TEXAS INSTRUMENTS **12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

PCN# 20150603002
Qualification of ASEN as Additional Assembly Site for Select Devices
Change Notification / Sample Request

Date: 6/5/2015
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

20150603002
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
TPD4E05U06DQAR	null
TPD4EUSB30DQAR	null
TPD4S010DQAR	null

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

PCN Number:	20150603002	**PCN Date:**	06/05/2015
Title:	Qualification of ASEN as Additional Assembly Site for Select Devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	09/05/2015	**Estimated Sample Availability:**	Date Provided at Sample request

Change Type:

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

PCN Details

Description of Change:

Qualification of ASEN as Additional Assembly Site for Select Devices. Assembly differences are shown in the following table:

	JCET	ASEN
Mold Compound	SID# 120903005409	SID# 1800819111

Reason for Change:

Continuity of Supply

Anticipated impact on Form, Fit, 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

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC:
2Q:
G4
MSL 2 /260C/1 YEAR
MSL 1 /235C/UNLIM
SEAL DT
03/29/04
OPT:
ITEM:
39
LBL: 5A (L)TO: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: JCET = F, ASEN = J

Product Affected:

TPD4E05U06DQAR	TPD4EUSB30DQAR	TPD4S010DQAR

Qualification Report

ASEN DQA Package Qual using TPD4EUSB30DQAR

Product Attributes

Attributes	Qual Device: TPD4EUSB30DQAR	QBS Product Reference: TPD8S009DSM	QBS Product Reference: TPD8S009DSM	QBS Package Reference: TPD4E05U06DQAR
Assembly Site	ASEN	NSE	NSE	ASE
Package Family	SON	SON	SON	SON
Flammability Rating	UL 94 V-0	UL 94 V 0	UL 94 V 0	UL 94 V 0
Wafer Fab Supplier	FFAB	TID	TID	CFAB
Wafer Process	A3C10TP1/D9789	50b10.13	50b10.13	VDIODE

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260C: TPD4EUSB30DQAR, TPD4S010DQAR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPD4EUSB30DQAR	QBS Product Reference: TPD8S009DSM	QBS Product Reference: TPD8S009DSM	QBS Package Reference: TPD4E05U06DQAR
AC	Autoclave 121C	96 Hours	--	3/231/0	3/231/0	--
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass
ESD	ESD - IEC Air Gap	8000 V	--	1/3/0	1/3/0	--
ESD	ESD - IEC Contact	8000 V	--	1/3/0	1/3/0	--
FLAM	Flammability (IEC 695-2-2)	--	--	3/15/0	3/15/0	3/15/0
FLAM	Flammability (UL 94V-0)	--	--	3/15/0	3/15/0	3/15/0
FLAM	Flammability (UL-1694)	--	--	3/15/0	3/15/0	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0
HBM	ESD - HBM	2500 V	--	1/3/0	1/3/0	--
CDM	ESD - CDM	1500 V	--	1/3/0	1/3/0	--
HTOL	Life Test, 150C	300 Hours	3/231/0	3/348/0	3/348/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	--	3/231/0	3/231/0	--
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	3/231/0	3/231/0	3/231/0
LU	Latch-up	(per JESD78)	--	1/6/0	1/6/0	--
PD	Physical Dimensions	--	--	3/15/0	3/15/0	3/15/0
SD	Solderability	8 Hours Steam Age	--	3/66/0	3/66/0	--
SD	Surface Mount Solderability	Pb Free	--	--	--	3/66/0
TC	Temperature Cycle, -65/150C	500 cycles	3/231/0	3/231/0	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0	--	--	3/231/0
WBP	Bond Strength	Wires	3/228/0	--	--	3/228/0
WBP	Wire Pull	Wires	--	3/228/0	3/228/0	--
WBS	Ball Bond Shear	Wires	--	3/228/0	3/228/0	--

- 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

ASEN DQA Package Qual using TPD4E05U06DQAR

Product Attributes

Die Attributes	Qual Device: TPD4E05U06DQAR	QBS Product Reference: TPD4E110DPWR	QBS Product Reference: TPD4E05U06QDQARQ1	QBS Product Reference: TPD4E05U06DQAR
Assembly Site	ASE	JCET	HNT	JCET
Package Family	SON	SON	SON	SON
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	CFAB	HIJI	CFAB	HIJI
Wafer Process	VDIODE	VDIODE-ULC	VDIODE.ULC	VDIODE-ULC

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPD4E05U06DQAR	QBS Product Reference: TPD4E110DPWR	QBS Product Reference: TPD4E05U06QDQARQ1	QBS Product Reference: TPD4E05U06DQAR
-	High Temp Reverse Bias, 125C	1000 Hours	--	--	3/231/0	--
AC	Autoclave 121C	96 Hours	--	--	3/231/0	--
ED	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	--	--	3/75/0	--
ED	Electrical Characterization	Per Datasheet Parameters	Pass	--	--	Pass
FLAM	Flammability (IEC 695-2-2)	--	3/15/0	--	--	--
FLAM	Flammability (UL 94V-0)	--	3/15/0	--	--	--
FLAM	Flammability (UL-1694)	--	3/15/0	--	--	--
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	--	3/231/0	--
HBM	ESD - HBM	4000 V	--	1/3/0	1/10/0	
CDM	ESD - CDM	1500 V	--	--	1/10/0	1/3/0
HTOL	Life Test, 150C	300 Hours	3/231/0	--	--	--
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	--	--	3/253/0
PD	Physical Dimensions	--	3/15/0	--	3/30/0	3/15/0
SD	Surface Mount Solderability	Pb Free Solder	3/66/0	--	1/10/0	--
SD	Surface Mount Solderability	Pb Solder	--	--	1/10/0	--

SD	Solderability	8 Hours Steam Age	--	--	--	3/66/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	--	--	3/254/0
TC	Temperature Cycle, -55/150C	700 Cycles	--	--	3/231/0	--
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0	--	--	3/253/0
WBP	Bond Pull	Wires		--	1/10/0	3/228/0
WBP	Bond Strength	Wires	3/228/0	--		--
WBS	Bond Shear Cpk>1.33, Ppk>1.67	Wires	--	--	1/30/0	--

- 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