12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240806006.1
Qualification of DFAB as an additional Wafer Fab site option for select devices
Change Notification / Sample Request

Date: August 06, 2024

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

20240806006.1
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
SN74LS02DR	NULL
SN74LS02N	NULL
SN74LS125ADBR	NULL
SN74LS125ADR	NULL
SN74LS125AN	NULL
SN74LS125ANSR	NULL
SN74LS151DR	NULL
SN74LS151N	NULL
SN74LS157N	NULL
SN74LS161ADR	NULL
SN74LS161AN	NULL
SN74LS193N	NULL
SN74LS221DR	NULL
SN74LS221N	NULL
SN74LS251DR	NULL
SN74LS251N	NULL
SN74LS393DR	NULL
SN74LS393N	NULL
SN74LS90DR	NULL
SN74LS90N	NULL

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

PCN Number:	20240806006.1	**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		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
SFAB	JI1	150 mm	DFAB	JI1	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 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:

SN74LS02DR	SN74LS151DR	SN74LS161ANSR	SN74LS251N
SN74LS02DRE4	SN74LS151N	SN74LS193DR	SN74LS251NE4
SN74LS02N	SN74LS151NE4	SN74LS193N	SN74LS251NSR
SN74LS02NE4	SN74LS151NSR	SN74LS193NE4	SN74LS393DR

SN74LS02NSR	SN74LS157DR	SN74LS193NSR	SN74LS393N
SN74LS02NSRG4	SN74LS157DRE4	SN74LS221DBR	SN74LS393NE4
SN74LS125ADBR	SN74LS157N	SN74LS221DR	SN74LS393NSR
SN74LS125ADR	SN74LS157NE4	SN74LS221N	SN74LS90DR
SN74LS125ADRE4	SN74LS157NSR	SN74LS221NE4	SN74LS90N
SN74LS125AN	SN74LS161ADR	SN74LS221NSR	SN74LS90NE4
SN74LS125ANSR	SN74LS161AN	SN74LS251DR	

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: SN75C185DWR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	2/154/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	1/22/0
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 SN75C185DWR is qualified at MSL1 260C
- Qual Device SN75C185DWR 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-2202-030

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

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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