



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN#20241218004.2**

**Qualification of RFAB as an additional Fab site, Die Revision and  
additional Assembly/Test Site (MLA) options for select devices  
Change Notification / Sample Request**

**Date:** December 19, 2024

**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 **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.

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.

Sincerely,

Change Management Team  
SC Business Services

**20241218004.2**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
ISO7742QDBQRQ1	ISO7742QDBQRQ1
ISO7763FQDBQRQ1	NULL
ISO7740FQDBQRQ1	595-ISO7740FQDBQRQ1
ISO7762QDBQRQ1	NULL
ISO7730QDBQRQ1	ISO7730QDBQRQ1
ISO7761QDBQRQ1	NULL
ISO7730FQDBQRQ1	ISO7730FQDBQRQ1
ISO7763QDBQRQ1	NULL
ISO7741QDBQRQ1	ISO7741QDBQRQ1
ISO7761FQDBQRQ1	NULL
ISO7760FQDBQRQ1	NULL
ISO7762FQDBQRQ1	NULL
ISO7731FQDBQRQ1	ISO7731FQDBQRQ1
ISO7731QDBQRQ1	ISO7731QDBQRQ1
ISO7741FQDBQRQ1	ISO7741FQDBQRQ1

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

<b>PCN Number:</b>	20241218004.2	<b>PCN Date:</b>	December 19, 2024
<b>Title:</b>	Qualification of RFAB as an additional Fab site, Die Revision and additional Assembly/Test Site (MLA) options for select devices		
<b>Customer Contact:</b>	Change Management Team	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	June 17, 2025	<b>Sample requests accepted until:</b>	January 18, 2025*

\*Sample requests received after January 18, 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 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 its RFAB fabrication facility as an additional Wafer Fab option in addition to Assembly/Test Site (MLA) options for the devices listed below.

Current Fab Site			Additional Fab site		
Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter
MIHO8/DMOS5	LBC8LVISO.1	200mm	RFAB	LBC8LVISO.2	300mm

The die was also changed as a result of the process change to accommodate the change in Fab technology

Current		Additional	
Probe Site	No Probe	TI CDAT (CD-PR)	

Construction differences are as follows:

	<b>Current A/T</b>	<b>Additional A/T</b>
	<b>TAI</b>	<b>MLA</b>
Bond wire composition, diameter	Au, 0.96 mil	Cu, 0.8 mil
Mold Compound	4221499	4221499

Topside Marking change:

<b>Current</b>	<b>Proposed</b>	<b>Current</b>	<b>Proposed</b>
7763Q	7763	7763FQ	7763F
7762Q	7762	7762FQ	7762F
7761Q	7761	7761FQ	7761F
7760Q	7760	7760FQ	7760F
7741Q	7741	7741FQ	7741F
7742Q	7742	7742FQ	7742F
7740Q	7740	7740FQ	7740F
7731Q	7731	7731FQ	7731F
7730Q	7730	7730FQ	7730F

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.



ISO7730-Q1, ISO7731-Q1  
SLLSEU3F – NOVEMBER 2016 – REVISED OCTOBER 2024

<b>Changes from Revision E (August 2023) to Revision F (October 2024)</b>	<b>Page</b>
• Updated numbering format for tables, figures and cross-references throughout document.....	1
• Updated Thermal Characteristics, Safety Limiting Values, and Thermal Derating Curves to provide more accurate system-level thermal calculations.....	6
• Updated electrical and switching characteristics to match device performance.....	6
• Updated maximum power dissipation in the power ratings section.....	8
• Updated distance through isolation, while maintaining all other insulation specifications.....	9
• Updated table entries.....	11
• Updated the input leakage current for ENx pins throughout the electrical characteristic sections.....	13
• Updated maximum total current consumption values throughout the supply current characteristics sections.....	14
• Updated maximum propagation delay specifications throughout the switching characteristics sections.....	19
• Updated the TDDB plot and the projected lifetime.....	33



