

PCN Number:	20220722001.1A		PCN Date:	July 28, 2022						
Title:	Qualification of new Process Technology and Die Change for select DRV5013 devices									
Customer Contact:	PCN Manager		Dept:	Quality Services						
Proposed 1st Ship Date:	Oct 22, 2022	Sample requests accepted until:	August 22, 2022*							
*Sample requests received after August 22, 2022 will not be supported.										
Change Type:										
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials					
<input checked="" 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 checked="" type="checkbox"/>	Wafer Fab Process					
		<input type="checkbox"/>	Part number change							
Notification Details										
Description of Change:										
<p>Revision A is to announce the <u>addition</u> of three new devices that were not included in the original PCN notification. The new devices are highlighted in yellow and bolded in the product affected section below. For these newly added devices ONLY, the expected first shipment date for the new devices will be 90 days from the date of this notice, and sample requests will be accepted until 30 days from the date of this notice.</p> <p>The proposed 1st ship date of October 22, 2022 still applies for the original set of devices.</p> <p>Texas Instruments is pleased to announce the qualification of a new process technology (LBC9) in RFAB and die change as listed below in the product affected section.</p>										
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">Fab Site</th> <th style="width: 33%;">Current Process Technology</th> <th style="width: 33%;">New Process Technology</th> </tr> </thead> <tbody> <tr> <td>RFAB</td> <td>LBC8</td> <td>LBC9</td> </tr> </tbody> </table>					Fab Site	Current Process Technology	New Process Technology	RFAB	LBC8	LBC9
Fab Site	Current Process Technology	New Process Technology								
RFAB	LBC8	LBC9								
<p>In support of the qualification of the new process technology, the devices will undergo a die change.</p> <p>Qual details are provided in the Qual Data Section.</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:										
The Die Revision will change as shown in the table and sample label below:										
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 50%;">Current</th> <th style="width: 50%;">New</th> </tr> </thead> <tbody> <tr> <td>Die Rev [2P]</td> <td>Die Rev [2P]</td> </tr> <tr> <td>A1</td> <td>B</td> </tr> </tbody> </table>					Current	New	Die Rev [2P]	Die Rev [2P]	A1	B
Current	New									
Die Rev [2P]	Die Rev [2P]									
A1	B									
Sample product shipping label (not actual product label)										



MADE IN: Malaysia
2DC: 20:



(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) TO: 1750

Product Affected:

DRV5013ADQDBZR	DRV5013ADQDBZT	DRV5013AGQDBZR	DRV5013AGQDBZT
DRV5013FAQDBZR			

Qualification Report
Approve Date 22-July-2022

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

Type	#	Test Name	Condition	Duration	Qual Device: DRV5013ADQDBZR	QBS Reference: TMAG5231B1DQDBZR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	1/77/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	3/231/0
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	1/3/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-
ESD	E2	ESD HBM	-	4000 Volts	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0

- 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

Qualification Report

Approve Date 27-July-2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: DRV5013AGQDBZR	Qual Device: DRV5013FAQDBZR	QBS Reference: TMAG5231B1DQDBZR	QBS Reference: DRV5013ADQDBZR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	1/77/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	1/77/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/231/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0	-
ESD	E2	ESD CDM	-	1500 Volts	-	-	1/3/0	-
ESD	E2	ESD CDM	-	250 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	4000 Volts	-	-	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	-	-	1/6/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	1/30/0

- 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
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Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: R-CHG-2109-069

For questions regarding this notice, e-mails can be sent to the contact shown below or your local Field Sales Representative.

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