



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN Number:	20260713002.2	PCN Issued	July 16, 2026
Qualifying a Design change, Data sheet update, TI Clark as an additional wafer Probe Test site and Assembly/Test site option for select devices		Sample request deadline:	September 14, 2026
		Estimated 1st ship date:	January 12, 2027
Sample requests received after September 14, 2026 will not be supported.			

Change type(s)	ZVEI ID(s)
Assembly Site Packing/Shipping/Labeling Design Data Sheet/Electrical Specification Test Site	SEM-DS-01, SEM-PA-18, SEM-DE-02, SEM-TF-01

PCN Details

Description of Change:		
Texas Instruments is pleased to announce a die design, TI Clark as an additional wafer Probe Test site and Assembly/Test site options for the select devices listed below.		
	Current Site	Additional Site
Wafer probe Test site	CD-PR	CLARK-PR
Assembly/Test site*	CDAT	CLARK
*No material differences between Assembly/Test sites		
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.		
LM63615-Q1, LM63625-Q1 SNVSB55J – FEBRUARY 2019 – REVISED JUNE 2026		
Changes from Revision I (May 2025) to Revision J (June 2026)		Page
• Added a statement and table note about input capacitor placement recommendation in the <i>Pin Configurations and Functions</i> table.....		4
• Updated I _{L-NEG} specification for LM63625-Q1 in the <i>Electrical Characteristics</i> table.....		8
LM63635-Q1 SNVSBK9J – NOVEMBER 2019 – REVISED JUNE 2026		
Changes from Revision I (October 2025) to Revision J (June 2026)		Page
• Added a statement and table note about input capacitor placement recommendation in the <i>Pin Configurations and Functions</i> table.....		4
• Updated the table note of <i>Absolute Maximum Ratings</i> table.....		6
• Updated I _{L-NEG} specification in the <i>Electrical Characteristics</i> table.....		8

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
LM636x5-Q1	SNVSB55I	SNVSB55J	http://www.ti.com/product/LM63615-Q1
LM63635-Q1	SNVSBK9I	SNVSBK9J	http://www.ti.com/product/LM63635-Q1

Qual details are provided in the Qual Data Section.

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

Reason for Change:

Improve robustness under corner-case application conditions.
Continuity of supply.

Anticipated impact on Form, Fit, Function, Quality or Reliability:

Review the updated datasheets and/or Standard Data Packet for more details on the changes

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:

Assembly Site Information

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
CDAT	CDA	CHN	Chengdu
CLARK	QAB	PHL	Angeles city, Pampanga

Sample product shipping label (not actual product label):



Products Affected:

LM63610DQDRRRQ1	LM63625DQDRRRQ1*	LM63635CC3QDRRRQ1
LM63615CAQDRRRQ1*	LM63635CA3QDRRRQ1	LM63635CC5QDRRRQ1
LM63615DQDRRRQ1*	LM63635CA5QDRRRQ1	LM63635DQDRRRQ1*
LM63625CAQDRRRQ1*	LM63635CAQDRRRQ1*	

*With Data sheet change

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

Approve Date 26-February-2026

Note: Minor silicon die revision for all assembly sites – TI Qualification R-NPD-2512-048 *

*Die revision was localized routing change to internal logic circuits to address bug fix. Change does not impact reliability or alter device specific data.

