



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20251015002.2

**Qualification of RFAB as an additional Fab site option,
TIEM-PR as additional wafer Probe site, Die Revision, Datasheet
and MLA as an additional Assembly/Test site option for select devices
Change Notification / Sample Request**

Date: October 15, 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

20251015002.2
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
LM2903BHQDRQ1	NULL
LM2903BRQPWRQ1	NULL

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

PCN Number:	20251015002.2	PCN Date:	October 15, 2025
Title:	Qualification of RFAB as an additional Fab site option, TIEM-PR as additional wafer Probe site, Die Revision, Datasheet and MLA as an additional Assembly/Test site option for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	April 13, 2026	Sample requests accepted until:	December 14, 2025*

*Sample requests received after December 14, 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 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 checked="" 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, TIEM-PR as additional wafer probe site & MLA as an additional Assembly/Test site options 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	200mm	RFAB	TIB	300mm

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

Wafer probe site

	Current site	Additional site
Wafer probe test site	CD-PR	TIEM-PR

Construction differences are as follows:

Group 1 device – Wafer fab site, Die rev, BOM

	Current	Proposed
Final wafer thickness	10.5mils	7.5mils

Group 2 device – Wafer fab site, Assembly/Test site, Die rev

	Current site	Additional site
Assembly site	FMX	MLA
Final wafer thickness	10.5mils	7.5mils

Group 3 device - Wafer fab site, Assembly/Test site, Die rev

	Current site	Additional site
Assembly site	HFTF	MLA
Mount compound	A-18	4147858
Mold compound	R-30	4211880

Marking differences	YMLL {CUST1} O	TI Letter, Mold cavity ID TI YM {CUST1} O (CAV)
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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.



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

The datasheet number will be changing.

Device Family	Change From:	Change To:
LM2903B-Q1	SLCS141L	SLCS141M

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/LM2903-Q1>

Qual details are provided in the Qual Data Section.

Test coverage, insertions, conditions will remain consistent with current testing.

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

<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
CFAB	CU3	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 (22L)	Assembly Country Code (23L)	Assembly City
HFTF	HFT	CHN	Hefei

FMX	MEX	MEX	Aguascalientes
TI Malaysia	MLA	MYS	Kuala Lumpur

Sample product shipping label (not actual product label):



Group 1 Product Affected: Wafer fab site, Die rev, BOM

LM2903BHQPWRQ1 LM2903BRQPWRQ1 LM2903BTQPWRQ1

Group 2 Product Affected: Wafer fab site, Die rev, Assembly/Test site

LM2903BHQDRQ1 LM2903BRQDRQ1 LM2903BTQDRQ1

Group 2 Product Affected: Wafer fab site, Die rev, Assembly/Test site

LM2903BHQDGKRQ1 LM2903BRQDGKRQ1 LM2903BTQDGKRQ1

Group 1 Qualification Report Automotive Qualification Summary (As per AEC-Q100 Rev. J and JEDEC Guidelines)

Approve Date 23-July-2024

Product Attributes

Attributes	Qual Device: <u>LM2903QPWRQ1</u>	QBS Package, Process Reference: <u>LM2902BQPWRQ1</u>
Automotive Grade Level	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125
Product Function	Signal Chain	Signal Chain
Wafer Fab Supplier	RFAB	RFAB
Assembly Site	MLA	MLA
Package Group	TSSOP	TSSOP
Package Designator	PW	PW
Pin Count	8	14

QBS: Qual By Similarity

Qual Device LM2903QPWRQ1 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: LM2903QPWRQ1	QBS Package, Process Reference: LM2902BQPWRQ1
Test Group A - Accelerated Environment Stress Tests									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	1/308/0	3/924/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	1/77/0	3/231/0
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	3/231/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	-
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	1/5/0	1/15/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	3/231/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	175C	500 Hours	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	-
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
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	3/90/0
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	1/30/0	3/90/0
SD	C3	JEDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	1/15/0	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	1/10/0	3/30/0
Test Group D - Die Fabrication Reliability Tests									
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements	-
TDDB	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	-
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	1500 Volts	1/3/0	-
LU	E4	AEC Q100-004	1	6	Latch-Up	Per AEC Q100-004	-	1/3/0	-
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0	-

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-2310-099

Group 2 Qualification Report **Automotive Qualification Summary** **(As per AEC-Q100 Rev. H and JEDEC Guidelines)**

