

PCN Number:	20140826000	PCN Date:	09/02/2014
Title:	Qualification of RFAB and TI Clark as Additional Fab Site and Assembly/Test Site Options for select DRV2603 devices		
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037
Dept:	Quality Services		
*Proposed 1st Ship Date:	12/02/2014	Estimated Sample Availability:	Date Provided at Sample request
Change Type:			
<input checked="" type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<input type="checkbox"/>	Part number change
PCN Details			
Description of Change:			
<p>This change notification is to announce the addition of RFAB and TI Clark as additional Fab site and Assembly/Test site options for select DRV2603 devices. The affected devices are listed in the Product Affected Section.</p>			
Fab Site:			
Current Site/Process/Wafer Diameter		Additional Site/Process/Wafer Diameter	
UMC-F8E/LBC8 Process/200mm		RFAB/LBC8 Process/300mm	
Assembly Site: There are no material set differences between MLA and TI-Clark. Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.			
Reason for Change:			
Continuity of supply.			
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):			
None			

Changes to product identification resulting from this PCN:

Fab Site

Current Chip Site	Chip Site Code (20L)	Chip Country Code (21 L)
UMC-F8E	CSO: U8E	JPN
New Chip Site	Chip Site Code (20L)	Chip Country Code (21 L)
RFAB	CSO: RFB	USA

Assembly Site

Current Assembly Site		
MLA	Assembly Site Origin (22L)	ASO: MYS
Clark-AT	Assembly Site Origin (22L)	ASO: QAB

Sample Product Shipping Label (not actual product label)

 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2Q:	 G4		(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
MSL '2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750			

ASSEMBLY SITE CODES: TI CLARK =I

Product Affected Devices

DRV2603CRUNR	DRV2603RUNR	DRV2603RUNT	DRV2603V1RUNR
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Qualification Report

New LBC8LV fab components in RFAB

Approved 09/17/2013

Attributes	Qual Device: DRV2603RUN	QBS Process: SH8350BCA0PAPG4_TIPI
Assembly Site	CLARK-AT	PHI
Package Family	QFN	TQFP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	RFAB
Wafer Fab Process	LBC8LV	LBC8LV

- QBS: Qual By Similarity
- Qual Device DRV2603RUN is qualified at LEVEL2-260C

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

Type	Test Name / Condition	Duration	Qual Device: DRV2603RUN	QBS Process: SH8350BCA0PAPG4_TIP1
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
AC	Autoclave 121C	96 Hours	-	3/231/0
TC	Temperature Cycle - 65/150C	500 Cycles	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	3/231/0
HTOL	Life Test, 125C	1000 Hours	-	3/224/0
HTOL	Life Test, 140C	480 Hours	3/231/0	-
HBM	ESD - HBM	1000 V	3/9/0	3/15/0
CDM	ESD - CDM	250 V	3/9/0	3/15/0
LU	Latch-up	(per JESD78)	3/18/0	3/24/0
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

Qualification Report

B-Stage Epoxy Ablestik 8006NS Enterprise Qual for QFN/SON package in Clark for DRV2603RUNR

Attributes	Qual Device: DRV2603RUNR	Qual Device: TPS71745DSER
Assembly Site	CLARK AT	CLARK AT
Package Family	WQFN	WSON
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	MIHO 8
Wafer Fab Process	LBC8LV	LBC7

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: DRV2603RUNR	Qual Device: TPS71745DSER
HAST	Biased HAST, 130C/85%RH	96 Hours	-	2/153/0
AC	Autoclave 121C	96 Hours	3/231/0	-
TC	Temperature Cycle, -65/+150C	500 Cycles	3/231/0	-
HTSL	High Temp Storage Bake, 150C	1000 Hours	3/231/0	-
MQ	Manufacturability	(per mfg. Site specification)	Pass	-
MSL	Thermal Path Integrity	Level 2 @ 260C	1/12/0	-
MSL	Moisture Sensitivity Level	Level 1 @ 260C	-	-
VM	Visual Quality Reliability Inspection	Pre-Stress	3/6/0	-
VM	Visual Quality Reliability Inspection	Post Temp Cycle	3/6/0	-

- 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