



**PCN#20140303000C**  
**Qualification of Amkor Philippines as Alternate Assembly/Test site**  
**for select PQFN Devices**  
**Change Notification / Sample Request**

**Date:** 2/9/2015  
**To:** MOUSER PCN

Dear Customer:

**Revision C** is to announce the retraction of the CSD16401Q5.

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](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

PCN Team  
SC Business Services

**20140303000C**

**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
CSD16401Q5	null

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

<b>PCN Number:</b>	20140303000C			<b>PCN Date:</b>	02/09/2015																		
<b>Title:</b>	Qualification of Amkor Philippines as Alternate Assembly/Test site for select PQFN Devices																						
<b>Customer Contact:</b>	PCN Manager	<b>Dept:</b>	Quality Services																				
<b>Proposed 1<sup>st</sup> Ship Date:</b>	06/05/2014	<b>Estimated Sample Availability:</b>	03/05/2014																				
<b>Change Type:</b>																							
<input checked="" type="checkbox"/> Assembly Site	<input type="checkbox"/>	Assembly Process	<input 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																					
<b>PCN Details</b>																							
<b>Description of Change:</b>																							
<p><b>Revision C</b> is to announce the retraction of the CSD16401Q5. This affected device is identified with a strikethrough and is highlighted in yellow in the Product Affected Section. The other devices listed below with a strikethrough were retracted on Revision A and Revision B of PCN201403003000.</p>																							
<p>Amkor Philippines is being qualified as an additional Assembly/Test site for the devices listed below. There are no BOM differences between devices assembled at Amkor Philippines versus the current Assembly site.</p>																							
<b>Reason for Change:</b>																							
Continuity of Supply																							
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>																							
None																							
<b>Changes to product identification resulting from this PCN:</b>																							
<table border="1"> <tr> <td colspan="2">Assembly Site</td> <td colspan="2">Assembly Site Origin (22L)</td> <td colspan="2">ASO: PAC</td> </tr> <tr> <td>PSI</td> <td></td> <td>Assembly Site Origin (22L)</td> <td></td> <td>ASO: AP3</td> <td></td> </tr> <tr> <td colspan="2">Amkor Philippines</td> <td colspan="2"></td> <td colspan="2"></td> </tr> </table>						Assembly Site		Assembly Site Origin (22L)		ASO: PAC		PSI		Assembly Site Origin (22L)		ASO: AP3		Amkor Philippines					
Assembly Site		Assembly Site Origin (22L)		ASO: PAC																			
PSI		Assembly Site Origin (22L)		ASO: AP3																			
Amkor Philippines																							
<p>Sample product shipping label (not actual product label)</p> <div style="display: flex; align-items: center;"> <div style="flex: 1;">  <b>TEXAS INSTRUMENTS</b>  MADE IN: Malaysia  2DC: 20;  <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td>MSL 2 / 260C/1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 / 235C/UNLIM</td> <td>03/29/04</td> </tr> </table> OPT:  ITEM: 39  <b>LBL: 5A (L)T0:1750</b> </div> <div style="flex: 1; text-align: center;">  <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(1P) SN74LS07NSR</span> <span>(Q) 2000</span> <span>(D) 0336</span> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(31T) LOT: 3959047MLA</span> <span>(4W) TKY(1T) 7523483SI2</span> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(P)</span> <span>(2P) REV: (V) 0033317</span> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(20L) CSO: SHE</span> <span>(21L) CCO:USA</span> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(22L) ASO:MLA</span> <span>(23L) ACO: MYS</span> </div> </div> </div>						MSL 2 / 260C/1 YEAR	SEAL DT	MSL 1 / 235C/UNLIM	03/29/04														
MSL 2 / 260C/1 YEAR	SEAL DT																						
MSL 1 / 235C/UNLIM	03/29/04																						
<p><b>Topside Device marking:</b>  Assembly site code for PAC= E  Assembly site code for AP3= 3</p>																							

<b>Product Affected</b>			
CSD16321Q5	CSD16407Q5	CSD17304Q3	CSD18502Q5B
CSD16322Q5	CSD16408Q5	CSD17308Q3	<b>CSD25401Q3</b>
CSD16323Q3	CSD16409Q3	CSD17309Q3	<b>CSD58887Q3</b>
CSD16325Q5	CSD16411Q3	CSD17311Q5	<b>CSD86330Q3D</b>
CSD16327Q3	CSD16414Q5	CSD17312Q5	<b>CSD95372BQ5MC</b>
<b>CSD16401Q5</b>	CSD16415Q5	CSD17559Q5	<b>CSD95373BQ5MC</b>
CSD16406Q3	CSD17303Q5		

### **Qualification Data – Approved February, 2014**

This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

#### **Qual Vehicle#1: CSD16323Q3 (MSL 1-260C)**

##### Package Construction Details

Assembly Site:	AK3	Mold Compound:	SID#202828
# Pins-Designator, Family:	8-DQG, VSON	Mount Solder:	SID#200757
Lead Finish	Matte Sn	Bond Wire:	2mil, Au

##### **Qualification: Plan Test Results**

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Autoclave	121°C/100% RH (96 Hrs)	77/0	77/0	77/0
**T/C -40C/125C	-40C/+125C (1000 Cyc)	77/0	77/0	77/0
**THB	85°C/85%R.H./80% Rated Vds (1000 Hrs)	77/0	77/0	77/0
HTRB	150°C/80% Rated Vds (1000 hrs)	77/0	77/0	77/0
HTGB	150°C/80% Rated Vgs (1000 hrs)	77/0	77/0	77/0
Intermittent Op Life	Delta T <sub>j</sub> = 100°C 2 min on/2 min off (10K Cyc)	77/0	77/0	77/0

Notes \*\*- Preconditioning sequence: Level 1-260C.

### **Qualification Data – Approved February, 2014**

This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

#### **Qual Vehicle#1: CSD17312Q5 (MSL 1-260C)**

##### Package Construction Details

Assembly Site:	AK3	Mold Compound:	SID#202828
# Pins-Designator, Family:	8-DQH, VSON	Mount Solder:	SID#200757
Lead Finish	Matte Sn	Bond Wire:	2mil, Au

##### **Qualification: Plan Test Results**

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Autoclave	121°C/100% RH (96 Hrs)	77/0	77/0	77/0
**T/C -40C/125C	-40C/+125C (1000 Cyc)	77/0	77/0	77/0
**THB	85°C/85%R.H./80% Rated Vds (1000 Hrs)	77/0	77/0	77/0
HTRB	150°C/80% Rated Vds (1000 hrs)	77/0	77/0	77/0
HTGB	150°C/80% Rated Vgs (1000 hrs)	77/0	77/0	77/0
Intermittent Op Life	Delta T <sub>j</sub> = 100°C 2 min on/2 min off (10K Cyc)	77/0	77/0	77/0

Notes \*\*- Preconditioning sequence: Level 1-260C.

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

<b>Location</b>	<b>E-Mail</b>
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>