Approve Date 12-JANUARY -2024

Product Attributes

Attributes		Qual Device: LM2903BQDRQ1	QBS Process Reference: LM2902BQPWRQ1	QBS Package, Product Reference: LM2903BQDRQ1	QBS Product Reference: LM2901BQDRQ1
Automotive Grade Level		Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range (C)		-40 to 125	-40 to 125	-40 to 125	-40 to 125
Product Function		Signal Chain	Signal Chain	Signal Chain	Signal Chain
Wafer Fab Supplier		RFAB	RFAB	CFAB	RFAB
Assembly Site		MLA	MLA	MLA	MLA
Package Group		SOIC	TSSOP	SOIC	SOIC
Package Designator		D	PW	D	D
Pin Count		8	14	8	14

QBS: Qual By Similarity

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 Process Reference: LM2902BQPWRQ1	QBS Package, Product Reference: LM2903BQDRQ1	QBS Product Reference: LM2901BQDRQ1
Test Group A - Accelerated Environment Stress Tests											
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	1/231/0	-	3/924/0	1/30800/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	1/77/0	-	3/231/0	1/77/0
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	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	-	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

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	-	-	1/77/0
Test Group B - Accelerated Lifetime Simulation Tests											
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	150C	300 Hours	1/77/0	-	3/231/0	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	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	1/30/0	-	3/90/0	1/30/0
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	1/30/0	-	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
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	1/10/0	-	3/30/0	1/10/0
Test Group D - Die Fabrication Reliability Tests											
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements	-	-	-
TDDB	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	-	-	-
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	1000 Volts	1/3/0	-	-	-
LU	E4	AEC Q100-004	1	6	Latch-Up	Per AEC Q100-004	-	1/6/0	-	-	-
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	1/30	-	-	-

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, 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

Group 3 Qualification Report

Automotive Qualification Summary

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

Approve Date 08-AUGUST -2024

Product Attributes

Attributes		Qual Device: LM2903QDGKRQ1	QBS Package Reference: LM2903BQDRQ1	QBS Package, Process Reference: LM2901BQDRQ1	QBS Process Reference: MC33063AQDRQ1	QBS Package Reference: LM2903BQDRQ1
Automotive Grade Level		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
Product Function		Signal Chain	Signal Chain	Signal Chain	Power Management	Signal Chain
Wafer Fab Supplier		RFAB	CFAB	RFAB	RFAB	RFAB
Assembly Site		MLA	MLA	MLA	FMX	MLA
Package Group		VSSOP	SOIC	SOIC	SOIC	SOIC
Package Designator		DGK	D	D	D	D
Pin Count		8	8	14	8	8

QBS: Qual By Similarity

Qual Device LM2903QDGKRQ1 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: LM2903QDGKRQ1	QBS Package Reference: LM2903BQDRQ1	QBS Package, Process Reference: LM2901BQDRQ1	QBS Process Reference: MC33063AQDRQ1	QBS Package Reference: LM2903BQDRQ1
Test Group A - Accelerated Environment Stress Tests												
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	1/308/0	3/924/0	1/308/0	-	1/308/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	1/77/0	3/231/0	1/77/0	-	1/77/0
AC/uHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	1/77/0	3/231/0	1/77/0	-	1/77/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/231/0	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
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	-	1/77/0	-	1/45/0
Test Group B - Accelerated Lifetime Simulation Tests												
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	1/77	-	-	3/231/0	-
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	150C	300 Hours	1/77/0	1/77/0	1/77/0	-	1/77/0
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	1/30/0	3/90/0	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	1/30/0	3/90/0	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	-	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
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	1/10/0	3/30/0	1/10/0	-	1/10/0
Test Group D - Die Fabrication Reliability Tests												
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements	-	-	-	-
TDDB	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	-	-	-	-
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	1000 Volts	1/3/0	-	-	-	-
LU	E4	AEC Q100-004	1	6	Latch-Up	Per AEC Q100-004	-	1/3/0	-	-	-	-
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0	-	-	-	-

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-2310-096

ZVEI ID: SEM-DS-02, SEM-DE-01, SEM-DE-03, SEM-DE-02, SEM-PW-13, SEM-PW-02, SEM-PW-09, SEM-PA-07, SEM-PA-11, SEM-PA-13, SEM-PA-18, SEM-TF-01

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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