

PCN Number: 20150227000 **PCN Date:** 03/02/2015

Title: Qualification of TI Clark as an Alternate Assembly Site with Cu Bond wire for select QFN Devices

Customer Contact: [PCN Manager](#) **Dept:** Quality Services

Proposed 1st Ship Date: 06/02/2015 **Estimated Sample Availability:** Provided upon Request

Change Type:

<input checked="" type="checkbox"/>	Assembly Site	<input checked="" 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		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of TI Clark as an alternate Assembly site for select devices in the QFN package. Construction differences between devices assembled at the existing and new site are noted below:

	TI Malaysia	TI Clark
Mount Compound	4205846	4207768
Bond Wire Composition/Diameter	Au, 0.96 mils	Cu, 0.8 mils

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		
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA
TI Clark	Assembly Site Origin (22L)	ASO: QAB

Sample product shipping label (not actual product label)

Topside Device marking:

Assembly site code for MLA= K
Assembly site code for QAB= I

Product Affected				
CDCL1810ARGZR	CDCL1810RGZRG4	CDCL1810RGZTG4	CDCL6010RGZRG4	
CDCL1810ARGZT	CDCL1810RGZT	CDCL6010RGZR	CDCL6010RGZT	
CDCL1810RGZR				



TI Information
Selective Disclosure

Qualification Report

CDCL6010RGZ: Cu wire
qualification
Approved 01/20/2015

Product Attributes

Attributes	Qual Device: CDCL6010RGZ	QBS Product: CDCL6010RGZ	QBS Process: THS4302RGT	QBS Process: ADS6442IRGC	QBS Package: SN1108041RHR
Assembly Site	TI_CLARK	MLA	CAR	MLA	CLARK-AT
Package Family	QFN	QFN	QFN	QFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	DMOS5	DMOS5	FFAB	DMOS5	RFAB
Wafer Fab Process	1833C05	1833C05	BICOM3X	1833C05	1833C05.25.LRKD

- QBS: Qual By Similarity
- Qual Device CDCL6010RGZ is qualified at LEVEL3-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: CDCL6010RGZ	QBS Product: CDCL6010RGZ	QBS Process: THS4302RGT	QBS Process: ADS6442IRGC	QBS Package: SN1108041RHR
AC	Autoclave 121C	96 Hours	1/77/0	-		1/77/0	1/77/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	1/77/0	-	3/78/0		-
HAST	Biased HAST, 130C/85%RH	96 Hours				1/77/0	
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	3/78/0	1/77/0	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	1/77/0	-	3/78/0	1/77/0	-
TS	Thermal Shock - 65/150C	500 Cycles			3/78/0	1/77/0	
HTOL	Life Test, 125C	1000 Hours			3/120/0	1/77/0	
WBS	Ball Bond Shear	Wires	-	-			1/76/0
WBP	Bond Pull	Wires	-	-			1/76/0
HBM	ESD - HBM	2000 V	1/6/0	1/3/0			-
CDM	ESD - CDM	1000 V	1/3/0	-			-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0			-
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass			Pass

- 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.

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USA	PCNAmericasContact@list.ti.com
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