



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 |
| FFAB | ASLNONC10 | 200 mm | RFAB |
| | | | LBC9 |
| | | | 300 mm |
| 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. | | | |


**TEXAS
INSTRUMENTS**

SN74LVC1G66
 SCES323R – JUNE 2001 – REVISED JUNE 2025

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</i> , and <i>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 | <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 |
|-------------|-----------------------------|------------------------------|-------------------|
| FFAB | TID | DEU | Freising |
| RFAB | RFB | USA | Richardson |

Assembly Site
Information:

| Assembly Site | Assembly 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: 2Q:



MSL 2 /260C/1 YEAR SEAL DT
MSL 1 /235C/UNLIM 03/29/04

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) 0033317
(20L) CS0: SHE (21L) CC0:USA
(22L) AS0: MLA (23L) AC0: 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: SN74LVC1G66DCKRQ1 | QBS Process Reference: SN74HCS74QPWRQ1 | QBS Package Reference: DRV5013ADEDBZRQ1 | QBS Package Reference: SN74AHC1G00DBVRQ1 | QBS Package Reference: GAHCT1G32QDBVRQ1 | QBS Package, Product Reference: 1P1G3157QDCKRQ1 |
|--------------------------------|------------------------------|------------------------------|--------------------------------|--|---|--|---|---|
| Automotive Grade Level | Grade 1 | Grade 1 | Grade 1 | Grade 1 | Grade 0 | 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 |
| Product Function | Interface | Interface | Interface | Logic | Signal Chain | Logic | Logic | Interface |
| Die Attributes | | | | | | | | |
| Wafer Fab Supplier | RFAB | RFAB | RFAB | RFAB | RFAB | RFAB | RFAB | RFAB |
| Wafer Process | LBC9 | LBC9 | LBC9 | LBC9 | LBC9 | LBC9 | LBC9 | LBC9 |
| Die Size (L,W) (um) | 290 x 290 | 290 x 290 | 290 x 290 | 460 x 510 | 680 x 620 | 282 x 285 | 282 x 285 | 290 x 290 |
| Package Attributes | | | | | | | | |
| Assembly Site | CDAT | CDAT | CDAT | MLA | CDAT | CDAT | CDAT | CDAT |
| Package Group | SOT | SOT | SOT | TSSOP | SOT | SOT | SOT | SOT |
| Package Designator | DCK | DBV | DCK | PW | DBZ | DBV | DBV | 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 |
| Body Thickness (mm) | 0.9 | 1.2 | 0.9 | 1 | 1 | 1.2 | 1.2 | 0.9 |
| Pin Count | 6 | 6 | 5 | 14 | 3 | 5 | 5 | 6 |
| Lead Finish | MATTE SN | MATTE SN | MATTE SN | NIPDAU | 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 |
| Mount Compound Supplier | SUMITOMO | SUMITOMO | SUMITOMO | HENKEL | SUMITOMO | SUMITOMO | SUMITOMO | SUMITOMO |
| Mount Compound Supplier Number | CRM-1076NS | CRM-1076NS | CRM-1076NS | QM 505MT | CRM-1076NS | CRM-1076NS | CRM-1076NS | CRM-1076NS |
| Mold Compound Supplier | 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 |
| Bond Wire Composition | 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 | 20.3 |

