12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240806003.1
Qualification of DFAB as an additional Wafer Fab site option for select devices
Change Notification / Sample Request

Date: August 06, 2024
To: Newark/Farnell 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

20240806003.1
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
CD4001UBE	NULL
CD40106BE	NULL
CD4013BE	NULL
CD4017BE	NULL
CD4020BE	NULL
CD4040BE	NULL
CD4082BE	NULL
CD4541BE	NULL

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

PCN Number:	20240806003.1	**PCN Date:**	August 06, 2024
Title:	Qualification of DFAB as an additional Wafer Fab site option for select devices		
Customer Contact:	Change Management Team	**Dept:**	Quality Services
Proposed 1st Ship Date:	November 04, 2024	**Sample requests accepted until:**	September 05, 2024*

***Sample requests received after September 05, 2024 will not be supported.**

Change Type:

☐	Assembly Site	☐	Design	☐	Wafer Bump Material
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Process
☐	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☒	Wafer Fab Material
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of DFAB as an additional Wafer Fab site option for the products listed in the "Product Affected" section of this document.

Current Fab Site			Additional Fab Site		
Fab Site	**Process**	**Wafer Diameter**	**Fab Site**	**Process**	**Wafer Diameter**
SFAB	CD4K	150 mm	DFAB	CD4K	200 mm

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 and 200-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):

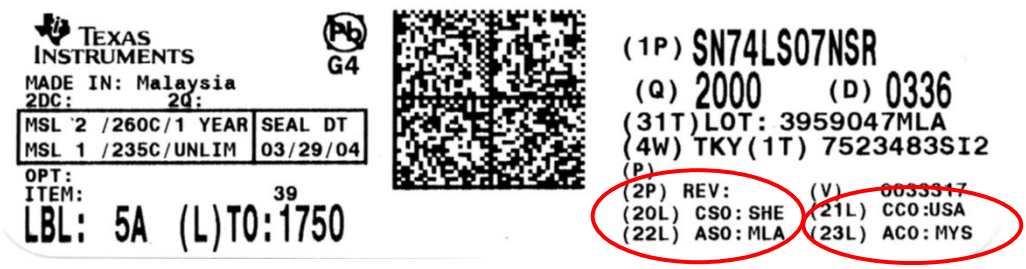
None

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
DL-LIN	**DLN**	**USA**	**Dallas**

Sample product shipping label (not actual product label):



Product Affected:

CD4001UBE	CD4013BE	CD4040BM96	CD4082BM96
CD4001UBM96	CD4013BM	CD4040BPWR	CD4082BNSR
CD4001UBPWR	CD4013BM96	CD4041UBE	CD4082BPWR
CD4002BE	CD4013BM96G4	CD4041UBM96	CD4093BE

CD4002BM96	CD4013BNSR	CD4041UBPWR	CD4093BM
CD4002BNSR	CD4013BPWR	CD4060BE	CD4093BM96
CD4002BPWR	CD4017BE	CD4060BM	CD4093BPWR
CD40106BE	CD4017BM96	CD4060BM96	CD4504BE
CD40106BM	CD4017BPWR	CD4060BPWR	CD4504BM
CD40106BM96	CD4020BE	CD4068BE	CD4504BM96
CD40106BNSR	CD4025BE	CD4068BM96	CD4504BPWR
CD40106BPWR	CD4025BM96	CD4068BNSR	CD4541BE
CD40109BNSR	CD4025BNSR	CD4068BPWR	CD4541BM96
CD40109BPWR	CD4025BPW	CD4075BE	CD4541BPWR
CD4012BE	CD4028BE	CD4075BM96	SN0402096BPWR
CD4012BM96	CD4028BM96	CD4075BNSR	
CD4012BNSR	CD4040BE	CD4075BPWR	
CD4012BPWR	CD4040BM	CD4082BE	

For alternate parts with similar or improved performance, please visit the product page on TI.com

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: CD4060BPWR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	1/77/0
HTOL	B1	Life Test	125C	1000 Hours	1/77/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0

- QBS: Qual By Similarity
- Qual Device CD4060BPWR is qualified at MSL1 260C
- Qual Device CD4060BPWR 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-2208-043

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

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

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