



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN#20251017000.2
Qualification of RFAB as an additional Fab site,
Die Revision & BOM option for select devices
Change Notification / Sample Request**

Date: October 17, 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

20251017000.2
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
SN74LVC541AQPWRQ1	SN74LVC541AQPWRQ1

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

PCN Number:	20251017000.2	PCN Date:	October 17, 2025
Title:	Qualification of RFAB as an additional Fab site, Die Revision & BOM option for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	April 15, 2026	Sample requests accepted until:	December 16, 2025*

*Sample requests received after December 16, 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 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 for the devices listed below.

Current Fab Site			Additional Fab site		
Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter
FFAB	ASLC10	200mm	RFAB	LBC9	300mm

The die was also changed as a result of the process change.

Construction differences as follows:

	Current	Additional
Final wafer thickness	10.5mils	6.0mils

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):

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.

RoHS

REACH

Green Status

IEC 62474

No Change

No Change

No Change

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
FFAB	TID	DEU	Freising
RFAB	RFB	USA	Richardson

Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
H, J	A

Sample product shipping label (not actual product label):



Product Affected:

CLVC244AQPWRG4Q1	SN74LVC244AQPWRNS	SN74LVC541AQPWRQ1
CLVC540AQPWRG4Q1	SN74LVC244AQPWRQ1	
CLVC541AQPWRG4Q1	SN74LVC540AQPWRQ1	

Qualification Report Automotive Qualification Summary (As per AEC-Q100 Rev. J and JEDEC Guidelines)

Approve Date 24-June -2025

Product Attributes

Attributes	Qual Device: SN74LVC244AQPWRQ1	Qual Device: SN74LVC540AQPWRQ1	Qual Device: SN74LVC541AQPWRQ1	QBS Process Reference: SN74HCS740PWRQ1	QBS Package Reference: SN74LVB12450PWRQ1	QBS Package Reference: SN74LVC173AIPWRQ1	QBS Product Reference: SN74LVC244AWRKS01	QBS Product Reference: SN74LVC540AWRKS01	QBS Package, Product Reference: SN74LVC9541APWRQ1	QBS Package, Product Reference: SN74LVC240APWRQ1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125
Product Function	Logic	Logic	Logic	Logic	Logic	Logic	Logic	Logic	Logic	Logic
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB
Assembly Site	MLA	MLA	MLA	MLA	MLA	MLA	CDAT	MLA	MLA	MLA
Package Group	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	QFN	QFN	TSSOP	TSSOP
Package Designator	PW	PW	PW	PW	PW	PW	RKS	RKS	PW	PW
Pin Count	20	20	20	14	20	20	20	20	20	20

QBS: Qual By Similarity, also known as Generic Data

Qual Device SN74LVC244AQPWRQ1 is qualified at MSL1 260C

Qual Device SN74LVC540AQPWRQ1 is qualified at MSL1 260C

Qual Device SN74LVC541AQPWRQ1 is qualified at MSL1 260C

Qualification Results

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

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: SN74LVC244AQPWRQ1	Qual Device: SN74LVC540AQPWRQ1	Qual Device: SN74LVC541AQPWRQ1	QBS Process Reference: SN74HCS740PWRQ1	QBS Package Reference: SN74LVB12450PWRQ1	QBS Package Reference: SN74LVC173AIPWRQ1	QBS Product Reference: SN74LVC244AWRKS01	QBS Product Reference: SN74LVC540AWRKS01	QBS Package, Product Reference: SN74LVC9541APWRQ1	QBS Package, Product Reference: SN74LVC240APWRQ1
Test Group A - Accelerated Environment Stress Tests																	
PC	A1	JEDEC J-STD-020, JEDEC JESD22-A113	3	77	Preconditioning	MSL1 260C	-	-	-	-	-	3/AII/0	1/AII/0	1/AII/0	-	-	1/AII/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	-	-	-	3/231/0	1/77/0	1/77/0	-	-	1/77/0
AC/UHAST	A3	JEDEC JESD22-A110, JEDEC JESD22-A118	3	77	Autoclave	121C/15psi	96 Hours	-	-	-	-	3/231/0	-	-	-	-	-
AC/UHAST	A3	JEDEC JESD22-A102, JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	-	1/77/0	1/77/0	-	-	-	1/77/0

TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	3/231/0	1/77/0	1/77/0	-	1/77/0
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	-	-	-	-	-	1/5/0	-	1/5/0
TC-SAM	A4	-	3	3	Post TC SAM	<50% delamination	-	-	-	-	-	-	-	-	1/12/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	-	-	3/135/0	-	-	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	175C	500 Hours	-	-	-	1/45/0	1/45/0	-	-	1/45/0
Test Group B - Accelerated Lifetime Simulation Tests															
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	-	-	-	3/231/0	-	1/77/0	-	-
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	150C	300 Hours	-	-	-	-	1/77/0	-	-	1/77/0
ELFR	B2	AEC Q100-008	3	600	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	-	-	-	-
Test Group C - Package Assembly Integrity Tests															
WBS	C1	AEC Q100-001	1	30	Wire Bond Shear	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	-	-	-	3/90/0	1/30/0	1/30/0	-	1/30/0
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	-	-	-	3/90/0	1/30/0	1/30/0	-	1/30/0
SD	C3	JEDEC J-STD-002	1	15	PB Solderability	>95% Lead Coverage	-	-	-	-	1/15/0	-	-	-	-
SD	C3	JEDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	-	-	-	1/15/0	-	-	-	1/15/0
FD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0	1/10/0	1/10/0	-	1/10/0
Test Group D - Die Fabrication Reliability Tests															
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements							
TDBB	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	-	-	Completed Per Process Technology Requirements							
HCI	D3	JESD60 & 28	-	-	Hot Carrier Injection	-	-	Completed Per Process Technology Requirements							
BTI	D4	-	-	-	Bias Temperature Instability	-	-	Completed Per Process Technology Requirements							
SM	D5	-	-	-	Stress Migration	-	-	Completed Per Process Technology Requirements							
Test Group E - Electrical Verification Tests															
ESD	E2	AEC Q100-002	1	3	ESD HBM	-	2000 Volts	-	-	-	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	500 Volts	-	-	-	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	-	-	-	1/6/0	1/6/0	1/6/0	1/3/0	1/3/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67, Room, hot, and cold	-	1/30/0	1/30/0	1/30/0	3/90/0	3/90/0	1/30/0	1/30/0	1/30/0

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

Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E) : -40C to +150C

Grade 1 (or Q) : -40C to +125C

Grade 2 (or T) : -40C to +105C

Grade 3 (or I) : -40C to +85C

E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):

Room/Hot/Cold : HTOL, ED

Room/Hot : THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU

Room : AC/uHAST

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-CHG-2408-069

ZVEI ID: SEM-DE-03, SEM-PW-13, SEM-PW-09, SEM-PW-02, SEM-PW-03

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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