12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20251009001.2
Qualification of RFAB using qualified Process Technology, Datasheet, Die Revision, additional Assembly changes for select devices

Change Notification / Sample Request

Date: January 15, 2026
To: MOUSER PCN

Dear Customer:
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

20251009001.2
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
LM2903BQDRQ1	NULL

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

PCN Number:	20251009001.2	**PCN Date:**	January 15, 2026
Title:	Qualification of RFAB using qualified Process Technology, Datasheet, Die Revision, additional Assembly changes for select devices		
Customer Contact:	Change Management Team	**Dept:**	Quality Services
Proposed 1st Ship Date:	July 14, 2026	**Sample requests accepted until:**	March 16, 2026*

***Sample requests received after March 16, 2026 will not be supported.**

Change Type:

☐	Assembly Site	☒	Design	☐	Wafer Bump Material
☒	Assembly Process	☒	Data Sheet	☐	Wafer Bump Process
☐	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☒	Wafer Fab Material
☒	Packing/Shipping/Labeling	☐	Test Process	☒	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of RFAB using the TIB qualified process technology and Assembly changes for the devices listed below.

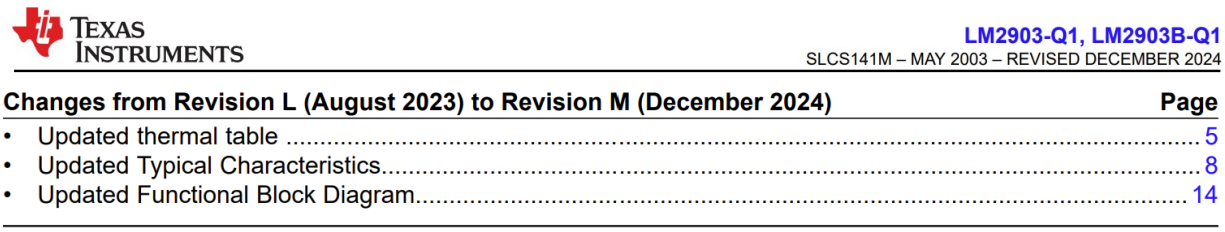
Current Fab Site			Additional Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
CFAB	JI3	200 mm	RFAB	TIB	300 mm

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

Construction differences are as follows:

	Current	New
Assembly Site	FMX/MLA	FMX/MLA
Final Wafer Thickness	10.5 mils	7.5 mils
Die Separation	Mechanical	Laser

The datasheet update was also included in PCNs 20241217021, 20250314001, 20241218003. The product datasheet(s) is updated as seen in the change revision history below:



TEXAS INSTRUMENTS

LM2903-Q1, LM2903B-Q1
SLCS141M – MAY 2003 – REVISED DECEMBER 2024

Changes from Revision L (August 2023) to Revision M (December 2024) **Page**

- Updated thermal table 5
- Updated Typical Characteristics..... 8
- Updated Functional Block Diagram..... 14

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
LM2903-Q1 and LM2903B-Q1	SLCS141L	SLCS141M	http://www.ti.com/product/LM2903-Q1

Qual details are provided in the Qual Data Section.

Reason for Change:

Introduce a new die design with behavior similar to that of the classic design.

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
CFAB	DLN	CHN	Chengdu
RFAB	**RFB**	**USA**	**Richardson**

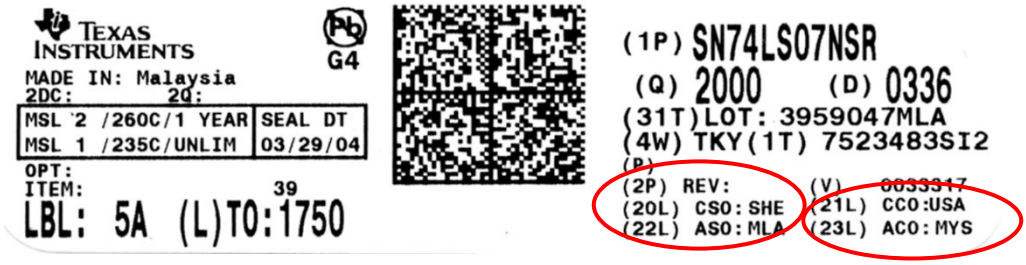
Die Rev:

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

Assembly Site Information:

Assembly Site	Assembly Site Origin Code (22L)	Assembly Site Country Code (23L)	Assembly Site City
FMX	MEX	MEX	Aguascalientes
MLA	MLA	MYS	KUALA LUMPUR

