PCN Number: 201		201	0150318001			PCN Dat	PCN Date: 03/19/201				
Title: Qualification of JCAP China as an alternate Bump, Assembly, and Test Site for select WCSP Devices											
Customer Contact:			Manager		Dept:	Quality Services					
Proposed 1 st Ship Date:		D	06/	19/2015	Estim	imated Sample Availab		ailability:		Date provided upon request	
Change Type:											
Assembly Site		е		Assembly Process			Assembly Materials				
Design				Electrical Specification			Mechanical Specification				
Test Site				Packing/Shipping/Labeling Te			Test Process	Test Process			
Wafer Bump Site				Wafer Bump Material				Wafer Bump Process			
Wafer Fab Site			Wafer Fab Materials		Wafer Fab Process						
				Part number change							
PCN Details											

Description of Change:

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.

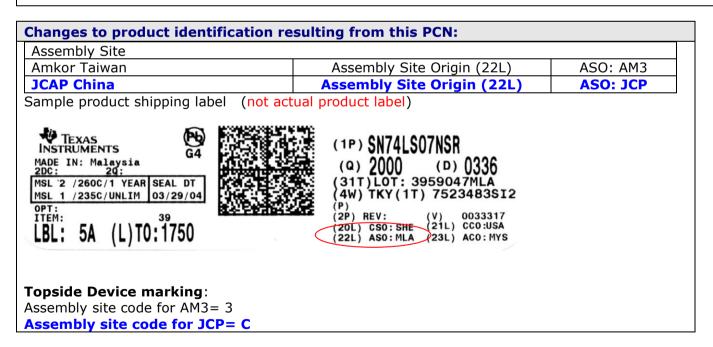
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.

Reason for Change:

Continuity of Supply

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None



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	ssembly Site JCAP		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 OPA2347IYZD is qualified at L1, 260C

Qualification Results

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

Туре	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
тс	Temperature Cycle, - 40/125C	500 Cycles	-	3/230/0	-	-
тс	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
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