Product Attributes

Attributes	Qual Device <u>LM636xxxQDRRQ1</u> CLARK-AT / CDAT assembly	Qual Device <u>LM636xxxQPWPRQ1</u> TIEMA assembly	Qual Device <u>LM636xxxQDPWPRQ1</u> MLA assembly	Original Q100 qualification: <u>LM636xxQDRRQ1</u> CDAT assembly	Original Qualification: <u>LM636xxQPWPQ1</u> MLA assembly	QBS for ELFR <u>LMR33620CQRNXTQ1</u>
Automotive Grade Level				Grade 1		Grade 1
Operating Temp Range				-40 to +125 C		-40 to +125 C
Product Function				Power Management		Power Management
Die Attributes	-	-	-	-	-	-
Wafer Fab Supplier				RFAB		RFAB
Wafer Process ID				LBC9		LBC9
Package Attributes	-	-	-	-	-	-
Assembly Site	CLARK	TIEMA	MLA	CDAT	MLA	UTL1
Package Type	QFN/SON	HTSSOP	HTSSOP	QFN/SON	HTSSOP	QFN/SON
Package Designator	DRR	PWP	PWP	DRR	PWP	RNX
Ball/Lead Count	12	16	16	12	16	12
Package Size (mils)	118.11 X 118.11	196.85 X 173.23	196.85 X 173.23	118.11 X 118.11	196.85 X 173.23	
Body Thickness (mils)	31.5	47.24	47.24	31.5	47.24	
Ball/Lead Pitch (mils)	19.7	25.59	25.59	19.7	25.59	
Leadframe Plating Composition	NiPdAu	Matte Sn	NiPdAu	NiPdAu	NiPdAu	

- QBS: Qual By Similarity

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 <u>LM636xxxQDRRQ1</u> / <u>LM636xxxQDPWPRQ1</u>	QBS Product Reference: <u>LM63625QDRRQ1</u>	QBS Product Reference: <u>LM63635QDPWPQ1</u>	QBS Process ELFR Reference: <u>LMR33620CQRNXTQ1</u>
Test Group A – Accelerated Environment Stress Tests										
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning	Level 2 - 260	Refer to R-CHG-2410-069 for DRR in Clark-AT, R-CHG-2405-009 for PWP in TIEMA and R-CHG-2403-108 in MLA.	Pass Level 2-260C	Pass Level 3-260C	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours		3/231/0	3/231/0	-
uHAST	A3	JEDEC JESD22-A102	3	77	Unbiased HAST 130C	96 Hours		3/231/0	3/231/0	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500 Cycles		3/231/0	3/231/0	-
TC-BP		MIL-STD883 Method 2011	1	30	Post 500 Temp. Cycle, Bond Pull	Wires		1/30/0	1/5/0	-
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle, -40/125C	1000 Cycles	N/A per Q100 rev J	N/A	1/45	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake, 175C or 150C	500 Hours 1000 hours	Refer to R-CHG-2410-069 for DRR in Clark-AT, R-CHG-2405-009 for PWP in TIEMA and R-CHG-2403-108 in MLA.	1/45/0	3/231/0	-
Test Group B – Accelerated Lifetime Simulation Tests										

	HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 150C	408 Hours	Device specific data	1/77/0	3/231/0	-
	ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 125C	48 Hours	QBS to technology ELFR	QBS	QBS	3/2400/0
	EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	N/A	N/A	N/A	N/A
Test Group C – Package Assembly Integrity Tests											
	WBS	C1	AEC Q100-001	1	30	Bond Shear (Cpk>1.67)	Wires	Refer to R-CHG-2410-069 for DRR in Clark-AT, R-CHG- 2405-009 for PWP in TIEMA and R-CHG-2403-108 in MLA.	1/30/0	1/30/0 Pass	-
	WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull (Cpk>1.67)	Wires		1/30/0	1/30/0 Pass	-
	SD	C3	JEDEC JESD22-B102	1	15	Surface Mount 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	-
	SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Solder Balls	N/A	N/A	N/A	N/A
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 Injection Carrier	-	Completed Per Process Technology Requirements			
	NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	Completed Per Process Technology Requirements			
	SM	D5	-	-	-	Stress Migration	-	Completed Per Process Technology Requirements			
Test Group E – Electrical Verification Tests											
	HBM	E2	AEC Q100-002	1	3	ESD - HBM	2000V	Device specific data from original DRR and PWP Q100 qualifications	1/3/0	1/3/0	-
	CDM	E3	AEC Q100-011	1	3	ESD - CDM	750V	Device specific data from original DRR / PWP packages	1/3/0	1/3/0	-
	LU	E4	AEC Q100-004	1	6	Latch-up	(Per AED Q100- 004)	Device specific data from original DRR / PWP packages	1/6/0	1/6/0	-
	ED	E5	AEC Q100-005	3	30	Electrical Distribution	Cpk>1.6 Room, Hot, & Cold	Device specific data from original DRR / PWP packages	3/30/0	3/30/0	-

A1 (PC): Preconditioning:

Performed for THB, Biased HAST, AC, uHAST, TC & PTC samples, as applicable.

Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E): -40°C to +150°C

Grade 1 (or Q): -40°C to +125°C

Grade 2 (or T): -40°C to +105°C

Grade 3 (or I) : -40°C to +85°C

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: 20201212-137488, R-NPD-2512-048

Automotive Qualification Summary
(As per AEC-Q100 Rev. J and JEDEC Guidelines)
Approve Date 27-February-2026

Product Attributes

		TI FAMILY LEVEL QUALIFICATION DATA (PER AEC-Q100 A1.5.2 Multiple Families): TI CLARK's QFN Package using Copper wire to BOAC bond pad						
Attributes	Qual Device:	QBS Package Reference:	QBS Package Reference:	QBS Package Reference:	QBS Package Reference:	QBS Package Reference:	QBS Package Reference:	QBS Package Reference:
	LM63625DQDQRRRQ1	LM70880QRRXRQ1	TPS2561AQDRCRQ1	TPS7A4701QRGWTO1	Q917A12ETRGRQ1	LM5157QRTERRQ1	PTPD45480TRGRRQ1	LM5148PSQRGYRQ1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 2	Grade 1	Grade 2	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 105	-40 to 125	-40 to 105	-40 to 125
Product Function	Power Management	Power Management	Power Management	Power Management	Power Management	Power Management	Power Management	Power Management
Die Attributes								
Wafer Fab Supplier	RFAB	CFAB, CFAB, RFAB	RFAB	FR-BIP-1	RFAB	RFAB	RFAB	RFAB
Package Attributes								
Assembly Site	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT
Package Group	QFN	QFN	QFN	QFN	QFN	QFN	QFN	QFN
Package Designator	DRR	RRX	DRC	RGW	RGZ	RTE	RGR	RGY
Package Size (mm)	3 x 3	6 x 6	3 x 3	5 x 5	7 x 7	3 x 3	3.5 x 3.5	4.5 x 3.5
Body Thickness (mm)	0.75	0.9	0.9	0.9	0.9	0.75	0.9	0.9
Pin Count	12	29	10	20	48	16	20	19
Lead Finish	NIPDAU	NIPDAU	NIPDAU	NIPDAU	NIPDAU	NIPDAU	NIPDAU	NIPDAU
Lead Pitch(mm)	0.5	0.5	0.5	0.65	0.5	0.5	0.5	0.5

