



**PCN# 20131218001**  
**Qualification of Alternate Assembly site for select WCSP devices**  
**Change Notification / Sample Request**

**Date:** 12/30/2013

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

Sincerely,

PCN Team  
SC Business Services  
Phone: +1(214) 480-6037  
Fax: +1(214) 480-6659

**20131218001**  
**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>
TCA6418EYFPR	null
TPS22906YZVR	null
TPS22921YZPR	null
TPS22946YZPR	null

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

<b>PCN Number:</b>	20131218001			<b>PCN Date:</b>	12/30/2013
<b>Title:</b>	Qualification of Alternate Assembly site for select WCSP devices				
<b>Customer Contact:</b>	PCN Manager	<b>Phone:</b>	+1(214)480-6037	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	03/30/2014	<b>Estimated Sample Availability:</b>	12/30/2013		
<b>Change Type:</b>					
<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 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>					
Texas Instruments is pleased to announce the qualification of JCAP as an alternate assembly site for the devices listed below. There is no material or dimensional differences between devices assembled at the 2 sites.					
<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>Assembly Site</td> <td colspan="2">Assembly Site Origin (22L)</td> <td colspan="3">ASO: STS</td> </tr> <tr> <td>STATS ChipPAC (SCS)</td> <td colspan="2">Assembly Site Origin (22L)</td> <td colspan="3">ASO: JCP</td> </tr> <tr> <td>JCAP</td> <td colspan="2"></td> <td colspan="3"></td> </tr> </table>						Assembly Site	Assembly Site Origin (22L)		ASO: STS			STATS ChipPAC (SCS)	Assembly Site Origin (22L)		ASO: JCP			JCAP					
Assembly Site	Assembly Site Origin (22L)		ASO: STS																				
STATS ChipPAC (SCS)	Assembly Site Origin (22L)		ASO: JCP																				
JCAP																							
Sample product shipping label (not actual product label)																							
 <b>TEXAS INSTRUMENTS</b> MADE IN: Malaysia 2Q: 2DC: MSL 2 / 260C/1 YEAR SEAL DT MSL 1 / 235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750			(1P) SN74LS07NSR (2Q) 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																				
<b>Topside Device marking:</b> Assembly site code for STS= G Assembly site code for JCP= P																							

<b>Product Affected</b>			
TCA6418EYFPR	TCA8418EYFPR	TPS22906YZVR	TPS22921YZPR
TPS22946YZPR			

### **Qualification Data: (Approved: June 2009)**

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

#### **Qualification Device: CD3239 (MSL 1-260C)**

##### **Package / Die Attributes**

Assembly Site & Bump Site:	JCAP	Bump Composition:	SnAgCu
# Pins-Designator, Family:	25-YFP, DSBGA	Bump Diameter:	0.23mm
Passivation/Coating:	MA21009085		

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

Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
**Steady-state Life Test	150C (168, 300 Hrs)	116/0	115/0	116/0
**High Temp. Storage Bake	150C (500, 1000 Hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Unbiased HAST	130C/85%RH/33.3 psia (96 Hrs)	77/0	77/0	77/0
**T/C -55C/125C	121C (96 Hrs)	77/0	77/0	77/0
**Temp Cycle	-55C/+125C (500, 1000 Cyc)	77/0	77/0	77/0
Visual Mechanical	Per Manufacturing Specifications	Pass	Pass	Pass
Physical Dimensions	(per mechanical drawing)	Pass	Pass	Pass
**Preconditioning: MSL1@260C				

### **Reference Qualification Data: (Approved: June 2010)**

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

#### **Qualification Device: TPS22934YZVR (MSL 1-260C)**

##### **Package Construction Details**

Assembly Site & Bump Site:	JCAP	Bump Composition:	SnAgCu
# Pins-Designator, Family:	4-YZV, DSBGA	Bump Diameter:	0.225mm
Passivation/Coating:	MA21009085		

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

Reliability Test	Conditions	Sample Size / Fail
Visual Mechanical	Per Manufacturing Specifications	Pass
Physical Dimensions	(per mechanical drawing)	Pass
Bump-shear	(per mfg. Site specification)	Pass
Notes: **Tests require preconditioning sequence: MSL1-260C		

## **Reference Qualification Data: (Approved: April 2008)**

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

### **Qualification Device: TS3DS26227YZT (MSL 1-260C)**

#### **Package / Die Attributes**

Assembly Site & Bump Site:	JCAP	Bump Composition:	SnAgCu
# Pins-Designator, Family:	12-YZT, DSBGA	Bump Diameter:	0.225mm
Passivation/Coating:	MA21009085		

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

Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
**Steady-state Life Test	150C (168, 300 Hrs)	116/0	116/0	116/0
**High Temp. Storage Bake	170C (168, 420hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Unbiased HAST	130C/85%RH/33.3 psia (96 Hrs)	77/0	77/0	77/0
**T/C -55C/125C	-55C/+125C (500, 1000 Cyc)	77/0	77/0	77/0
Visual Mechanical	Per Manufacturing Specifications	Pass	Pass	Pass
Solderability	Steam age, 8 hours	Pass	Pass	Pass
Physical Dimensions	(per mechanical drawing)	Pass	Pass	Pass
Bump-shear	(per mfg. Site specification)	Pass	Pass	Pass
**Preconditioning: MSL1@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>