



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20250610001.1

**Qualification of RFAB as an additional Fab site option,
Die Revision & BOM options for select devices
Change Notification / Sample Request**

Date: June 11, 2025

To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments 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.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

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.

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

Sincerely,

Change Management Team
SC Business Services


20250610001.1
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
SN74CB3T3257PWR	SN74CB3T3257PWR
SN74CB3T3253PWR	NULL
SN74CB3T3245PWR	NULL
SN74CB3T3245DGVR	NULL

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

PCN Number:	20250610001.1		PCN Date:	June 11, 2025																			
Title:	Qualification of RFAB as an additional Fab site option, Die Revision & BOM options for select devices																						
Customer Contact:	Change Management Team		Dept:	Quality Services																			
Proposed 1st Ship Date:	September 09, 2025		Sample requests accepted until:	August 10, 2025*																			
*Sample requests received after August 10, 2025 will not be supported.																							
Change Type:																							
<input type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material																		
<input 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 RFAB as an additional Fab site option & 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>Current Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> <th>Additional Fab site</th> <th>Process</th> <th>Wafer Diameter</th> </tr> </thead> <tbody> <tr> <td>FR-BIP-1</td> <td>ASLNONC 10</td> <td>200mm</td> <td>RFAB</td> <td>LBC9</td> <td>300mm</td> </tr> </tbody> </table>						Current Fab Site			Additional Fab site			Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter	FR-BIP-1	ASLNONC 10	200mm	RFAB	LBC9	300mm
Current Fab Site			Additional Fab site																				
Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter																		
FR-BIP-1	ASLNONC 10	200mm	RFAB	LBC9	300mm																		
The die was also changed as a result of the process change.																							
Construction differences are as follows:																							
Group 1 Device: (Fab, Die rev, BOM)																							
	Current		Proposed																				
Bond wire composition, diameter	Cu, 0.96 mil		Cu, 0.8 mil																				
Group 2 Device: (Fab, BOM)																							
	Current		Proposed																				
Bond wire composition, diameter	Au, 0.96 mil Cu, 0.96 mil		Cu, 0.8 mil																				
Group 3 Device: (Fab, BOM)																							
	Current		Proposed																				
Mount compound	4042500		4147858																				
Mold compound	4206193		4211471, 4206193																				
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 links to the revised datasheets are available in the table below.																							
			SN74CB3T3245 <small>SCDS136D – OCTOBER 2003 – REVISED MAY 2025</small>																				
Changes from Revision C (May 2018) to Revision D (May 2025)					Page																		
• Updated the numbering format for tables, figures, and cross-references throughout the document.....					1																		
• Added the DGS package throughout the document.....					1																		
• Updated specs in the <i>Switching Characteristics</i> table.....					4																		
• Added the latest information and new package to the <i>Thermal Information</i> table.....					4																		

Changes from Revision * (October 2003) to Revision A (May 2025) Page

• Added the <i>Pin Configuration and Functions, Specifications, ESD Ratings, Thermal Information, Overview, Functional Block Diagram, Device Functional Modes, Application and Implementation, Typical Applications, Power Supply Recommendations, Layout, Layout Guidelines, Layout Example, Device and Documentation Support, and Mechanical, Packaging, and Orderable Information</i> sections.....	1
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated specs in the <i>Electrical Characteristics</i> table.....	6
• Updated specs in the <i>Switching Characteristics 85C</i> table.....	7

Changes from Revision * (October 2003) to Revision A (May 2025) Page

• Added the <i>Applications, Package Information table, Pin Configuration and Functions, Specifications, ESD Ratings, Thermal Information, Detailed Description, Overview, Functional Block Diagram, Feature Description, Device Functional Modes, Application and Implementation, Application Information, Typical Application, Power Supply Recommendations, Layout, and Device and Documentation Support</i> sections.....	1
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated graphic and note in <i>Typical DC Voltage-Translation Characteristics</i>	1
• Updated specs in the <i>Electrical Characteristics</i> table.....	4
• Updated specs in the <i>Switching Characteristics</i> table.....	4

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
SN74CB3T3245	SCDS136C	SCDS136D	http://www.ti.com/product/SN74CB3T3245
SN74CB3T3257	SCDS149	SCDS149A	http://www.ti.com/product/SN74CB3T3257
SN74CB3T3253	SCDS148	SCDS148A	http://www.ti.com/product/SN74CB3T3253

Qual details are provided in the Qual Data Section.

