PCN Number:	20150909000	PCN Date:	9/11/2015
Title:	Qualification of Hana Thailand as an Additional Assembly & Test site for select devices in the DQN package		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	12/11/2015	Estimated Sample Availability:	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 Hana Thailand as an additional Assembly & Test site for select devices in the DQN package shown in the table below. BOM differences are noted below:

	JCET	HNT
Mount Compound	S#120402001600	**SID#400173**

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

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	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 website.

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City
JCET	JCE	CHN	Jiangyin
HNT	**HNN**	**THA**	**Ayutthaya**

Sample product shipping label (not actual product label)

Topside Device marking:
Assembly site code for JCET= F
Assembly site code for HNT = H

Product Affected

LP5907SNX-1.2/NOPB	LP5907SNX-2.5/NOPB	LP5907SNX-2.85/NOPB	LP5907SNX-3.2/NOPB
LP5907SNX-1.8/NOPB	LP5907SNX-2.7/NOPB	LP5907SNX-3.0/NOPB	LP5907SNX-3.3/NOPB
LP5907SNX-2.2/NOPB	LP5907SNX-2.8/NOPB	LP5907SNX-3.1/NOPB	LP5907SNX-4.5/NOPB

TEXAS INSTRUMENTS

TI Information
Selective Disclosure

Qualification Report

Hana - Thailand as 2nd Site Multi-Source for LP5907SNX Family Cat2CF Qualification

Approved 07/31/2015

Product Attributes

Attributes	Qual Device: LP5907SNX-2.85/ NOPB	QBS Package Reference: TLV70750DQN	QBS Package Reference: TLV70750DQN
Assembly Site	HANA - THAILAND	HANA -THAILAND	HANA - THAILAND
Package Family	X2SON	X2SON	X2SON
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	AIZU	MIHO8	MIHO8
Wafer Fab Process	CMOS9T	LBC7	LBC7

- QBS: Qual By Similarity
- Qual Device LP5907SNX-2.84/NOPB is qualified at MSL1

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LP5907SNX-2.85/NOPB	QBS Package Reference: TLV70750DQN	QBS Package Reference: TLV70750DQN
PC	PreCon Level 1	ATE	1/231/0	1/305/0	3/847/0
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	1/77/0	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-
AC	Autoclave 121C	96 Hours	-	1/77/0	-
UHAST	Unbiased HAST 110C/85%RH	96 Hours	1/77/0	1/77/0	2/154/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	1/45/0	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	1/77/0	3/231/0
HTOL	Life Test, 125C	1000 Hours	1/77/0	-	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-
WBS	Ball Bond Shear	5 units, >76 balls, 0 fails	3/60/0	1/76/0	1/76/0
WBP	Bond Pull	4 Wire, 5 units min	3/60/0	-	2/152/0
SD	Solderability	Steam age, 8 Hours	3/60/0	1/22/0	2/44/0
PD	Physical Dimensions	(per mechanical drawing)	3/60/0	1/5/0	2/10/0
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	1/3/0
CDM	ESD - CDM	1000 V	1/3/0	1/3/0	-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-
ED	Electrical Characterization	Over Temperature	1/30/0	1/30/0	-
DS	Die Shear	-	-	1/15/0	1/10/0
MECH	Visual / Mechanical	-	-	1/459/0	-
MQ	Manufacturability	(per mfg. Site specification)	3/Pass	1/Pass	-
MSL	Moisture Sensitivity, L1 260C	3 Cycles / 260 C	-	-	-
XRAY	X-ray	(top side only)	-	-	-

- 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

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
Asia Pacific	PCNAsiaContact@list.ti.com
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