



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN Number:	20260309001.2A		PCN Date:	August 13, 2026										
Title:	Qualify New Assembly Material set for Selected Device(s)													
Customer Contact:	Change Management team		Dept:	Quality Services										
Proposed 1st Ship Date:	Sept 09, 2026		Sample requests accepted until:	N/A										
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:														
Revision A is to update the AEC-Q100 Qualification Report for this notification.														
Texas Instruments is pleased to announce the qualification of new assembly material set for devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows														
Group 1														
<table border="1"><thead><tr><th></th><th>Current</th><th>Proposed</th></tr></thead><tbody><tr><td>Mold Compound</td><td>4208625</td><td>4222198</td></tr></tbody></table>							Current	Proposed	Mold Compound	4208625	4222198			
	Current	Proposed												
Mold Compound	4208625	4222198												
Group 2														
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	Current	Proposed												
Wire diam/type	1.0mil Au	0.8mil Cu												
Mold Compound	4208625	4222198												
Group 3														
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	Current	Proposed												
Wire diam/type	1.3mil Au	1.3mil Cu												
Mold Compound	4208625	4222198												
Reason for Change:														
Continuity of supply														
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):														
Review the SDP for full evaluation of the change based on the customer use case.														
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.														
<table border="1"><thead><tr><th>RoHS</th><th>REACH</th><th>Green Status</th><th>IEC 62474</th></tr></thead><tbody><tr><td>☒ No Change</td><td>☒ No Change</td><td>☒ No Change</td><td>☒ No Change</td></tr></tbody></table>						RoHS	REACH	Green Status	IEC 62474	☒ No Change	☒ No Change	☒ No Change	☒ No Change	
RoHS	REACH	Green Status	IEC 62474											
☒ No Change	☒ No Change	☒ No Change	☒ No Change											

Changes to product identification resulting from this PCN:

None

Group 1 Product Affected:

DS90UA102TRHSJQ1	DS90UB925QSQX/NOPB	DS90UR904QSQX/J7003069
DS90UA102TRHSRQ1	DS90UB940NTNKDRQ1	DS90UR904QSQX/NOPB
DS90UA102TRHSTQ1	DS90UB940NTNKDTQ1	DS90UR905QSQ/E7002382
DS90UB301ATRHSRQ1	DS90UB940TNKDRQ1	DS90UR905QSQ/NOPB
DS90UB301ATRHSTQ1	DS90UB940TNKDTQ1	DS90UR905QSQE/E7002382
DS90UB301QSQ/NOPB	DS90UB948TNKDRQ1	DS90UR905QSQE/NOPB
DS90UB301QSQE/NOPB	DS90UB948TNKDTQ1	DS90UR905QSQX/E7002382
DS90UB904QSQ/NOPB	DS90UH301QSQ/NOPB	DS90UR905QSQX/E7002600
DS90UB904QSQE/J7003047	DS90UH301QSQE/NOPB	DS90UR905QSQX/NOPB
DS90UB904QSQE/NOPB	DS90UH301QSQX/NOPB	DS90UR908QSQ/NOPB
DS90UB904QSQX/NOPB	DS90UH925QSQ/E7002397	DS90UR908QSQE/NOPB
DS90UB904QSQX/S7002783	DS90UH925QSQ/NOPB	DS90UR908QSQX/NOPB
DS90UB914ATRHSJQ1	DS90UH925QSQE/E7002397	DS99R124AQSQ/NOPB
DS90UB914ATRHSRQ1	DS90UH925QSQE/NOPB	DS99R124AQSQE/NOPB
DS90UB914ATRHSTQ1	DS90UH925QSQX/E7002397	DS99R124AQSQX/NOPB
DS90UB914QSQ/NOPB	DS90UH925QSQX/NOPB	DS99R124QSQ/E7002678
DS90UB914QSQE/NOPB	DS90UH940NTNKDRQ1	DS99R124QSQ/NOPB
DS90UB914QSQX/NOPB	DS90UH940NTNKDTQ1	DS99R124QSQE/NOPB
DS90UB921TRHSRQ1	DS90UH940TNKDRQ1	DS99R124QSQX/NOPB
DS90UB921TRHSTQ1	DS90UH940TNKDTQ1	LM25119PSQ/NOPB
DS90UB925QSQ/E7002826	DS90UH948TNKDRQ1	LM25119PSQE/NOPB
DS90UB925QSQ/NOPB	DS90UH948TNKDTQ1	LM25119PSQX/NOPB
DS90UB925QSQE/E7002826	DS90UR904QSQ/NOPB	LM25119QPSQ/NOPB
DS90UB925QSQE/NOPB	DS90UR904QSQE/J7003050	LM25119QPSQX/NOPB
DS90UB925QSQX/E7002826	DS90UR904QSQE/NOPB	