ISO7740-Q1, ISO7741-Q1, ISO7742-Q1  
SLLSEUDG – NOVEMBER 2016 – REVISED OCTOBER 2024

<b>Changes from Revision F (January 2024) to Revision G (October 2024)</b>	<b>Page</b>
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated distance through isolation, while maintaining other insulation specifications.....	8
• Updated the input leakage current for ENx pins throughout the electrical characteristic sections.....	12
• Updated the TDDB plot and the projected lifetime.....	32

<b>Changes from Revision E (July 2023) to Revision F (January 2024)</b>	<b>Page</b>
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated Thermal Characteristics, Safety Limiting Values, and Thermal Derating Curves to provide more accurate system-level thermal calculations.....	5
• Updated electrical and switching characteristics to match device performance.....	5



ISO7760-Q1, ISO7761-Q1, ISO7762-Q1, ISO7763-Q1  
SLLSEU7E – NOVEMBER 2018 – REVISED JULY 2024

<b>Changes from Revision D (January 2024) to Revision E (July 2024)</b>	<b>Page</b>
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated Thermal Characteristics, Safety Limiting Values, and Thermal Derating Curves to provide more accurate system-level thermal calculations.....	8
• Changed CPG parameter description from "External clearance" to "External creepage".....	9
• Updated electrical and switching characteristics to match device performance.....	13

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
<b>ISO773x-Q1</b>	SLLSEU3E	<b>SLLSEU3F</b>	<a href="http://www.ti.com/product/ISO7730-Q1">http://www.ti.com/product/ISO7730-Q1</a>
<b>ISO774x-Q1</b>	SLLSEU0E	<b>SLLSEU0G</b>	<a href="http://www.ti.com/product/ISO7740-Q1">http://www.ti.com/product/ISO7740-Q1</a>
<b>ISO776x-Q1</b>	SLLSEU7D	<b>SLLSEU7E</b>	<a href="http://www.ti.com/product/ISO776x-Q1">http://www.ti.com/product/ISO776x-Q1</a>

<b>Reason for Change:</b>			
Supply Continuity			
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>			
None			
<b>Impact on Environmental Ratings</b>			
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.			
<b>RoHS</b>	<b>REACH</b>	<b>Green Status</b>	<b>IEC 62474</b>
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change
<b>Changes to product identification resulting from this PCN:</b>			
<b>Fab/Probe Site Information:</b>			
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
MIHO8	MH8	JPN	Ibaraki
DMOS5	DM5	USA	Dallas
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>
<b>CD-PR</b>	<b>CDP</b>	<b>CHN</b>	<b>Chengdu</b>
<b>Die Rev:</b>			
<b>Current</b>		<b>New</b>	
Die Rev [2P]	<b>Die Rev [2P]</b>		
A	A		
<b>Assembly Site Information:</b>			
Assembly Site	Assembly Site Origin Code (22L)	Assembly Country Code (23L)	Assembly City
TAI	TAI	TWN	Chung Ho, New Taipei City
<b>TI Malaysia</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>
Sample product shipping label (not actual product label):			
	 <p>(1P) SN74LS07NSR    (Q) 2000 (D) 0336    (31T) LOT: 3959047MLA    (4W) TKY(1T) 7523483SI2    (P)    (2P) REV: (V) 0033317    (20L) CS0: SHE (21L) CCO:USA    (22L) AS0: MLA (23L) ACO: MYS</p>		
<b>Product Affected:</b>			
ISO7730FQDBQRQ1	ISO7740QDBQRQ1	ISO7760FQDBQRQ1	ISO7762QDBQRQ1
ISO7730QDBQRQ1	ISO7741FQDBQRQ1	ISO7760QDBQRQ1	ISO7763FQDBQRQ1
ISO7731FQDBQRQ1	ISO7741QDBQRQ1	ISO7761FQDBQRQ1	ISO7763QDBQRQ1
ISO7731QDBQRQ1	ISO7742FQDBQRQ1	ISO7761QDBQRQ1	
ISO7740FQDBQRQ1	ISO7742QDBQRQ1	ISO7762FQDBQRQ1	

