

PCN# 20240628006.1

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

Date: June 28, 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

20240628006.1
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
TLC374CDR	NULL
TLC374IDR	NULL

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

PCN Number:	20240628006.1	PCN Date:	June 28, 2024																		
Title:	Qualification of RFAB using qualified Process Technology, Die Revision and additional Assembly Site (MLA) & BOM options for select devices																				
Customer Contact:	Change Management Team	Dept:	Quality Services																		
Proposed 1st Ship Date:	September 26, 2024	Sample requests accepted until:	July 28, 2024*																		
*Sample requests received after July 28, 2024 will not be supported.																					
Change Type:																					
<input checked="" type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Design																		
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet																		
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change																		
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site																		
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process																		
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material																		
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process																		
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Wafer Fab Site																		
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Wafer Fab Material																		
<input type="checkbox"/>		<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/BOM options for the devices listed below.																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">Current Fab Site</th> <th colspan="3" style="text-align: center;">Additional Fab Site</th> </tr> <tr> <th style="text-align: center;">Fab Site</th> <th style="text-align: center;">Process</th> <th style="text-align: center;">Wafer Diameter</th> <th style="text-align: center;">Fab Site</th> <th style="text-align: center;">Process</th> <th style="text-align: center;">Wafer Diameter</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">DFAB</td> <td style="text-align: center;">LINCOS</td> <td style="text-align: center;">150 mm</td> <td style="text-align: center;">RFAB</td> <td style="text-align: center;">LBC9</td> <td style="text-align: center;">300 mm</td> </tr> </tbody> </table>				Current Fab Site			Additional Fab Site			Fab Site	Process	Wafer Diameter	Fab Site	Process	Wafer Diameter	DFAB	LINCOS	150 mm	RFAB	LBC9	300 mm
Current Fab Site			Additional Fab Site																		
Fab Site	Process	Wafer Diameter	Fab Site	Process	Wafer Diameter																
DFAB	LINCOS	150 mm	RFAB	LBC9	300 mm																
The die was also changed as a result of the process change.																					
Construction differences are as follows:																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">TAI</th> <th style="text-align: center;">FMX</th> <th style="text-align: center;">MLA</th> </tr> </thead> <tbody> <tr> <td>Wire diam/type</td> <td style="text-align: center;">0.96mil Cu</td> <td style="text-align: center;">0.96mil Cu</td> <td style="text-align: center;">0.8mil Cu</td> </tr> </tbody> </table>					TAI	FMX	MLA	Wire diam/type	0.96mil Cu	0.96mil Cu	0.8mil Cu										
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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.																					
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">RoHS</th> <th style="text-align: center;">REACH</th> <th style="text-align: center;">Green Status</th> <th style="text-align: center;">IEC 62474</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/> No Change</td> <td style="text-align: center;"><input checked="" type="checkbox"/> No Change</td> <td style="text-align: center;"><input checked="" type="checkbox"/> No Change</td> <td style="text-align: center;"><input checked="" type="checkbox"/> No Change</td> </tr> </tbody> </table>				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
DL-LIN	DLN	USA	Dallas
RFAB	RFB	USA	Richardson

Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
E	A

Assembly/Test Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City
FMX	MEX	MEX	Aguascalientes
MLA	MLA	MYS	Kuala Lumpur

Sample product shipping label (not actual product label):

Product Affected:

TLC374CDR	TLC374IDR	TLV2354IDR
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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: TLC374IDR	QBS Reference: OPA4991QDRQ1	QBS Reference: TPS481111LQDGSRQ1
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	175C	500 Hours	-	1/45/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0
HTOL	B1	Life Test	150C	408 Hours	-	1/77/0	-
ESD	E2	ESD CDM	-	1000 Volts	1/3/0	-	-
ESD	E2	ESD HBM	-	2000 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 TLC374IDR 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-2310-094

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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