Group 2 Product Affected:

DAC101C081QISD/NOPB	DS90UR907QSQE/NOPB	EMB1433QSQ/NOPB
DAC101C081QISDX/NOPB	DS90UR907QSQX/E7003100	EMB1433QSQE/NOPB
DS90UH925ATRHSJQ1	DS90UR907QSQX/NOPB	EMB1433QSQX/NOPB
DS90UH925ATRHSRQ1	DS99R421QSQX/J7003070	LM2734ZQSDE/NOPB
DS90UH925ATRHSTQ1	DS99R421QSQX/NOPB	LMH6722QSD/NOPB
DS90UR907QSQ/E7003100	EMB1432QSQ/NOPB	LMH6722QSDX/NOPB
DS90UR907QSQ/NOPB	EMB1432QSQE/NOPB	
DS90UR907QSQE/E7003100	EMB1432QSQX/NOPB	

Group 3 Product Affected:

LM2623QNHLRQ1	LP38691QSD-3.3/NOPB	LP38693QSD-ADJ/NOPB
LM2623QNHLTQ1	LP38691QSD-5.0/NOPB	LP38693QSDX-1.8/NOPB
LM26480QSQ-AA/NOPB	LP38691QSD-ADJ/NOPB	LP38693QSDX-2.5/NOPB
LM26480QSQ-CF/NOPB	LP38691QSDX-1.8/NOPB	LP38693QSDX-3.3/NOPB
LM26480QSQX-8D/NOPB	LP38691QSDX-2.5/NOPB	LP38693QSDX-5.0/NOPB

LM26480QSQX-AA/NOPB	LP38691QSDX-3.3/NOPB	LP38693QSDX-ADJ/NOPB
LM2735YQSD/NOPB	LP38691QSDX-5.0/E7002802	LP8728QSQE-A/NOPB
LM2735YQSDX/NOPB	LP38691QSDX-5.0/NOPB	LP8728QSQX-A/NOPB
LM5112Q1SD/NOPB	LP38691QSDX-ADJ/NOPB	LP8728QSQX-B/NOPB
LM5112Q1SDX/NOPB	LP38693QSD-1.8/NOPB	LP8728QSQX-C/NOPB
LM5113QDPRRQ1	LP38693QSD-2.5/NOPB	LP8728QSQX-D/NOPB
LP38691QSD-1.8/NOPB	LP38693QSD-3.3/NOPB	SN386901NGGRQ1
LP38691QSD-2.5/NOPB	LP38693QSD-5.0/NOPB	SN386918NGGRQ1

Qualification Report

Automotive Qualification Summary

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

Qualification of UniBOM set for QFN packages (Automotive)

Approve Date 15-DECEMBER -2025

Product Attributes

Attributes	Qual Device: LM25119QPSQ/NOPB	Qual Device: LM26420Q1XSQ/NOPB	Qual Device: DS90UH948TNKDRQ1	Qual Device: LM5109BQNGTRQ1	QBS Package Reference: DS90UH928QSQ34	QBS Process Reference: TLV3801QDSGRQ1	QBS Process Reference: LM5100AMR/NOPB
Automotive Grade Level	Grade 1	Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125	-40 to 105	-40 to 125	-40 to 105	-40 to 125	-40 to 125
Product Function	Interface	Interface	Interface	Interface	Interface	Signal Chain	Power Management
Wafer Fab Supplier	MAINEFAB	MAINEFAB	MAINEFAB	MAINEFAB	FR-BIP-1	FR-BIP-1	MAINEFAB
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA	TIEMA	UTL1	TIEMA
Package Group	QFN	QFN	QFN	QFN	QFN	QFN	SOIC
Package Designator	RTV	RUM	NKD	NGT	RHS	DSG	DDA
Pin Count	32	16	64	8	48	8	8

QBS: Qual By Similarity, also known as Generic Data

Qual Device LM25119QPSQ/NOPB is qualified at MSL1 260C

Qual Device LM26420Q1XSQ/NOPB is qualified at MSL3 260C

Qual Device DS90UH948TNKDRQ1 is qualified at MSL3 260C

Qual Device LM5109BQNGTRQ1 is qualified at MSL1 260C

Note 1: Affected devices in PCN have justification to use Process QBS references for Group B tests based on AEC-Q100 Rev-J Appendix 1 A1.2, silicon wafer fab and die attributes were qualified. ELFR/HTOL purpose is for silicon changes and TI will not re-run these tests for assembly/AT site changes even if AEC-Q100/ZVIE states these tests are a consideration.

