



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20251008002.1

**Qualification of RFAB using qualified Process Technology, Design, Datasheet and
additional Assembly BOM options for select devices
Change Notification / Sample Request**

Date: October 08, 2025

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.

As referenced in the "reason for change" below, this particular PCN relates to TI's multiyear transition, announced in 2020, to close our 150mm production and move more capacity into 300mm. We are entering the final phases of this transition, and the final 150mm wafers started in October 2025. **Thus, it's critical that you take the appropriate actions, noted in this PCN, to prepare for applicable product changes.**

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

20251008002.1
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
SN74LVC1G66DCKR	SN74LVC1G66DCKR
SN74LVC1G66DBVR	SN74LVC1G66DBVR

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

PCN Number:	20251008002.1	PCN Date:	October 08, 2025
Title:	Qualification of RFAB using qualified Process Technology, Design, Datasheet and additional Assembly BOM options for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	January 06, 2026	Sample requests accepted until:	December 07, 2025*
*Sample requests received after December 07, 2025 will not be supported.			
Change Type:			
<input checked="" type="checkbox"/> Assembly Site	<input checked="" type="checkbox"/> Design	<input type="checkbox"/>	Wafer Bump Material
<input checked="" 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 addition of RFAB using the LBC9 qualified process technology, Design, and additional Assembly BOM options for the devices listed below.

Current Fab Site		Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process
FFAB	ASLNONC10	200 mm	RFAB	LBC9

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

Construction differences are as follows:

Group 1

	HFTFAT	CDAT
Substrate or Lead Frame Material	SID#L-144	4226999
Wire diam/type	Cu; 1.0 MIL	Cu; 0.8 MIL
Mount compound	SID# A-03	4207123
Mold compound	SID#R-27	4222198
Device Marking	C6J	3LRH
Top protective layer or Passivation layer material	Nitride	Oxide, Nitride

Group 2

	HFTFAT	CDAT
Substrate or Lead Frame Material	SID#L-123	4225757
Wire diam/type	Cu; 1.0 MIL	Cu; 0.8 MIL
Mount compound	SID# A-03	4207123
Mold compound	SID#R-27	4222198
Device Marking	C66J	3LQH
Top protective layer or Passivation layer material	Nitride	Oxide, Nitride

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.

Changes from Revision Q (March 2017) to Revision R (June 2025)		Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....		1
• Updated Thermal Information.....		6
• Updated resistance range in Section 5.5		7
• Updated switching timing in Section 5.6		7
• Updated Sine-wave distortion in Section 5.7		8
• Added <i>Receiving Notifications of Documentation Updates, Support Resources, Electrostatic Discharge Caution, and Glossary</i> the sections.....		18

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
SN74LVC1G66	SCES323Q	SCES323R	http://www.ti.com/product/SN74LVC1G66

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 200-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.

RoHS

REACH

Green Status

IEC 62474

<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
FFAB	TID	DEU	Freising
RFAB	RFB	USA	Richardson

Assembly Site Information:

Assembly Site	Asembly Site Origin Code (22L)	Assembly Site Country Code (23L)	Assembly Site City
HFTFAT	HFT	CHN	Hefei
CDAT	CDA	CHN	Chengdu

Sample product shipping label (not actual product label):

 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2G MSL 2 / 260C / 1 YEAR MSL 1 / 235C / UNLIM OPT: ITEM: 39 LBL: 5A (L)T0:1750		 	(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY(1T) 7523483SI2 (P) (2P) REV: (V) 0053317 (20L) CS0: SHE (21L) CCO:USA (22L) AS0: MLA (23L) ACO: MYS	
Product Affected- Group 1: SN74LVC1G66DCKR				
Product Affected- Group 2: SN74LVC1G66DBVR				

