNIAT	UNM	MY	Ipoh	ASEN	ASN	CN	Suzhou
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City													
UNIAT	UNM	MY	Ipoh													
ASEN	ASN	CN	Suzhou													
Material Differences:																
Group 1 Device:																
	UNIAT	ASEN														
Mount Compound	47000011	1400410101														
Mold Compound	47160091	1800558151														
Wire Type	Au	Cu														
Lead finish	Matte Sn	NiPdAu														
Group 2 Device:																
	UNIAT	ASEN														
Mount Compound	47000011	1400410101														
Mold Compound	47160155	1800558151														
Lead finish	Matte Sn	NiPdAu														
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																
<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 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		
UNIAT	Assembly Site Origin (22L)	ASO: UNM
ASEN	Assembly Site Origin (22L)	ASO: ASN

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

Product Affected Group 1:

CSD16301Q2	CSD17313Q2	CSD17313Q2T
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Product Affected Group 2:

CSD85301Q2	CSD85301Q2T	CSD87502Q2	CSD87502Q2T
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Qualification Report

Q2 Package offload to ASEN - Phase 2 Dual die
Approved Date 12-Dec-2018

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: CSD85301Q2	Qual Device: CSD87502Q2	Qual Device: CSD58902Q2	Qual Device: CSD87502Q2
HTGB	High Temp. Gate Bias, 150C	1000 Hours	-	-	1/77/0	1/77/0
HTRB	High Temp. Reverse Bias, 150C	1000 Hours	-	-	1/77/0	1/77/0
IOL	IOL 2min Cycle	10000 Cycles	-	3/231/0	-	-
AC	Autoclave 121C	96 Hours	-	3/231/0	-	-
HBM	ESD - HBM	400 V	-	-	1/3/0	-
CDM	ESD - CDM	2000 V	-	-	1/3/0	-
PD	Physical Dimensions	(per mechanical drawing)	-	3/30/0	-	-
SD	Solderability	8 Hours Steam Age, Pb-Free	-	-	3/30/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	-	3/231/0	-	-
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	3/231/0	-	-
WBP	Bond Pull	76 Wires, 5units min	-	3/228/0	-	-
WBS	Ball Bond Shear	76 balls, 5 units min	-	3/228/0	-	-
YLD	FTY and Bin Summary	-	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/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

THIS INFORMATION RELATING TO QUALITY AND RELIABILITY IS PROVIDED "AS IS." Product information detailed in this report may not accurately reflect TI's current product materials, processes and testing used in the construction of the TI products. Customers are solely responsible to conduct sufficient engineering and additional qualification testing to determine whether a device is suitable for use in their applications. Using TI products outside limits stated in TI's datasheet may void TI's warranty. See TI's Terms of Sale at "<http://www.ti.com/lsds/ti/legal/termsofsale.page>"

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