12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20150123003
Qualification of Hitachi as Additional Assembly/Test location for Select Devices in the DCU package
Change Notification / Sample Request

Date: 1/26/2015
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20150123003
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
SN74AVCH2T45DCUR	null
TCA9406DCUR	null
TS5A3359DCUR	null
TXB0102DCUR	null
TXB0102DCUT	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20150123003	**PCN Date:**	1/26/2015
Title:	Qualification of HIT as Additional Assembly/Test location for Select Devices in the DCU package		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	04/26/2015	**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 Hitachi as an alternate Assembly and Test site for the devices listed below. Device construction differences are noted as follows:

What	Hana Thailand	Hitachi
Mount Compound	SID#400154	SID#RZ241C
Mold Compound	SID#450207	SID#RM500F
Lead Finish	NiPdAu	Matte Sn

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

Upon expiry of this PCN TI will combine lead free solutions in a single *standard part number*, for example; ***SN74AVCH2T45DCUR*** – can ship with both Matte Sn and NiPdAu/Ag.

Example:

- Customer order for 7500units of **SN74AVCH2T45DCUR** with 2500 units SPQ (Standard Pack Quantity per Reel).

- TI can satisfy the above order in one of the following ways.
  I. 3 Reels of NiPdAu finish.
  II. 3 Reels of Matte Sn finish
  III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish.
  IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish.

Reason for Change:

Continuity of Supply

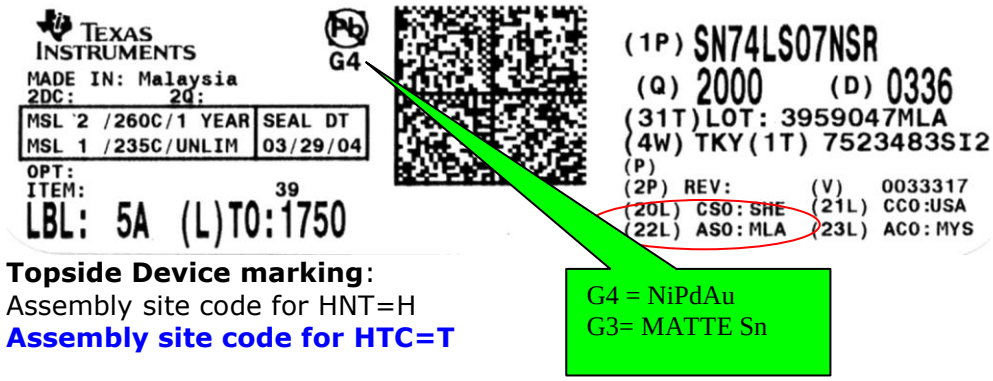
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None

Changes to product identification resulting from this PCN:

Assembly Site		
Hana Thailand	Assembly Site Origin (22L)	ASO: HNT
Hitachi	**Assembly Site Origin (22L)**	**ASO: HTC**

Sample product shipping label (not actual product label)



Topside Device marking:
Assembly site code for HNT=H
Assembly site code for HTC=T

Product Affected

SN74AVCH2T45DCUR	TCA9406DCUR	TS5A3359DCUT	TXB0102DCUT
SN74AVCH2T45DCUT	TS5A3359DCUR	TXB0102DCUR	

Qualification Report

A-T site Transfer: TXB0102DCUR, TCA9406DCUR, SN74AVCH2T45DCUR, and TS5A3359DCUR (HNT to HIT)
Approved 01/13/2015

Product Attributes

Attributes	Qual Device: SN74AVCH2T45DCUR	Qual Device: TCA9406DCUR	Qual Device: TS5A3359DCUR	Qual Device: TXB0102DCUR	QBS Package: SN74LVC2G125DCUR	QBS Package: SN74LVC2G74DCUR	QBS Package: SN74CB3Q3306ADCUR
Assembly Site	HIT	HIT	HIT	HIT	HITACHI-RENESAS	HITACHI-RENESAS	HITACHI-RENESAS
Package Family	-	-	-	-	-	-	-
Flammability Rating	-	-	-	-	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	FFAB	FFAB	FFAB	FFAB	FFAB	FFAB	FFAB
Wafer Fab Process	ASLC10/P9705	ASLC10/P9785	ASLC10/P9785	ASLC10/P9785	ASL3C	ASL3C	ACTPI

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260C: SN74AVCH2T45DCUR, TCA9406DCUR, TS5A3359DCUR, TXB0102DCUR

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

Type	Test Name / Condition	Duration	Qual Device: SN74AVCH2T45DCUR	Qual Device: TCA9406DCUR	Qual Device: TS5A3359DCUR	Qual Device: TXB0102DCUR	QBS Package: SN74LVC2G125DCUR	QBS Package: SN74LVC2G74DCUR	QBS Package: SN74CB3Q3306ADCUR
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/231/0	-
AC	Autoclave 121C	96 Hours	-	-	-	-	-	-	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	-	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	-	-	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	3/231/0	-
HTSL	High Temp. Storage Bake, 175C	500 Hours	-	-	-	-	-	-	-
TS	Thermal Shock-65/150C	500 Cycles	-	-	-	-	-	3/231/0	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-	-	3/231/0	-
WBS	Bond Shear	Wires	-	-	-	-	-	-	-
WBP	Bond Pull	Wires	-	-	-	-	-	-	-
SD	Solderability	Post 8 Hours Steam Age	-	-	-	-	-	3/66/0	-
PD	Physical Dimensions	--	-	-	-	-	-	3/15/0	-
LI	Lead Fatigue	Leads	-	-	-	-	-	3/66/0	-
LI	Lead Pull	Leads	-	-	-	-	-	3/66/0	-
HBM	ESD - HBM	2000 V	-	-	-	-	-	-	-
HBM	ESD - HBM	2500 V							
CDM	ESD - CDM	750 V	-	-	-	-	-	-	-
CDM	ESD - CDM	1000 V							
CDM	ESD – CDM	1500 V							
LU	Latch-up	(per JESD78)	-	-	-	-	-	-	-
ED	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	-	-	-	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass	-	-	-
WBS	Bond Strength	Wires	-	-	-	-	-	3/231/0	3/231/0
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

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
Japan	PCNJapanContact@list.ti.com