# Qualification Report

## Automotive Qualification Summary

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

Approve Date 12-November-2024

#### Product Attributes

Attributes		Qual Device: <a href="#">ISO7763QDBQRQ1</a>	QBS Process Reference: <a href="#">UCC23513QDWYQ1</a>	QBS Package Reference: <a href="#">TPD3S714QDBQRQ1</a>	QBS Product Reference: <a href="#">ISO7763QDWRQ1</a>	QBS Package Reference: <a href="#">ISO7241CQDWRQ1</a>
<b>Automotive Grade Level</b>		Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
<b>Operating Temp Range (C)</b>		-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125
<b>Product Function</b>		Interface	Power Management	Interface	Interface	Interface
<b>Wafer Fab Supplier</b>		RFAB, RFAB	RFAB, RFAB	DP1DMS	RFAB, RFAB	RFAB, MH8, RFAB
<b>Assembly Site</b>		MLA	TAI	MLA	MLA	MLA
<b>Package Group</b>		SSOP	SOIC	SSOP	SOIC	SOIC
<b>Package Designator</b>		DBQ	DWY	DBQ	DW	DW
<b>Pin Count</b>		16	6	16	16	16

QBS: Qual By Similarity, also known as Generic Data

Qual Device ISO7763QDBQRQ1 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: <a href="#">ISO7763QDBQRQ1</a>	QBS Process Reference: <a href="#">UCC23513QDWYQ1</a>	QBS Package Reference: <a href="#">TPD3S714QDBQRQ1</a>	QBS Product Reference: <a href="#">ISO7763QDWRQ1</a>	QBS Package Reference: <a href="#">ISO7241CQDWRQ1</a>
<b>Test Group A - Accelerated Environment Stress Tests</b>												
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	3/0/0	3/0/0	3/0/0	-	3/0/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-	1/77/0
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Autoclave	121C/15psig	96 Hours	3/231/0	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	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
TC-SAM	A4	-	3	3	Post TC SAM	<50% delamination	-	-	-	-	1/12/0	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	1/45/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	175C	500 Hours	-	3/135/0	-	-	-
<b>Test Group B - Accelerated Lifetime Simulation Tests</b>												
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	-	3/231/0	-	-	-
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	-	-	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	150C	24 Hours	-	-	3/2400/0	-	-
<b>Test Group C - Package Assembly Integrity Tests</b>												

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: ISO7763QDBQRQ1	QBS Process Reference: UCC23513QDWYQ1	QBS Package Reference: TPD3S714QDBQRQ1	QBS Product Reference: ISO7763QDWQ1	QBS Package Reference: ISO7241CQDWQ1
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	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	3/90/0	3/90/0	-	1/30/0	3/90/0
SD	C3	JEDEC J-STD-002	1	15	PB Solderability	>95% Lead Coverage	-	-	1/15/0	3/45/0	-	-
SD	C3	JEDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	-	1/15/0	3/45/0	-	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	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	1/3/0	-	1/3/0	1/3/0
ESD	E2	AEC Q100-002	1	3	ESD HBM	-	4000 Volts	-	-	3/9/0	-	-
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	1500 Volts	-	-	3/9/0	-	-
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	500 Volts	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	-	-	1/6/0	3/18/0	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	3/90/0	3/90/0	1/30/0	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/>

# Qualification Report

## Automotive Qualification Summary

### (As per AEC and JEDEC Guidelines)

#### Q006 SOIC at MLA

Approve Date 04-November-2024

#### Product Attributes

Attributes		Qual Device: <u>ISO7241CQDWRQ1</u>		QBS Package Reference: <u>ISO7241CQDWRQ1</u>	
<b>Automotive Grade Level</b>		Grade 1		Grade 1	
<b>Operating Temp Range (C)</b>		-40 to 125		-40 to 125	
<b>Product Function</b>		Interface		Interface	
<b>Wafer Fab Supplier</b>		RFAB, MH8, RFAB		RFAB, MH8, RFAB	
<b>Assembly Site</b>		MLA		MLA	
<b>Package Group</b>		SOIC		SOIC	
<b>Package Designator</b>		DW		DW	
<b>Pin Count</b>		16		16	