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: LM25119QPSQ/NOPB	Qual Device: LM26420Q1XSQ/NOPB	Qual Device: DS90UH948TNKDRQ1	Qual Device: LM5109BQNGTRQ1	QBS Package Reference: DS90UH928QSQ/S4	QBS Process Reference: TLV3801QDSGRQ1	QBS Process Reference: LM5100AMR/NOPB
Test Group A - Accelerated Environment Stress Tests														
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	3/693/0	-	-	-	-	-	-
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL3 260C	-	-	3/462/0	3/231/0	-	3/693/0	-	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-	3/231/0	-	-
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	3/231/0	-	-	3/231/0	-	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-55C/125C	1000 Cycles	-	-	-	-	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	-	-	-	-
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	-	-	-	-	3/15/0	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	500 Hours	-	-	-	-	3/135/0	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	175C	500 Hours	3/135/0	3/135/0	-	-	-	-	-
Test Group B - Accelerated Lifetime Simulation Tests														
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	-	-	-	3/231/0	3/231/0	3/231/0 Note 1	3/231/0 Note 1
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	125C	48 Hours	-	-	-	-	-	3/2400/0 Note 1	3/2400/0 Note 1
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	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	3/90/0	3/90/0	3/90/0	-	3/90/0	3/90/0	3/90/0
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	-	3/30/0	3/30/0	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	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
TDD	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
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
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
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
Test Group E - Electrical Verification Tests														
ESD	E2	AEC Q100-002	1	3	ESD HBM	-	2000 Volts	-	-	-	-	1/3/0	1/3/0	3/9/0
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	500 Volts	-	-	-	-	1/3/0	1/3/0	3/9/0
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	-	-	-	-	1/3/0	1/3/0	3/9/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0	3/90/0	3/90/0	-	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-2310-014

Qualification Report

Automotive Qualification Summary

(As per AEC and JEDEC Guidelines)

Q006 QFN at TIEM

Approve Date 15-DECEMBER -2025

Product Attributes

Attributes	Qual Device: LM25119QPSQ/NOPB	Qual Device: LM26420Q1XSQ/NOPB	Qual Device: DS90UH948TNKDRQ1	Qual Device: LM5109BQNGTRQ1	QBS Package Reference: DS90UH928QSQ/S4
Automotive Grade Level	Grade 1	Grade 1	Grade 2	Grade 1	Grade 2
Operating Temp Range (C)	-40 to 125	-40 to 125	-40 to 105	-40 to 125	-40 to 105
Product Function	Interface	Interface	Interface	Interface	Interface
Wafer Fab Supplier	MAINEFAB	MAINEFAB	MAINEFAB	MAINEFAB	FR-BIP-1
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA	TIEMA
Package Group	QFN	QFN	QFN	QFN	QFN
Package Designator	RTV	RUM	NKD	NGT	RHS
Pin Count	32	16	64	8	48

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: LM25119QPSQ/NOPB	Qual Device: LM26420Q1XSQ/NOPB	Qual Device: DS90UH948TNKDRQ1	Qual Device: LM5109BQNGTRQ1	QBS Reference: DS90UH928QSQ/S4
Test Group A - Accelerated Environment Stress Tests												
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	3/0/0	-	-	-	-

PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL3 260C	-	-	3/0/0	3/0/0	-	3/0/0
PC	A1.1	-	3	22	SAM Precon Pre	Review for delamination	-	3/66/0	3/66/0	3/66/0	-	3/66/0
PC	A1.2	-	3	22	SAM Precon Post	Review for delamination	-	3/66/0	3/66/0	3/66/0	-	3/66/0
HAST	A2.1	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-	3/231/0
HAST	A2.1.2	-	3	1	Cross Section, post bHAST, 1X	Post stress cross section	Completed	3/3/0	-	-	-	3/3/0
HAST	A2.1.3	-	3	3	Wire Bond Shear, post bHAST, 1X	Post stress	-	2/6/0	-	-	-	3/9/0
HAST	A2.1.4	-	3	3	Bond Pull over Stitch, post bHAST, 1X	Post stress	-	3/9/0	-	-	-	3/9/0
HAST	A2.1.5	-	3	3	Bond Pull over Ball, post bHAST, 1X	Post stress	-	3/9/0	-	-	-	3/9/0
HAST	A2.2	JEDEC JESD22-A110	3	70	Biased HAST	130C/85%RH	192 Hours	3/231/0	-	-	-	3/231/0
HAST	A2.2.1	-	3	22	SAM Analysis, post bHAST 2X	Review for delamination	Completed	3/66/0	-	-	-	3/66/0
HAST	A2.2.2	-	3	1	Cross Section, post bHAST, 2X	Post stress cross section	Completed	3/3/0	-	-	-	3/3/0
HAST	A2.2.3	-	3	3	Wire Bond Shear, post bHAST, 2X	Post stress	-	3/9/0	-	-	-	3/9/0
HAST	A2.2.4	-	3	3	Bond Pull over Stitch, post bHAST, 2X	Post stress	-	3/9/0	-	-	-	3/9/0
HAST	A2.2.5	-	3	3	Bond Pull over Ball, post bHAST, 2X	Post stress	-	3/9/0	-	-	-	3/9/0
TC	A4.1	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-55C/125C	1000 Cycles	-	-	-	-	3/231/0
TC	A4.1	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	-	-
TC	A4.1.1	-	3	22	SAM Analysis, post TC 1X	Review for delamination	Completed	-	-	3/66/0	-	3/66/0
TC	A4.1.2	-	3	1	Cross Section, post TC, 1X	Post stress cross section	Completed	3/3/0	3/3/0	3/3/0	-	3/3/0
TC	A4.1.3	-	3	3	Wire Bond Shear, post TC, 1X	Post stress	-	3/9/0	3/9/0	3/9/0	-	3/9/0
TC	A4.1.4	-	3	3	Bond Pull over Stitch, post TC, 1X	Post stress	-	3/9/0	3/9/0	3/9/0	-	3/9/0
TC	A4.1.5	-	3	3	Bond Pull over Ball, post TC, 1X	Post stress	-	3/9/0	3/9/0	3/9/0	-	3/9/0
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-55C/125C	2000 Cycles	-	-	-	-	3/231/0
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-65C/150C	1000 Cycles	3/231/0	3/231/0	3/231/0	-	-
TC	A4.2.1	-	3	22	SAM Analysis, post TC, 2X	Review for delamination	Completed	3/66/0	3/66/0	3/66/0	-	3/66/0
TC	A4.2.2	-	3	1	Cross Section, post TC, 2X	Post stress cross section	Completed	3/3/0	3/3/0	3/3/0	-	3/3/0
TC	A4.2.3	-	3	3	Wire Bond Shear, post TC, 2X	Post stress	-	3/9/0	3/9/0	3/9/0	-	3/9/0
TC	A4.2.4	-	3	3	Bond Pull over Stitch, post TC, 2X	Post stress	-	3/9/0	3/9/0	3/9/0	-	3/9/0
TC	A4.2.5	-	3	3	Bond Pull over Ball, post TC, 2X	Post stress	-	3/9/0	3/9/0	3/9/0	-	3/9/0

HTSL	A6.1	JEDEC JESD22- A103	3	45	High Temperature Storage Life	175C	500 Hours	3/135/0	3/135/0	-	-	-
HTSL	A6.1.1	-	3	1	Cross Section, post HTSL, 1X	Post stress cross section	Completed	3/3/0	3/3/0	-	-	3/3/0
HTSL	A6.2	JEDEC JESD22- A103	3	44	High Temperature Storage Life	175C	1000 Hours	3/135/0	3/135/0	-	-	-
HTSL	A6.2.1	-	3	1	Cross Section, post HTSL, 2X	Post stress cross section	Completed	3/3/0	3/3/0	-	-	3/3/0
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	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	3/90/0	3/90/0	3/90/0	-	3/90/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device LM25119QPSQ/NOPB is qualified at MSL1 260C

Qual Device LM26420Q1XSQ/NOPB is qualified at MSL3 260C

Qual Device DS90UH948TNKDRQ1 is qualified at MSL3 260C

Qual Device LM5109BQNGTRQ1 is qualified at MSL1 260C

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/>

ZVEI ID: SEM-PA-11 SEM-PA-08

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 Change Management team or your local Field Sales Representative.

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