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device 1P1G3157QDCKRQ1 is qualified at MSL1 260C
- Qual Device 1P1G3157QDBVRQ1 is qualified at MSL1 260C
- Qual Device SN74LVC1G66DCKRQ1 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: SN74HCS74QPWRQ1 | QBS Package Reference: DRV5013ADEDBZRQ1 | QBS Package Reference: SN74AHC1G00DBVRQ1 | QBS Package Reference: CAHCT1G32QDBVRQ1 | QBS Package, Product Reference: 1P1G3157QDCKRQ1 |
|--|----|-------------------------------------|-------------|----------|-------------------------------|---|-------------|---|---|---|---|---|---|---|--|
| Test Group A - Accelerated Environment Stress Tests | | | | | | | | | | | | | | | |
| PC | A1 | JEDEC J-STD-020 JESD22-A113 | 3 | 77 | Preconditioning | MSL1 260C | - | - | - | - | No Fails | No Fails | No Fails | No Fails | - |
| HAST | A2 | JEDEC JESD22-A110 | 3 | 77 | Biased HAST | 130C/85%RH | 96 Hours | - | - | - | 3/231/0 | 3/231/0 | 1/77/0 | 1/77/0 | - |
| ACU/HAST | A3 | JEDEC JESD22-A102/JEDEC JESD22-A119 | 3 | 77 | Unbiased HAST | 130C/85%RH | 96 Hours | - | - | - | - | 3/231/0 | 1/77/0 | 1/77/0 | - |
| TC | A4 | JEDEC JESD22-A104 and Appendix 3 | 3 | 77 | Temperature Cycle | -55C/150C | 1500 Cycles | - | - | - | - | 3/231/0 | - | - | - |
| 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 | - |
| TC-BP | A4 | ML-STD883 Method 2011 | 1 | 5 | Post Temp Cycle Bond Pull | - | - | - | - | - | - | 1/5/0 | 1/5/0 | 1/5/0 | - |
| HTSL | A6 | JEDEC JESD22-A103 | 1 | 45 | High Temperature Storage Life | 150C | 2000 Hours | - | - | - | - | 3/135/0 | - | - | - |
| HTSL | A6 | JEDEC JESD22-A103 | 1 | 45 | High Temperature Storage Life | 175C | 500 Hours | - | - | - | - | - | 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 | - | - | - | - |
| ELFR | B2 | AEC Q100-008 | 3 | 800 | 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 | 3/90/0 | 1/30/0 | 1/30/0 | 1/30/0 |
| WBP | C2 | ML-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 | JEDEC J-STD-002 | 1 | 15 | PB Solderability | >95% Lead Coverage | - | - | - | - | 1/15/0 | 1/15/0 | - | - | - |
| SD | C3 | JEDEC J-STD-002 | 1 | 15 | PB-Free Solderability | >95% Lead Coverage | - | - | - | - | 1/15/0 | 1/15/0 | - | - | - |
| PD | C4 | JEDEC 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 | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements |

| Type | # | Test Spec | Min Lot Qty | SS / Lot | Test Name | Condition | Duration | Qual Device: 1P1G3157QDCKRQ1 | Qual Device: 1P1G3157QDBVRQ1 | Qual Device: SN74LVC1G66QDCKRQ1 | QBS Process Reference: SN74HCS74QPWRQ1 | QBS Package Reference: DRV5013ADEDBZRQ1 | QBS Package Reference: SN74AHC1G00DBVRQ1 | QBS Package Reference: CAHCT1G32QDBVRQ1 | QBS Package, Product Reference: 1P1G3157QDCKRQ1 |
|--|----|--------------|-------------|----------|-------------------------------------|------------------------------|------------|---|---|---|---|---|---|---|--|
| TDDb | D2 | JESD35 | - | - | Time Dependent Dielectric Breakdown | - | - | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements |
| HCI | D3 | JESD60 & 28 | - | - | Hot Carrier Injection | - | - | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements |
| BTI | D4 | - | - | - | Bias Temperature Instability | - | - | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements |
| SM | D5 | - | - | - | Stress Migration | - | - | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | Completed Per Process Technology Requirements | 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 | 3/90/0 | 2/60/0 | 1/30/0 | 1/30/0 | 1/30/0 |
| Additional Tests | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> 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: | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> 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): | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Room/Hot/Cold: HTOL, ED Room/Hot: THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU | | | | | | | | | | | | | | | |
| Room: ACU/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.

IMPORTANT NOTICE AND DISCLAIMER

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