



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20240826004.1

**Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet and additional Assembly site (TAI) & BOM options for select devices
Change Notification / Sample Request**

Date: August 26, 2024

To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) [process](#).

TI requires acknowledgement of receipt of this notification within 30 days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 30 days of this notification, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the Change Management team. For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

Change Management Team
SC Business Services


20240826004.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
CD4067BM96	NULL
CD4067BPWR	NULL

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

PCN Number:	20240826004.1	PCN Date:	August 26, 2024																		
Title:	Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet and additional Assembly site (TAI) & BOM options for select devices																				
Customer Contact:	Change Management Team	Dept:	Quality Services																		
Proposed 1st Ship Date:	November 24, 2024	Sample requests accepted until:	September 25, 2024*																		
*Sample requests received after September 25, 2024 will not be supported.																					
Change Type:																					
<input checked="" type="checkbox"/> Assembly Site	<input checked="" type="checkbox"/> Design	<input type="checkbox"/> Wafer Bump Material																			
<input checked="" type="checkbox"/> Assembly Process	<input checked="" type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Process																			
<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input checked="" type="checkbox"/> Wafer Fab Site																			
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Site	<input checked="" type="checkbox"/> Wafer Fab Material																			
<input checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input checked="" type="checkbox"/> Wafer Fab Process																			
PCN Details																					
Description of Change:																					
Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab option in addition to an Assembly site (TAI) and BOM options for the devices listed below.																					
<table border="1"> <thead> <tr> <th colspan="3">Current Fab Site</th> <th colspan="3">Additional Fab Site</th> </tr> <tr> <th>Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> <th>Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> </tr> </thead> <tbody> <tr> <td>SFAB</td> <td>CD4000</td> <td>150 mm</td> <td>RFAB</td> <td>LBC9</td> <td>300 mm</td> </tr> </tbody> </table>			Current Fab Site			Additional Fab Site			Fab Site	Process	Wafer Diameter	Fab Site	Process	Wafer Diameter	SFAB	CD4000	150 mm	RFAB	LBC9	300 mm	
Current Fab Site			Additional Fab Site																		
Fab Site	Process	Wafer Diameter	Fab Site	Process	Wafer Diameter																
SFAB	CD4000	150 mm	RFAB	LBC9	300 mm																
The die was also changed as a result of the process change.																					
Construction differences are as follows:																					
Group 1 BOM Table: (FAB/Process migration, die change plus BOM update):																					
What		Current	Additional																		
Bond Wire composition, diameter		Au, 0.96	Cu, 0.8 mil																		
Group 2 BOM Table (FAB/Process migration, die change, TAI as additional Assembly site & BOM update):																					
What		ASESH	TAI																		
Bond Wire composition, diameter		Au, 1.0 mil	Cu, 0.8 mil																		
Mold Compound		SID#EN2000646	4211880																		
Mount Compound		SID#EY1000063	4147858																		
The datasheets will be changing as a result of the above mentioned changes. The datasheet change details can be reviewed in the datasheet revision history. The link to the revised datasheet is available in the table below.																					
		CD4067B, CD4097B <small>SCHS052D – JUNE 2003 – REVISED AUGUST 2024</small>																			
Changes from Revision C (July 2024) to Revision D (August 2024)			Page																		
• Added Settling Time plots.....			8																		

Changes from Revision B (June 2003) to Revision C (July 2024)**Page**

- Updated the numbering format for tables, figures, and cross-references throughout the document..... 1
- Changed max and typ IDD for lower supply voltages.....6
- Changed max IIN at low temperature.....6

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
CD40x7B	SCHS052B	SCHS052D	http://www.ti.com/product/CD4097B

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

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

None

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS**REACH****Green Status****IEC 62474**

<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change
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Changes to product identification resulting from this PCN:**Fab Site****Information:**

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
SH-BIP-1	SHE	USA	Sherman
RFAB	RFB	USA	Richardson

Die Rev:**Current****New**

Die Rev [2P]	Die Rev [2P]
-	-

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
ASESH	ASH	CHN	Shanghai
TI Taiwan	TAI	TWN	Shanghai

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) CS0: SHE (21L) CC0:USA
(22L) AS0: MLA (23L) AC0: MYS

Product Affected:

Group 1 Device list (FAB/Process migration, die change plus BOM update):

CD4067BM96

Group 2 Device list: (FAB/Process migration, die change, TAI as additional Assembly site & BOM update):

CD4067BPWR

For alternate parts with similar or improved performance, please visit the product page on [TI.com](http://ti.com)



TI Information
Selective Disclosure

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: CD4067BM96	QBS Reference: TPS5130PTR	QBS Reference: SN65LBC175DWR	QBS Reference: CD4067BPWR
UHASt	A3	Autoclave	121C/15psig	96 Hours	-	1/77/0	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	1/77/0	-	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	-	-	1/76/0	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	-	-	1/76/0	-
ESD	E2	ESD CDM	-	250 Volts	-	-	1/3/0	-
ESD	E2	ESD CDM	-	500 Volts	1/3/0	-	-	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	-	-	1/3/0	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	1/3/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	1/30/0	1/30/0

- QBS: Qual By Similarity
- Qual Device CD4067BM96 is qualified at MSL1 260C
- 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/>

TI Qualification ID: R-CHG-2303-053

Qualification Report

Approve Date 05-June-2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: CD4067BPWR	QBS Reference: OPA4991QPWRQ1	QBS Reference: CD4066BPWR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	1/77/0	-
UHA	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	1/45/0	-
HTOL	B1	Life Test	150C	300 Hours	-	3/231/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	1/10/0	-
ESD	E2	ESD CDM	-	1500 Volts	-	1/3/0	1/3/0
ESD	E2	ESD CDM	-	500 Volts	1/3/0	-	-
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	-
ESD	E2	ESD HBM	-	4000 Volts	-	1/3/0	-
ESD	E2	ESD HBM	-	500 Volts	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0	3/18/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	1/30/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	3/90/0	-

- QBS: Qual By Similarity
- Qual Device CD4067BPWR is qualified at MSL1 260C
- 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/>

TI Qualification ID: R-CHG-2303-052

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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