



PCN Number:	20150318001		PCN Date:	03/19/2015	
Title:	Qualification of JCAP China as an alternate Bump, Assembly, and Test Site for select WCSP Devices				
Customer Contact:	PCN Manager	Dept:	Quality Services		
Proposed 1st Ship Date:	06/19/2015	Estimated Sample Availability:	Date provided upon request		
Change Type:					
<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		
PCN Details					
Description of Change:					
<p>Texas Instruments is pleased to announce the qualification of JCAP China as an alternate Bump, Assembly, and Test site for the devices shown below. The material set will be the same between the 2 sites.</p> <p>Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.</p>					
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:						
Assembly Site						
Amkor Taiwan	Assembly Site Origin (22L)	ASO: AM3				
JCAP China	Assembly Site Origin (22L)	ASO: JCP				
Sample product shipping label (not actual product label)						
 <p>MADE IN: Malaysia 2DC: 20:</p> <table border="1"> <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> <p>OPT: ITEM: 39 LBL: 5A (L)T0:1750</p>	MSL 2 /260C/1 YEAR	SEAL DT	MSL 1 /235C/UNLIM	03/29/04		<p>(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</p>
MSL 2 /260C/1 YEAR	SEAL DT					
MSL 1 /235C/UNLIM	03/29/04					
Topside Device marking:						
Assembly site code for AM3= 3						
Assembly site code for JCP= C						

Product Affected

OPA2347YZDR	OPA2347YZDT	TMP106YZCR	TMP106YZCT
-------------	-------------	------------	------------



TI Information
Selective Disclosure

Qualification Report

Offload of the OPA2347YZD 150mm WCSP from Amkor K4 to JCAP
turnkey
Approved 02/16/2015

Product Attributes

Attributes	Qual Device: OPA2347YZD	QBS Product: OPA2347YED	QBS Process: TMP105YZC	QBS Package: CD3239
Assembly Site	JCAP	UEI-NC	JCAP	JCAP
Package Family	DSBGA	DSBGA	DSBGA	DSBGA
Flammability Rating	UL94V-0	UL-94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	TSMC	TSMC	TSMC	DMOS5
Wafer Fab Process	0.6um DPDM	0.6um DPDM	0.5um DPTM	50HPA07HV

- QBS: Qual By Similarity
- Qual Device OPA2347YZD is qualified at L1, 260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: OPA2347YZD	QBS Product: OPA2347YED	QBS Process: TMP105YZC	QBS Package: CD3239
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	-	3/231/0	-	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0	-	3/231/0	3/231/0
TC	Temperature Cycle, -40/125C	500 Cycles	-	3/230/0	-	-
TC	Temperature Cycle, -55/125C	700 Cycles	3/231/0	-	3/230/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/135/0	3/221/0	-
HTOL	Life Test, 150C	300 Hours	-	3/231/0	3/230/0	3/231/0
PD	Physical Dimensions	Per Mechanical drawing	-	-	-	3/15/0
HBM	ESD HBM	2000 V	-	1/3/0	1/3/0	-
CDM	ESD CDM	1000 V	-	1/3/0	1/3/0	-
LU	Latch-up	(per JESD78)	-	1/6/0	1/6/0	-
ED	Electrical Characterization	Per Datasheet Parameters	-	3/30/0	-	-
SBS	Bump Shear	Unstressed (50 bumps)	3/150/0	-	3/150/0	-

- 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