QBS: Qual By Similarity, also known as Generic Data
Qual Device LM63625DQDRRRQ1 is qualified at MSL2 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: LM63625DQDRRRQ1	QBS Package Reference: LM70880QRRXRQ1	QBS Package Reference: TPS2561AQDRCRQ1	QBS Package Reference: TPS7A4701QRGWTO1	QBS Package Reference: Q917A12ETRGRQ1	QBS Package Reference: LM5157QRTERRQ1	QBS Package Reference: PTPD45480TRGRRQ1	QBS Package Reference: LM5148PSQRGYRQ1
Test Group A - Accelerated Environment Stress Tests															
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	QBS	3/231/0	3/231/0	3/231/0	-	3/231/0	3/231/0	3/231/0
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL3 260C	-	QBS	-	-	-	3/231/0	-	-	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	QBS	3/231/0	-	-	-	3/231/0	1/77/0	-
ACU/HAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Autoclave	121C/15psig	96 Hours	QBS	-	-	-	3/231/0	-	-	-
ACU/HAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	QBS	3/231/0	-	-	-	3/231/0	1/77/0	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	QBS	3/231/0	3/231/0	3/231/0	-	3/231/0	3/231/0	3/231/0
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	QBS	1/5/0	1/5/0	-	-	1/5/0	1/5/0	1/5/0
TC-SAM	A4	-	3	3	Post TC SAM	<50% delamination	-	-	3/9/0	3/9/0	-	-	3/9/0	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	QBS	3/135/0	-	-	-	-	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	-	-	-	-	-	-
All other group B tests are carried over from original Q100 product qualification															
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	3/90/0	3/90/0	3/90/0	3/90/0	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	3/90/0	3/90/0	3/90/0	3/90/0	1/30/0	3/90/0
SD	C3	JEDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	Generic data applied	1/15/0	-	-	3/45/0	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	3/30/0	3/30/0	3/30/0	3/30/0	1/10/0	3/30/0
Test Group D - Die Fabrication Reliability Tests															
All other group D tests are carried over by original Q100 product qualification. Not applicable to assembly site change															
Test Group E - Electrical Verification Tests															
ESD	E2	AEC Q100-002	1	3	ESD HBM	-	2000 Volts	All Device specific tests are carried over from original Q100 product qualification							
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	500 Volts								
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-								
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot and cold	-								
Additional Tests															
BLR	T1	-	-	-	Board Level Reliability - Temp Cycle	-40/125C	1000 Cycles	-	1/32/0	-	-	-	-	-	-

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-2512-051

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

Approve Date 03-JUNE -2025

Product Attributes

Attributes	Qual Device: LM63625DQDRRQ1	QBS Package Reference: TPS92622QDRRQ1	QBS Process, Product Reference: LM70880QRRXRQ1	QBS Package Reference: LM5165QDRCRQ1	QBS Package Reference: LM5148PSQGRYQ1
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	Power Management	Power Management	Power Management	-	Power Management
Wafer Fab Supplier	RFAB	RFAB	CFAB, CFAB, RFAB	RFAB	RFAB
Assembly Site	CLARK-AT	CDAT	CLARK-AT	CLARK-AT	CLARK-AT
Package Group	QFN	QFN	QFN	QFN	QFN
Package Designator	DRR	DRR	RRX	DRC	RGY
Pin Count	12	12	29	10	19

QBS: Qual By Similarity, also known as Generic Data

Qual Device LM63625DQDRRQ1 is qualified at MSL2 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: LM63625DQDRRQ1	QBS Package Reference: TPS92622QDRRQ1	QBS Process, Product Reference: LM70880QRRXRQ1	QBS Package Reference: LM5165QDRCRQ1	QBS Package Reference: LM5148PSQGRYQ1
Test Group A - Accelerated Environment Stress Tests												
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	-	3/0/0	3/340/0	3/0/0	3/0/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	1/77/0	3/231/0	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	-	3/231/0	3/231/0	3/231/0	3/231/0
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	-	-	-	3/36/0	-	-
PTC	A5	JEDEC JESD22-A105	1	45	PTC	-40/125C	1000 Cycles	-	-	-	1/45/0	-

HTSL	A6	JEDEC JESD22- A103	1	45	High Temperature Storage Life	175C	500 Hours	-	-	-	3/135/0	-
Test Group B - Accelerated Lifetime Simulation Tests												
HTOL	B1	JEDEC JESD22- A108	3	77	Life Test	125C	1000 Hours	-	1/77/0	3/231/0	3/231/0	-
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	3/90/0	3/90/0	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	3/90/0	3/90/0	3/90/0
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	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	3/30/0	3/30/0	3/30/0
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
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
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
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
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
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
ESD	E3	AEC Q100- 011	1	3	ESD CDM	-	500 Volts	-	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	1/3/0	-	1/3/0
ED	E5	AEC Q100- 009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	3/90/0	3/90/0	-	1/30/0
Additional Tests												
BLR	T1	-	-	-	Board Level Reliability - Temp Cycle	-40/125C	1000 Cycles	-	-	1/32/0	-	-

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:

TI Qualification ID: R-CHG-2410-069

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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