



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20180626000.1
Qualification of NFME as additional
Assembly and Test Site for the DRV5013ADQDBZT
Change Notification / Sample Request

Date: June 26, 2018
To: PREMIER FARNELL PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20180626000.1
Attachment: 1




Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
DRV5013ADQDBZT	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20180626000.1		PCN Date:	June 26, 2018												
Title:	Qualification of NFME as additional Assembly and Test Site for the DRV5013ADQDBZT															
Customer Contact:	PCN Manager	Dept:	Quality Services													
Proposed 1st Ship Date:	Sept 26, 2018	Estimated Sample Availability:	Date provided at sample request													
Change Type:																
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site											
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material											
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process											
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site											
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials											
				<input type="checkbox"/>	Wafer Fab Process											
PCN Details																
Description of Change:																
Texas Instruments is pleased to announce the Qualification of NFME as additional Assembly and Test Site for the DRV5013ADQDBZT. Construction differences are noted below:																
<table border="1"> <thead> <tr> <th></th> <th>HANA</th> <th>NFME</th> </tr> </thead> <tbody> <tr> <td>Mount compound</td> <td>400180</td> <td>A-03</td> </tr> <tr> <td>Mold compound</td> <td>450179</td> <td>R-27</td> </tr> <tr> <td>Bond wire, diameter</td> <td>Au, 1.0 mil</td> <td>Au, 0.8 mil</td> </tr> </tbody> </table>						HANA	NFME	Mount compound	400180	A-03	Mold compound	450179	R-27	Bond wire, diameter	Au, 1.0 mil	Au, 0.8 mil
	HANA	NFME														
Mount compound	400180	A-03														
Mold compound	450179	R-27														
Bond wire, diameter	Au, 1.0 mil	Au, 0.8 mil														
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																
Anticipated impact on Material Declaration																
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI Eco-Info website . There is no impact to the material meeting current regulatory compliance requirements with this PCN change.													
Changes to product identification resulting from this PCN:																
Assembly Site Information:																
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City													
HANA	HNT	THA	Ayutthaya													
NFME	NFM	CHN	Chongchuan													
Sample product shipping label (not actual product label)																

 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2Q: MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750	 	(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
Product Affected: Group 1		
DRV5013ADQDBZT		

Qualification Report

Qualify Second Source Assembly Site for 3DBZ Package for MDBU Hall Sensors

Approve Date 21-Jun-2017

Product Attributes

Attributes	Qual Device: DRV5013ADQDBZR	QBS Product Reference: DRV5013ADQDBZ	QBS Process Reference: SN84002PAP	QBS Package Reference: LM4040C50IDBZR	QBS Package Reference: LM4040D30IDBZR	QBS Package Reference: TLV431AIDBZR
Assembly Site	NFM-NANTONG FUJITSU	HANA THAILAND	TITL	NFME	NFME	NFME
Package Family	SOT23 (DBZ); 1.3 X 2.92 MM	SOT	HTQFP	SOT	SOT	SOT
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	DMS5	DM5	SFAB	SFAB	SFAB
Wafer Process	LBC8	LBC8	LBC8	J12	J12	O1

- QBS: Qual By Similarity
- Qual Device DRV5013ADQDBZR is qualified at LEVEL1-260CG

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: DRV5013ADQDBZR	QBS Product Reference: DRV5013ADQDBZ	QBS Process Reference: SN84002PAP
AC	Autoclave 121C	96 Hours	3/231/0	-	3/231/0
ED	Electrical Characterization	Per Datasheet	-	1/30/0	1/30/0

		Parameters			
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	3/2400/0
FLAM	Flammability (IEC 695-2-2)	--	-	-	-
FLAM	Flammability (UL 94V-0)	--	-	-	-
FLAM	Flammability (UL-1694)	--	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	3/231/0
HBM	ESD - HBM	1500 V	-	1/3/0	-
CDM	ESD - CDM	1500 V	-	1/3/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	-	-
LI	Lead Fatigue	Leads	-	-	-
LI	Lead Pull to Destruction	Leads	-	-	-
LU	Latch-up	(per JESD78)	-	1/18/0	1/6/0
PD	Physical Dimensions	--	3/30/0	-	-
SD	Solderability	Pb-Free	3/66/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	1/77/0	3/231/0
WBP	Bond Strength	Wires	-	-	-
WBS	Ball Bond Shear	Wires	-	-	-

Type	Test Name / Condition	Duration	QBS Package Reference: LM4040C50IDBZR	QBS Package Reference: LM4040D30IDBZR	QBS Package Reference: TLV431AIDBZR
AC	Autoclave 121C	96 Hours	1/77/0	1/77/0	1/77/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-
FLAM	Flammability (IEC 695-2-2)	--	1/5/0	1/5/0	1/5/0
FLAM	Flammability (UL 94V-0)	--	1/5/0	1/5/0	1/5/0
FLAM	Flammability (UL-1694)	--	1/5/0	1/5/0	1/5/0
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	1/77/0	1/77/0
HBM	ESD - HBM	1500 V	-	-	-
CDM	ESD - CDM	1500 V	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-
HTOL	Life Test, 150C	300 Hours	1/77/0	1/77/0	1/77/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	1/77/0	1/77/0	1/77/0
LI	Lead Fatigue	Leads	1/22/0	1/22/0	1/22/0

LI	Lead Pull to Destruction	Leads	1/22/0	1/22/0	1/22/0
LU	Latch-up	(per JESD78)	-	-	-
PD	Physical Dimensions	--	1/5/0	1/5/0	1/5/0
SD	Solderability	Pb-Free	1/22/0	1/22/0	1/22/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	1/77/0
WBP	Bond Strength	Wires	1/76/0	1/76/0	1/76/0
WBS	Ball Bond Shear	Wires	1/76/0	1/76/0	1/76/0

- 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