PCN Number:	20141015000			**PCN Date:**	10/16/2014
Title:	Qualification of Additional Assembly/Test locations for select DPY packaged Devices				
Customer Contact:	PCN Manager	**Phone:**	+1(214)480-6037	**Dept:**	Quality Services
Proposed 1st Ship Date:	01/16/2015	**Estimated Sample Availability:**	Date provided upon request		

Change Type:

☒	Assembly Site	☐	Assembly Process	☒	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☒	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☐	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of ASE Suzhou (ASEN) and TI Chengdu (CDAT) as an alternate Assembly/Test sites for the devices listed below. Device construction differences are noted as follows:

What	JCET	ASEN	CDAT
Mount Compound	SID#120402002600	**SID#1400230112**	**4221461**
Mold Compound	SID#120903003009	**SID#1800819111**	**4210087**

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

Reason for Change:

Continuity of Supply

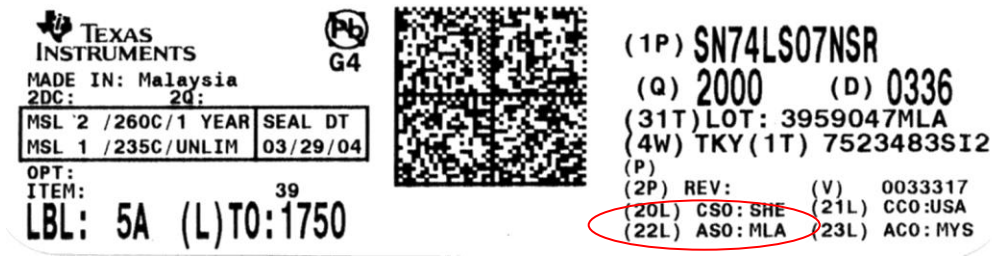
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None

Changes to product identification resulting from this PCN:

Assembly Site		
JCET	Assembly Site Origin (22L)	ASO: JCE
ASEN	Assembly Site Origin (22L)	ASO: ASN
CDAT	Assembly Site Origin (22L)	ASO: CDA

Sample product shipping label (not actual product label)



Topside Device marking:
Assembly site code for JCE= F
Assembly site code for ASN=T**
Assembly site code for CDA=8
** - Temporary code. Will change in 2015.

Product Affected			
TPD1E05U06DPYR	TPD1E10B06DPYR	TPD1E10B09DPYR	TPD1E10B09DPYT
TPD1E05U06DPYT	TPD1E10B06DPYT		

TI Information
Selective Disclosure

Qualification Report

New A-T site: ASEN 2-pin DPY multiple devices

Approved 10/02/2014

Product Attributes

Attributes	Qual Device: TPD1E05U06DPYR	Qual Device: TPD1E10B06DPYR	Qual Device: TPD1E10B09DPYR
Assembly Site	ASEN	ASEN	ASEN
Wafer Fab Site	CFAB	CFAB	CFAB
Wafer Fab Process	VDIODE	VDIODE	VDIODE

- QBS: Qual By Similarity
- Qual Device TPD1E05U06DPYR is qualified at -
- Qual Devices qualified at LEVEL1-260C: TPD1E10B06DPYR, TPD1E10B09DPYR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPD1E05U06DPYR	Qual Device: TPD1E10B06DPYR	Qual Device: TPD1E10B09DPYR
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	3/231/0
SD	Surface Mount Solderability	Pb Free solder	-	-	3/69/0
PD	Physical Dimensions	(Per mechanical drawing)	-	-	3/90/0
ED	Electrical Characterization	(Per Datasheet Parameters)	Pass	Pass	Pass
	Bond Strength	Wires	-	-	3/228/0
FLAM	Flammability (IEC 695-2-2)	--	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	--	-	-	3/15/0
FLAM	Flammability (UL-1694)	--	-	-	3/15/0

- 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

Qualification Report

Chengdu A/T Startup X2SON Package (DPY)

Approval date: 10/08/2014

Product Attributes

Attributes	Qual Device: TPD1E10B09DPYR
Assembly Site	CHENGDU
Package Family	X2SON
Flammability Rating	UL 94 V-0
Wafer Fab Site	CFAB
Wafer Fab Process	VDIODE

- QBS: Qual By Similarity
- Qual Device TPD1E10B09DPYR is qualified at LEVEL1-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPD1E10B09DPYR
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0
TC	Temperature Cycle, -65/+150C	500 Cycles	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0
SD	Surface Mount Solderability	Pb Free	3/66/0
PD	Physical Dimensions	(per mechanical drawing)	3/15/0
ED	Electrical Characterization, side by side	-	Pass
MECH	Visual / Mechanical	(per mfg. Site specification)	3/984/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
MQ	Manufacturability (Test)	(per mfg Site specification)	Pass
MSL	Moisture Sensitivity, JEDEC	Level1-260C	3/36/0
	Salt Atmosphere	24 Hours	3/66/0
YLD	FTY and Bin Summary	-	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

For questions regarding this notice e-mail contacts shown below or your local Field Sales Representative.

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