Sample product shipping label (not actual product label):



Product Affected

LM2903BQDRQ1

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

LM2903BQDRQ1 (MLA)
Approve Date 12-JANUARY -2024

Product Attributes

Attributes	Qual Device: LM2903BQDRQ1	QBS Product Reference: LM2903QDGKRQ1	QBS Product Reference: LM2903QPWRQ1	QBS Process Reference: LM2902BQPWRQ1	QBS Package, Product Reference: LM2903BQDRQ1	QBS Product Reference: LM2901BQDRQ1	QBS Product Reference: LM2903QDGKRQ1	QBS Product Reference: LM2903QPWRQ1
Automotive Grade Level	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
Product Function	Signal Chain	Signal Chain	Signal Chain	Signal Chain	Signal Chain	Signal Chain	Signal Chain	Signal Chain
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	CFAB	RFAB	RFAB	RFAB
Assembly Site	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA
Package Group	SOIC	VSSOP	TSSOP	TSSOP	SOIC	SOIC	VSSOP	TSSOP
Package Designator	D	DGK	PW	PW	D	D	DGK	PW
Pin Count	8	8	8	14	8	14	8	8

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device LM2903BQDRQ1 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: LM2903BQDRQ1	QBS Product Reference: LM2903QDGKRQ1	QBS Product Reference: LM2903QPWRQ1	QBS Process Reference: LM2902BQPWRQ1	QBS Package, Product Reference: LM2903BQDRQ1	QBS Product Reference: LM2901BQDRQ1
Test Group A - Accelerated Environment Stress Tests													
Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: LM2903BQDRQ1	QBS Product Reference: LM2903QDGKRQ1	QBS Product Reference: LM2903QPWRQ1	QBS Process Reference: LM2902BQPWRQ1	QBS Package, Product Reference: LM2903BQDRQ1	QBS Product Reference: LM2901BQDRQ1
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	1/308/0	1/308/0	1/0/0	3/0/0	3/924/0	1/30800/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	1/77/0	1/77/0	1/77/0	3/231/0	3/231/0	1/77/0
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	110C/85%RH	264 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	-	3/231/0	1/77/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	1/77/0	1/77/0	3/231/0	3/231/0	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	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	-	-	3/231/0	3/135/0	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	175C	500 Hours	1/45/0	1/45/0	1/77/0	-	-	1/77/0
Test Group B - Accelerated Lifetime Simulation Tests													
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	150C	300 Hours	1/77/0	1/77/0	1/77/0	-	1/77/0	1/77/0
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	150C	408 Hours	-	-	-	3/231/0	-	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	1/800/0	-
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	1/30/0	1/30/0	1/30/0	3/90/0	3/90/0	1/30/0

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: LM2903BQDRQ1	QBS Product Reference: LM2903QDGKRQ1	QBS Product Reference: LM2903QPWRQ1	QBS Process Reference: LM2902BQPWRQ1	QBS Package, Product Reference: LM2903BQDRQ1	QBS Product Reference: LM2901BQDRQ1
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	1/30/0	1/30/0	1/30/0	3/90/0	3/90/0	1/30/0
SD	C3	JEDEC J-STD-002	1	15	PB Solderability	>95% Lead Coverage	-	1/15/0	-	-	-	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	1/15/0	-	1/15/0	1/15/0
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	1/10/0	1/10/0	1/10/0	3/30/0	3/30/0	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
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
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
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
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
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	3/9/0	1/3/0	1/3/0
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	1000 Volts	1/3/0	1/3/0	1/3/0	3/9/0	-	-
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	1/6/0	1/3/0	1/3/0	3/18/0	1/6/0	1/6/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	1/30/0 (1)	1/30/0 (1)	1/30/0 (1)	3/90/0	3/90/0	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

Notes

(1) Device Family QBS. These 3 devices use the same silicon. The only difference is the packages the silicon is put in. Total lots of ED is 3.

Orderable Part Numbers

The following table contains a list of all TI Orderable Part Numbers (OPNs) released by this qualification per Product Qualification Family definition (AEC Q100 Appendix 1). Group E results shown above cover all part numbers listed here.

