

<b>PCN Number:</b>	20130708001		<b>PCN Date:</b>	07/15/2013	
<b>Title:</b>	Qualification of JCAP as an Additional Assembly, Bump, and Test site for Select Devices on WCSP Package				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	10/15/2013	<b>Estimated Sample Availability:</b>	Date Provided at Sample request		
<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 checked="" 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
<b>PCN Details</b>					
<b>Description of Change:</b>					
Qualification of JCAP as an Additional Assembly, Bump, and Test site for Select Devices on WCSP Package. Assembly differences are shown in the following table:					
<b>Group 1 Device: Current Assembly – TI Clark</b>					
		<b>Clark-AT</b>		<b>JCAP-AT</b>	
<b>Bump Site</b>		Clark-BP		JCAP-FAB	
<b>Solder Ball</b>		4207848		MA22008110	
<b>Group 2 Device: Current Assembly – SCSAT</b>					
		<b>SCS-AT</b>		<b>JCAP-AT</b>	
<b>Bump Site</b>		SCS-BP		JCAP-FAB	
<b>Solder Ball</b>		014461D		MA22008110	
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.					
<b>Reason for Change:</b>					
Continuity of supply.					
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>					
None					

**Changes to product identification resulting from this PCN:**

Assembly Site		
SCS-AT	Assembly Site Origin (22L)	ASO: STS
Clark-AT	Assembly Site Origin (22L)	ASO: QAB
JCAP-AT	Assembly Site Origin (22L)	ASO: JCP

**Sample product shipping label to show code location only - not actual product label**



Assembly Site Code: Clark-AT=I, JCAP-AT=P

**Product Affected:**

**Group 1 Device: Current Assembly – TI Clark**

TPS22908YZTR	TPS22908YZTT
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**Group 2 Device: Current Assembly – SCSAT**

TPS22903YFPR	TPS22904YFPR	TPS22904YFPT	TS5A12301EYFPR
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**Qualification Data – Group 1 Device**

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.

**Qual Vehicle : TS3DS26227YZT (MSL1-260C)**

**Package Construction Details**

<b>Assembly &amp; Bump Site:</b>	JCAP	<b>Bump Composition:</b>	SnAgCu
<b># Pins-Designator, Family:</b>	12-YZT, WCSP/DSBGA	<b>Bump Diameter:</b>	0.25mm

**Qualification:**  Plan  Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot 1	Lot 2	Lot 3
**Steady-state Life Test	150C (300 Hrs)	116/0	116/0	116/0
**High Temp. Storage Bake	170C (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 (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-55C/+125C (1000 Cyc)	77/0	77/0	77/0
Manufacturability (Assembly)	(per mfg site specifications)	Pass	Pass	Pass
Moisture Sensitivity	MSL1-260C	12/0	12/0	12/0
** Moisture Preconditioning (MSL1-260C)				

## Qualification Data – Group 2 Device

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.				
<b>Qual Vehicle : CD3239 (MSL1-260C)</b>				
<b>Package Construction Details</b>				
<b>Assembly &amp; Bump Site:</b>	JCAP	<b>Bump Composition:</b>	SnAgCu	
<b># Pins-Designator, Family:</b>	25-YFP, WCSP/DSBGA	<b>Bump Diameter:</b>	0.25mm	
<b>Qualification:</b> <input type="checkbox"/> <b>Plan</b> <input checked="" type="checkbox"/> <b>Test Results</b>				
Reliability Test	Conditions	Sample Size/Fail		
		Lot 1	Lot 2	Lot 3
**Steady-state Life Test	150C (300 Hrs)	116/0	116/0	116/0
**High Temp. Storage Bake	150C (1000hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Unbiased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-55C/+125C (1000 Cyc)	77/0	77/0	77/0
Manufacturability (Assembly)	(per mfg site specifications)	Pass	Pass	Pass
Moisture Sensitivity	MSL1-260C	12/0	12/0	12/0
** Moisture 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.

Location	E-Mail
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>