

PCN#20140930003A
Qualification of Amkor Philippines as an Additional Assembly
and Test location for Select Devices in the SOIC package
Change Notification / Sample Request

Date: 12/4/2014
To: MOUSER PCN

Dear Customer:

Revision A is to announce the addition of devices that were not included on the original PCN notification and the retraction of other devices that were included.

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
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

20140930003
Attachment: 1

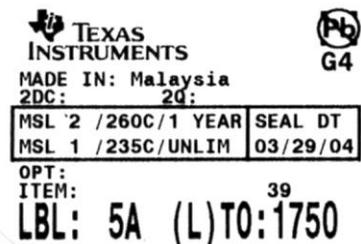
Products Affected:

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
TPS54227DDA	null
TPS54227DDAR	null
TPS54427DDA	null
TPS54427DDAR	null

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

PCN Number:	20140930003A			PCN Date:	12/04/2014									
Title:	Qualification of Amkor Philippines as an Additional Assembly and Test location for Select Devices in the SOIC package													
Customer Contact:	<u>PCN Manager</u>		Phone:	+1(214)480-6037										
Dept:	Quality Services													
Proposed 1st Ship Date:	03/04/2015		Estimated Sample Availability:	Date provided upon request										
Change Type:														
<input checked="" type="checkbox"/> Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials										
<input type="checkbox"/> Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification										
<input checked="" type="checkbox"/> Test Site	<input 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										
	<input type="checkbox"/>	Part number change												
PCN Details														
Description of Change:														
Revision A is to announce the <u>addition</u> of devices that were not included on the original PCN notification. The additional device are highlighted and bolded in the device list below. The expected first shipment date for these new devices will be 90 days from this notice for these newly added devices only. The retracted devices are highlighted bolded , and struck through in the device list below.														
Texas Instruments is pleased to announce the qualification of Amkor Philippines as an additional Assembly and Test location for the devices listed below. Assembly material differences are noted below:														
<table border="1"> <thead> <tr> <th></th> <th>ASEH</th> <th>Amkor Philippines</th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>SID#EY1000063</td> <td>SID#101374994</td> </tr> <tr> <td>Mold Compound</td> <td>SID#EN2000509</td> <td>SID#101379294</td> </tr> </tbody> </table>							ASEH	Amkor Philippines	Mount Compound	SID#EY1000063	SID#101374994	Mold Compound	SID#EN2000509	SID#101379294
	ASEH	Amkor Philippines												
Mount Compound	SID#EY1000063	SID#101374994												
Mold Compound	SID#EN2000509	SID#101379294												
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:														
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin (22L)</th> <th>ASO: ASH</th> </tr> </thead> <tbody> <tr> <td>ASE Shanghai</td> <td></td> <td></td> </tr> <tr> <td>AMKOR (AP1)</td> <td>Assembly Site Origin (22L)</td> <td>ASO: AKR</td> </tr> </tbody> </table>						Assembly Site	Assembly Site Origin (22L)	ASO: ASH	ASE Shanghai			AMKOR (AP1)	Assembly Site Origin (22L)	ASO: AKR
Assembly Site	Assembly Site Origin (22L)	ASO: ASH												
ASE Shanghai														
AMKOR (AP1)	Assembly Site Origin (22L)	ASO: AKR												
Sample product shipping label (not actual product label)														



(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY(1T) 7523483SI2
 (P)
 (2P) REV: (V) 0033317
 (20L) CS0: SHE (21L) CCO:USA
 (22L) AS0: MLA (23L) ACO: MYS

Topside Device marking:

Assembly site code for ASH= A

Assembly site code for AKR= 4

Product Affected

905X5433200	TPS54228DDA	TPS54332DDA	TPS54527DDAR
HPA01123DDAR	TPS54228DDAR	TPS54332DDAR	TPS54528DDA
SN1101004DDAR	TPS54229DDA	TPS54335DDA	TPS54528DDAR
SN1101005DDAR	TPS54229DDAR	TPS54335DDAR	TPS54627DDA
SN1106041DDAR	TPS54229EDDA	TPS54427DDA	TPS54627DDAR
SN1110024DDAR	TPS54229EDDAR	TPS54427DDAR	TPS54628DDA
SN1208017DDAR	TPS5432DDA	TPS54428DDA	TPS54628DDAR
SN54229EDDAR	TPS5432DDAR	TPS54428DDAR	TPS56628DDA
TPS54427DDA	TPS54332CDDA	TPS54527DDA	TPS56628DDAR
TPS54427DDAR	TPS54332CDDAR		

Qualification Report

Amkor: Qualify Amkor Assembly (AP1) with 101379294 mold compound, 101374994 mount compound + Cu wire (2.0 MIL) on PWR DCS SOIC devices with BOAC

Approval 09/18/2014

Product Attributes

Attributes	Qual Device: TPS54327DDA	Qual Device: TPS54627DDA
Assembly Site	AMKOR AP1	AMKOR AP1
Package Family	SOIC	SOIC
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Site	RFAB	RFAB
Wafer Fab Process	LBC7	LBC7

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL2-260C: TPS54327DDA, TPS54627DDA

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS54327DDA	Qual Device: TPS54627DDA
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	3/231/0	-
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0
TC-BP	Auto Post Temp. Cycle Bond Pull	per MIL-STD 883 Method 2011	3/15/0	3/15/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/229/0	-
ED	Electrical Characterization.	Per Datasheet Parameters	1/30/0	-
FLAM	Flammability (UL 94V-0)	--	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