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

Product Attributes									
Attributes	Qual Device: 1P1G3157QDCKRQ1	Qual Device: 1P1G3157QDBVRQ1	Qual Device: SN74LVC1G66QDCKRQ1	QBS Process Reference: SN74HCS74QPPWRQ1	QBS Package Reference: DRV5013ADEDBZRQ1	QBS Package Reference: SN74AHC1G000DBVRQ1	QBS Package Reference: CAHCT1G32QDBVRQ1	QBS Package Reference: 1P1G3157QDCKRQ1	QBS Package, Product Reference: 1P1G3157QDCKRQ1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 0	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 150	-40 to 125	-40 to 125	-40 to 125	-40 to 125
Product Function	Interface	Interface	Interface	Logic	Signal Chain	Logic	Logic	Logic	Interface
Die Attributes									
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB
Wafer Process	LBC9	LBC9	LBC9	LBC9	LBC9	LBC9	LBC9	LBC9	LBC9
Die Size (LW) (um)	290 x 290	290 x 290	290 x 290	460 x 510	680 x 820	282 x 285	282 x 285	290 x 290	290 x 290
Package Attributes									
Assembly Site	CDAT	CDAT	CDAT	MLA	CDAT	CDAT	CDAT	CDAT	CDAT
Package Group	SOT	SOT	SOT	TSSOP	SOT	SOT	SOT	SOT	SOT
Package Designator	DCK	DBV	DCK	PW	DBZ	DBV	DBV	DCK	DCK
Package Size (mm)	2 x 1.25	2.9 x 1.6	2 x 1.25	5 x 4.4	2.92 x 1.3	2.9 x 1.6	2.9 x 1.6	2 x 1.25	2 x 1.25
Body Thickness (mm)	0.9	1.2	0.9	1	1	1.2	1.2	0.9	0.9
Pin Count	6	6	5	14	3	5	5	6	6
Lead Finish	MATTE SN	MATTE SN	MATTE SN	NIPDAU	MATTE SN	MATTE SN	MATTE SN	MATTE SN	MATTE SN
Lead Pitch(mm)	0.65	0.95	0.65	0.65	0.96	0.95	0.95	0.65	0.65
Mount Compound Supplier	SUMITOMO	SUMITOMO	SUMITOMO	HENKEL	SUMITOMO	SUMITOMO	SUMITOMO	SUMITOMO	SUMITOMO
Mount Compound Supplier Number	CRM-1076NS	CRM-1076NS	CRM-1076NS	QMI 505MT	CRM-1076NS	CRM-1076NS	CRM-1076NS	CRM-1076NS	CRM-1076NS
Mold Compound Supplier	SUMITOMO	SUMITOMO	SUMITOMO	SUMITOMO	Sumitomo	SUMITOMO	SUMITOMO	SUMITOMO	SUMITOMO
Mold Compound Supplier Number	EME-G700LTD	EME-G700LTD	EME-G700LTD	EME-G610TA	EME-G700LTD	EME-G700LTD	EME-G700LTD	EME-G700LTD	EME-G700LTD
Bond Wire Composition	CU	CU	CU	CU	CU	CU	CU	CU	CU
Bond Wire Diameter(um)	20.32	20.32	20.32	20.32	20.32	20.32	20.32	20.32	20.3

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device 1P1G3157QDCKRQ1 is qualified at MSL1 260C
- Qual Device 1P1G3157QDBVRQ1 is qualified at MSL1 260
- Qual Device SN74LVC1G66QDCKRQ1 is qualified at MSL1 260C
- Qual Device 1P1G66QDBVRQ1 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: 1P1G3157QDCKRQ1	Qual Device: 1P1G3157QDBVRQ1	Qual Device: SN74LVC1G66QDCKRQ1	QBS Process Reference: SN74HCS74QPBVRQ1	QBS Package Reference: DRV5013ADEDBZRQ1	QBS Package Reference: SN74AHC1G00DBVRQ1	QBS Package Reference: CAHCT1G32QDBVRQ1	QBS Package Reference: 1P1G3157QDCKRQ1
Test Group A - Accelerated Environment Stress Tests															
PC	A1	JEDDEC J-STD-020 JEDEC JESD22-A115	3	77	Preconditioning	MSL1 260C	-	-	-	-	No Fails	No Fails	No Fails	No Fails	-
HAST	A2	JEDDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	-	-	3/23/0	3/23/0	1/77/0	1/77/0	-
AC/HAST	A3	JEDDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	3/23/0	3/23/0	1/77/0	1/77/0	-
TC	A4	JEDDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-55C/150C	1500 Cycles	-	-	-	3/23/0	-	-	-	-
TC	A4	JEDDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	3/23/0	-	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	1/5/0	1/5/0	-
HTSL	A6	JEDDEC JESD22-A103	1	45	High Temperature Storage Life	150C	2000 Hours	-	-	-	3/13/0	-	-	-	-
HTSL	A6	JEDDEC JESD22-A103	1	45	High Temperature Storage Life	175C	500 Hours	-	-	-	1/45/0	1/45/0	1/45/0	1/45/0	-
Test Group B - Accelerated Lifetime Simulation Tests															
HTOL	B1	JEDDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	-	-	-	3/23/0	-	-	-	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	125C	40 Hours	-	-	-	3/240/0	-	-	-	-
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	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	3/90/0	1/30/0	1/30/0	1/30/0
SD	C3	JEDDEC J-STD-002	1	15	PB Solderability	>95% Lead Coverage	-	-	-	-	1/15/0	1/15/0	-	-	-
SD	C3	JEDDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	-	-	-	1/15/0	1/15/0	-	-	-
PD	C4	JEDDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0	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							
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
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	1/3/0
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	1/3/0	-	-	1/6/0	1/6/0	-	-	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	3/60/0	2/60/0	1/30/0	1/30/0	1/30/0

Additional Tests

- 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/HAST

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

TI Qualification ID: R-CHG-2410-081

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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