Reason for Change:

Supply Continuity

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

New die leveraging improved design techniques, and made in a more robust process flow, are included in these devices. The datasheet includes some revisions. There are small non-datasheet changes. See updated datasheets and / or the Supporting Data Packet for more details on the changes.

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

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
FR-BIP-1	TID	DEU	Freising
RFAB	RFB	USA	Richardson

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

Die Rev [2P]	Die Rev [2P]
A ₁ -	-

Sample product shipping label (not actual product label):

**Group 1 Product Affected: Fab, Die rev, BOM**

SN74CB3T3245PWR	SN74CB3T3253PWR.A	SN74CB3T3257PWR.B
SN74CB3T3245PWR.A	SN74CB3T3253PWR.B	SN74CB3T3257PWRE4
SN74CB3T3245PWR.B	SN74CB3T3257PWR	
SN74CB3T3253PWR	SN74CB3T3257PWR.A	

Group 2 Product Affected: Fab, BOM

SN74CB3T3245DBQR	SN74CB3T3245DBQR.A	SN74CB3T3245DBQR.B
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Group 3 Product Affected: Fab, BOM

SN74CB3T3245DGVR	SN74CB3T3245DGVR.A	SN74CB3T3245DGVR.B
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**Group 1
Qualification Report**

(R-CHG-2404-031)

Approve Date 29-April-2025

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN74CB3T3253PWR	QBS Reference: TLV62568DBVR	QBS Reference: OPA4991QPWRQ1
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	1/77/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	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	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/3000/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	1/10/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/6/0	3/18/0
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	1/30/0	1/30/0	-
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, also known as Generic Data

Qual Device SN74CB3T3253PWR 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-2404-031

Group 2
Qualification Report
(R-CHG-2411-045)
Approve Date 23-April-2025

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN74CB3T3245DBQR	QBS Reference: TLV62568DBVR	QBS Reference: TLV1812QDGKRQ1	QBS Reference: TLV1832QDGKRQ1	QBS Reference: SN74ACT244QDGSRQ1	QBS Reference: SN74AC165PWRQ1	QBS Reference: SN74CB3T3245DGVR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	1/77/0	1/77/0	1/77/0	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	1/77/0	-	1/77/0	1/77/0	1/77/0	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	-	1/77/0	1/77/0	1/77/0	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	-	1/45/0	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	1/77/0	1/77/0	1/45/0	-	-
HTOL	B1	Life Test	150C	300 Hours	-	3/231/0	1/77/0	1/77/0	-	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/3000/0	-	-	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB Solder;	-	-	-	-	1/22/0	-	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	1/15/0	1/15/0	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	1/10/0	1/10/0	1/10/0	3/30/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	-	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	1/3/0	1/3/0	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/6/0	1/6/0	1/3/0	-	-	1/3/0
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	1/30/0	1/30/0	-	-	-	-	1/30/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-	-	-	-	1/30/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	1/30/0	2/60/0	1/30/0	1/30/0	-

QBS: Qual By Similarity, also known as Generic Data

Qual Device SN74CB3T3245DBQR is qualified at MSL2 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-2411-045

Group 3 Qualification Report

(R-CHG-2404-032)

Approve Date 29-April-2025

Qualification Results

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

Texas Instruments Incorporated

TI Information - Selective Disclosure

PCN#20250610001.1

Type	#	Test Name	Condition	Duration	Qual Device: <u>SN74CB3T3245PWR</u>	Qual Device: <u>SN74CB3T3257PWR</u>	QBS Reference: <u>TLV62568DBVR</u>	QBS Reference: <u>SN74AC165PWRQ1</u>	QBS Reference: <u>SN74CB3T3245DGVR</u>
HAST	A2	Biased HAST	130C	96 Hours	-	-	3/231/0	-	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0	-
TC	A4	Temperature Cycle	-65/150C	500 Cycles	-	-	3/231/0	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	1/45/0	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	1/77/0	-
HTOL	B1	Life Test	150C	300 Hours	-	-	3/231/0	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	3/3000/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0	-
ESD	E2	ESD CDM	-	1000 Volts	1/3/0	1/3/0	-	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	1/3/0	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/3/0	1/6/0	-	1/3/0
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	1/30/0	1/30/0	1/30/0	-	1/30/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	-	1/30/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	-	1/30/0	-

QBS: Qual By Similarity, also known as Generic Data

Qual Device SN74CB3T3245PWR is qualified at MSL1 260C

Qual Device SN74CB3T3257PWR 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-2404-032

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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