LBT-LM2903DR	LM2903AVQDRG4Q1
LM2903AVQDRQ1	LM2903BQDRQ1
LM2903DRCT	LM2903IDRDL
LM2903QDRG4Q1	LM2903QDRQ1
LM2903VQDRQ1	LM2903ZQDRQ1
SN104611DR	

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-2309-005

Q006 Summary for 0.8 Mil PCC Wire LBC9/TIB Al Bond Pads in MLA (Grade 1, -40/125C)
Approved 23-Sep-2021

Product Attributes

Attributes	Qual Device: OPA2991QDRQ1
Die Attributes	-
Wafer Fab Supplier	RFAB
Wafer Process	LBC9
Die Size (L,W) (mm)	1.08 X 0.81
Package Attributes	-
Assembly Site	MLA
Package Group	SOIC
Package Designator	D
Package Size (mils)	192.91 X 153.54
Body Thickness (mm)	1.58
Pin Count	8
Lead Finish	NiPDAU
Lead Pitch (mm)	1.27
Die Attach Supplier Name	HENKEL
Die Attach Supplier Number	QMI 505MT
Mold Compound Supplier Name	SUMITOMO
Mold Compound Supplier Number	EME-G633C
Wire Bond Composition	Cu
Wire Bond Diameter (mm)	20.32
Flammability Rating	UL 94 V-0

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: OPA2991QDRQ1
Test Group A – Accelerated Environment Stress Tests								
	PC	A1	-	3	22	SAM Analysis, Pre Stress	Completed	3/66/0
	PC	A1	JEDEC J-STD-020 JESD22-A113	3	276	Preconditioning	Level 1-260C	3/828/0
	PC	A1	-	3	22	SAM Analysis, Post Stress	Completed	3/66/0
	HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	3/231/0
	HAST	A2	JEDEC JESD22-A110	3	70	Biased HAST, 130C/85%RH	192 Hours	3/210/0
	HAST	A2	-	3	1	Cross Section, Post bHAST 192 Hours	Completed	3/3/0
	HAST	A2	-	3	22	SAM Analysis, Post bHAST, 192 Hours	Completed	3/66/0
	HAST	A2	-	3	3	Wire Bond Shear, Post bHast, 192 Hours	Units	3/9/0
	HAST	A2	-	3	3	Bond Pull over Stitch, post bHAST, 192 Hours	Units	3/9/0
	HAST	A2	-	3	3	Bond Pull over Ball, Post bHAST, 192 Hours	Units	3/9/0
	TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500 Cycles	3/231/0
	TC	A4	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle, -65/150C	1000 Cycles	3/210/0
	TC	A4	-	3	1	Cross Section, Post T/C 1000 Cycles	Completed	3/3/0
	TC	A4	-	3	22	SAM Analysis, Post T/C, 1000 Cycles	Completed	3/66/0
	TC	A4	-	3	3	Wire Bond Shear, Post T/C 1000 Cycles	Units	3/9/0
	TC	A4	-	3	3	Bond Pull over Stitch, Post T/C, 1000 Cycles	Units	3/9/0
	TC	A4	-	3	3	Bond Pull over Ball, Post T/C, 1000 Cycles	Units	3/9/0

	Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: OPA2991QDRQ1
	PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle - 40/125C	1000 Cycles	N/A
	PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle - 40/125C	2000 Cycles	N/A
	HTSL	A6	JEDEC JESD22-A103	3	45	High Temp Storage Bake 150C	1000 Hours	3/135/0
	HTSL	A6	JEDEC JESD22-A103	3	44	High Temp Storage Bake 150C	2000 Hours	3/132/0
	HTSL	A6	-	3	1	Cross Section, Post HTSL 2000 Hours	Completed	3/3/0
Test Group C – Package Assembly Integrity Tests								
	WBS	C1	AEC Q100-001	3	30	Wire Bond Shear, Cpk>1.67	Wires	3/90/0
	WBP	C2	MIL-STD883 Method 2011	3	30	Bond Pull over Ball, Cpk >1.67	Wires	3/90/0

- QBS: Qual By Similarity
- Qual Device OPA2991QDRQ1 is qualified at MSL1 260C

A1 (PC): Preconditioning:
Performed for THB, Biased HAST, AC, uHAST & TC samples, as applicable.

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
Green/Pb-free Status:
Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20201209-137461

ZVEI ID: SEM-PW-02, SEM-PW-03, SEM-PW-09, SEM-DE-01, SEM-DE-02, SEM-DE-03, SEM-BD-01, SEM-DS-02, SEM-PA-19, SEM-PW-13

For alternate parts with similar or improved performance, please visit the product page on TI.com

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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