

PCN Number:	20170530000A	PCN Date:	June 29, 2017
Title:	Qualification of HANA Thailand (HNT) as an additional Assembly & Test site for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Change Type:			
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
		<input type="checkbox"/>	Wafer Bump Site
		<input type="checkbox"/>	Wafer Bump Material
		<input type="checkbox"/>	Wafer Bump Process
		<input type="checkbox"/>	Wafer Fab Site
		<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	Wafer Fab Process

PCN Details

Description of Change:

Revision A is to remove TCA9517ADGKR device in the Product Affected Section (with ~~strikethrough~~) and highlighted in yellow. This was inadvertently included and is not affected by this change.

Texas Instruments Incorporated is announcing the qualification HANA Thailand (HNT) as Additional Assembly and Test 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
ASE Shanghai	ASH	CHN	Shanghai
HANA Thailand	HNT	THA	Ayutthaya

Material Differences:

	ASH	HNT
Mount compound	EY1000063	400154
Mold compound	EN2000515	450179
Wire type	Cu	Au
Lead Finish	NiPdAuAg	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.
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Changes to product identification resulting from this PCN:

Assembly Site		
ASE Shanghai	Assembly Site Origin (22L)	ASO: ASH
HANA Thailand	Assembly Site Origin (22L)	ASO: HNT

Sample product shipping label (not actual product label)



MADE IN: Malaysia
2DC: 2Q:



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

OPT:
ITEM: 39
LBL: 5A (L)T0:1750

(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

ASSEMBLY SITE CODES: ASH= A, HNT= H

Product Affected:

TCA9517ADGKR	TCA9617ADGKR
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Qualification Report

HNT as an additional assembly site for TCA9517ADGKR and TCA9617ADGK Miho 8 LBC7
Approve Date 24-May-2017

Product Attributes

Attributes	Qual Device: TCA9517ADGKR	Qual Device: TCA9617ADGKR	QBS Product Reference: TCA9517ADGKR	QBS Product Reference: TCA9617ADGKR	QBS Process Reference: BQ24730RGF	QBS Package Reference: TPS77301DGK
Assembly Site	HANA (HNT)	HANA (HNT)	ASE SHANGHAI	ASE SHANGHAI	MLA	HNT
Package Family	VSSOP	VSSOP	VSSOP	MSOP	QFN	MSOP
Flammability Rating	UL 94 V-0	-	UL 94 V-0	-	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MIHO	MIHO	MIHO 8	MIHO8	MIHO8	DFAB
Wafer Process	-	-	LBC7	LBC7	LBC7	LBC3S

- QBS: Qual By Similarity
- Qual Device TCA9517ADGKR 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: TCA9517ADGKR	Qual Device: TCA9617ADGKR	QBS Product Reference: TCA9517ADGKR
AC	Autoclave 121C	96 Hours	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	Pass
EDR	EEPROM Data Retention, 170C	600 Hours	-	-	-
FLAM	Flammability (IEC 695-2-2)	--	-	-	-
FLAM	Flammability (UL -1694)	--	-	-	-
FLAM	Flammability (UL 94V-0)	--	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-
HBM	ESD - HBM	5500 V	-	-	1/3/0
CDM	ESD - CDM	1000 V	-	-	1/3/0
HTOL	Life Test, 155C	240 Hours	-	-	-

HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-
LU	Latch-up	(Per JESD78, Class II)	-	-	1/6/0
LU	Latch-Up	(per JESD78)	-	-	-
MQ	Manufacturing Qualification	--	1/1/0	1/1/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-
TS	Thermal Shock, -65/150C	500 Cycles	-	-	-

Type	Test Name / Condition	Duration	QBS Product Reference: TCA9617ADGKR	QBS Process Reference: BQ24730RGF	QBS Package Reference: TPS77301DGK
AC	Autoclave 121C	96 Hours	1/77/0	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	-
EDR	EEPROM Data Retention, 170C	600 Hours	1/77/0	-	-
FLAM	Flammability (IEC 695-2-2)	--	-	-	3/15/0
FLAM	Flammability (UL -1694)	--	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	--	-	-	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HBM	ESD - HBM	5500 V	-	-	-
CDM	ESD - CDM	1000 V	-	-	-
HTOL	Life Test, 155C	240 Hours	-	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	1/77/0	-	3/231/0
LU	Latch-up	(Per JESD78, Class II)	1/6/0	-	-
LU	Latch-Up	(per JESD78)	-	3/15/0	-
MQ	Manufacturing Qualification	--	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0
TS	Thermal Shock, -65/150C	500 Cycles	-	3/231/0	3/231/0

- 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

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

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USA	PCNAmericasContact@list.ti.com
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