



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250618005.1

**Qualification of DFAB as an additional Fab site option for select JI2 devices
Change Notification / Sample Request**

Date: June 18, 2025

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 60 days of the date of this notice. Lack of acknowledgement of this notice within 60 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 60 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 60 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

Changes outlined in this notification underscore our commitment to product longevity and supply continuity, as well as our continued efforts to transition to newer, more efficient manufacturing processes and technologies. Specifically, this particular notification is related to TI's multiyear transition plan for our two remaining 150-millimeter production lines (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). SFAB closure activities are expected to begin by the end of 2025. DFAB will remain open with a smaller set of 200mm technologies and GaN.

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.

TI values customer engagement and feedback related to TI changes. Customers should contact TI if there are questions or concerns regarding a change notification.

Change Management Team
SC Business Services

20250618005.1
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
SN74LS245N	
SN74LS148N	
SN74LS245DBR	
SN74LS244N	
SN74LS640N	
SN74LS688N	
SN74LS240DBR	
SN74LS640-1N	
SN74LS244DWR	
SN74LS148DR	
SN74LS148NSR	
SN74LS245N	
SN74LS240N	
SN74LS688DWR	
SN74LS244DBR	
SN74LS244DWR	
SN74LS244NSR	
SN74LS240DWR	
SN74LS245NSR	
SN74LS240N	
SN74LS244N	
SN74LS245DWR	

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

PCN Number:	20250618005.1	PCN Date:	June 18, 2025
Title:	Qualification of DFAB as an additional Fab site option for select JI2 devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	September 16, 2025	Sample requests accepted until:	August 17, 2025*
*Sample requests received after August 17, 2025 will not be supported.			
Change Type:			
☐	Assembly Site	☐	Design
☐	Assembly Process	☐	Data Sheet
☐	Assembly Materials	☐	Part number change
☐	Mechanical Specification	☐	Test Site
☒	Packing/Shipping/Labeling	☐	Test Process
☐		☒	Wafer Bump Material
☐		☐	Wafer Bump Process
☐		☒	Wafer Fab Site
☐		☒	Wafer Fab Material
☐		☒	Wafer Fab Process
PCN Details			
Description of Change:			
Texas Instruments is pleased to announce the addition of DFAB as an additional Wafer Fab option for the devices listed below.			
Current Fab Site			Additional Fab Site
Current Fab Site	Process	Wafer Diameter	Additional Fab Site
SFAB	JI2	150 mm	DFAB
			JI2
			200 mm
	SFAB (Current)		DFAB (Additional)
Metallization material	MT1: 2300A TiW / 7.6kA AICu2% MT2: 1000A TiW / 14kA AICu2%		MT1: 2300A TiW / 7.6kA AICu0.5% MT2: 1000A TiW / 14kA AICu0.5%
Dielectric material	Silox		TEOS
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:			
SN74LS148DR	SN74LS240NSR	SN74LS245DBR.A	SN74LS640DWR.A
SN74LS148DR.A	SN74LS240NSR.A	SN74LS245DWR	SN74LS640N
SN74LS148N	SN74LS244DBR	SN74LS245DWR.A	SN74LS640N.A
SN74LS148N.A	SN74LS244DBR.A	SN74LS245N	SN74LS640NSR
SN74LS148NSR	SN74LS244DWR	SN74LS245N.A	SN74LS640NSR.A
SN74LS148NSR.A	SN74LS244DWR.A	SN74LS245NE4	SN74LS688DWR
SN74LS240DBR	SN74LS244N	SN74LS245NSR	SN74LS688DWR.A
SN74LS240DBR.A	SN74LS244N.A	SN74LS245NSR.A	SN74LS688N
SN74LS240DWR	SN74LS244NE4	SN74LS640-1N	SN74LS688N.A
SN74LS240DWR.A	SN74LS244NSR	SN74LS640-1N.A	SN74LS688NE4
SN74LS240N	SN74LS244NSR.A	SN74LS640-1NSR	SN74LS688NSR
SN74LS240N.A	SN74LS244NSRG4	SN74LS640-1NSR.A	SN74LS688NSR.A
SN74LS240NE4	SN74LS245DBR	SN74LS640DWR	

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

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN74LS245DWR	QBS Reference: LT1013DIDR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	3/231/0	-
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	150C	1000 Hours	3/231/0	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	-
HTOL	B1	Life Test	150C	300 Hours	-	3/231/0
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	3/2400/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	1/22/0	-
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	-
ESD	E2	ESD HBM	-	2500 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, also known as Generic Data
- Qual Device SN74LS245DWR 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-2407-021

In performing change qualifications, Texas Instruments follows integrated circuit industry standards in performing defect mechanism analysis and failure mechanism-based accelerated environmental testing to ensure wafer fab process, assembly process and product quality and reliability. As encouraged by these standards, TI uses both product-specific and generic (family) data in qualifying its changes. For devices to be categorized as a 'product qualification family' for generic data purposes, they must share similar product, wafer fab process and assembly process elements. The applicability of generic data (also known at TI as Qualification by Similarity (QBS)) is determined by the Reliability Engineering function following these

industry standards. Generic data is shown in the qualification report in columns titled "QBS Process" (for wafer fab process), "QBS Package" (for assembly process) and "QBS Product" (for product family).

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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