#### 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>ISO7241CQDWRQ1</u>	QBS Reference: <u>ISO7241CQDWRQ1</u>
<b>Test Group A - Accelerated Environment Stress Tests</b>									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	No Fails	-
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	-	No Fails
PC	A1.1	-	3	22	SAM Precon Pre	Review for delamination	-	3/66/0	3/66/0
PC	A1.2	-	3	22	SAM Precon Post	Review for delamination	-	3/66/0	3/66/0
HAST	A2.1	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	3/231/0
HAST	A2.1.2	-	3	1	Cross Section, post bHAST, 1X	Post stress cross section	Completed	-	3/3/0
HAST	A2.1.3	-	3	3	Wire Bond Shear, post bHAST, 1X	Post stress	-	-	3/9/0
HAST	A2.1.4	-	3	3	Bond Pull over Stitch, post bHAST, 1X	Post stress	-	-	3/9/0
HAST	A2.1.5	-	3	3	Bond Pull over Ball, post bHAST, 1X	Post stress	-	-	3/9/0
HAST	A2.2	JEDEC JESD22-A110	3	70	Biased HAST	130C/85%RH	192 Hours	-	3/231/0
HAST	A2.2.1	-	3	22	SAM Analysis, post bHAST 2X	Review for delamination	Completed	-	3/66/0
HAST	A2.2.2	-	3	1	Cross Section, post bHAST, 2X	Post stress cross section	Completed	-	3/9/0
HAST	A2.2.3	-	3	3	Wire Bond Shear, post bHAST, 2X	Post stress	-	-	3/9/0
HAST	A2.2.4	-	3	3	Bond Pull over Stitch, post bHAST, 2X	Post stress	-	-	3/9/0
HAST	A2.2.5	-	3	3	Bond Pull over Ball, post bHAST, 2X	Post stress	-	-	3/9/0
TC	A4.1	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: ISO7241CQDWQ1	QBS Reference: ISO7241CQDWQ1
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
TC	A4.1.3	-	3	3	Wire Bond Shear, post TC, 1X	Post stress	-	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
TC	A4.1.5	-	3	3	Bond Pull over Ball, post TC, 1X	Post stress	-	3/9/0	3/9/0
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-65C/150C	1000 Cycles	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
TC	A4.2.2	-	3	1	Cross Section, post TC, 2X	Post stress cross section	Completed	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
TC	A4.2.4	-	3	3	Bond Pull over Stitch, post TC, 2X	Post stress	-	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
HTSL	A6.1	JEDEC JESD22-A103	3	45	High Temperature Storage Life	150C	1000 Hours	-	3/135/0
HTSL	A6.1	JEDEC JESD22-A103	3	45	High Temperature Storage Life	175C	630 Hours	-	-
HTSL	A6.1.1	-	3	1	Cross Section, post HTSL, 1X	Post stress cross section	Completed	-	3/3/0
HTSL	A6.2	JEDEC JESD22-A103	3	44	High Temperature Storage Life	150C	2000 Hours	-	3/135/0
HTSL	A6.2	JEDEC JESD22-A103	3	44	High Temperature Storage Life	175C	1000 Hours	-	-
HTSL	A6.2.1	-	3	1	Cross Section, post HTSL, 2X	Post stress cross section	Completed	-	3/3/0
<b>Test Group C - Package Assembly Integrity Tests</b>									
WBS	C1	AEC Q100-001	1	30	Wire Bond Shear	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	-	-
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	-	-

QBS: Qual By Similarity, also known as Generic Data

Qual Device ISO7241CQDWQ1 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/>

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