



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN Number:	20260805000.2	PCN Issued	August 05, 2026
Qualify additional BOM material for select package devices		Sample request deadline:	October 04, 2026
		Estimated 1st ship date:	February 01, 2027
Sample requests received after October 04, 2026 will not be supported.			

Change Type(s)	Assembly Process Assembly Material
ZVEI ID	SEM-PA-08, SEM-PA-11

PCN Details

Description of Change:		
Texas Instruments is pleased to announce the qualification of additional BOM material for select devices in the SOIC package. Device affected will remain on current Assembly & Test sites. Material differences as follows. Construction Differences are as follows:		
Group 1		
	Current	Additional
Wire type/diam	0.96mil Au	0.8mil Cu
Mold compound	4221499-0008	4221499-1008
Group 2		
	Current	Additional
Mold compound	4221499-0008	4221499-1008
Qual details are provided in the Qual Data Section.		
Reason for Change:	Continuity of supply.	

Anticipated impact on Form, Fit, Function, Quality or Reliability:	Physical aspects of the device have changed Review the 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. <table><tr><td>RoHS</td><td>REACH</td><td>Green Status</td><td>IEC 62474</td></tr><tr><td>☒ No Change</td><td>☒ No Change</td><td>☒ No Change</td><td>☒ No Change</td></tr></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 Products Affected: Wire type and mold compound

ISO1042BQDWVRQ1
Group 2 Products Affected: Mold compound only
ISO1042QDWRQ1, ISO1042QDWVQ1

Qualification Data
Automotive Qualification Summary
(As per AEC-Q100 Rev. J and JEDEC Guidelines)
Approve Date 09-October-2025

Product Attributes

Attributes	Qual Device: <u>ISO1410DWR</u>	QBS Process Reference: <u>ISO5851QDWQ1</u>	QBS Package Reference: <u>ISOUSB211DPRQ1</u>
Automotive Grade Level	Grade 1	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125	-40 to 125
Product Function	Power Management	Interface	Interface
Wafer Fab Supplier	MH8, MH8, MH8	MH8, DP1DM5, DP1DM5	MH8, MH8, RFAB, RFAB, MH8, MH8
Assembly Site	TAI	TAI	TAI
Package Group	SOIC	SOIC	SSOP
Package Designator	DW	DW	DP
Pin Count	16	16	28

QBS: Qual By Similarity, also known as Generic Data
Qual Device ISO1410DWR is qualified at MSL2 260C
Qual Device UCC5871QDWJRQ1 is qualified at MSL3 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: <u>ISO1410DWR</u>	QBS Process Reference: <u>ISO5851QDWQ1</u>	QBS Package Reference: <u>ISOUSB211DPRQ1</u>
Test Group A - Accelerated Environment Stress Tests										
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	No Fails	-	No Fails
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Autoclave	121C/15psig	96 Hours	3/231/0	-	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
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	-	-	1/5/0
TC-SAM	A4	-	3	3	Post TC SAM	<50% delamination	-	-	-	3/36/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	-	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	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	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
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	-	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
TDDb	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	-	-	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
BTI	D4	-	-	-	Bias Temperature Instability	-	-	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
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	-	500 Volts	-	1/3/0	-
LU	E4	AEC Q100-004	1	3	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	-	-	1/30/0	-

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-2503-064

Automotive Qualification Summary (As per AEC and JEDEC Guidelines)

Q006 SOIC, SSOP at TAI
Approve Date 09-October-2025

Product Attributes

Attributes	Qual Device:	QBS Package Reference:
	<u>ISO1410DWR</u>	<u>ISOUSB211DPRQ1</u>
Automotive Grade Level	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125
Product Function	Power Management	Interface
Wafer Fab Supplier	MH8, MH8, MH8	MH8, MH8, RFAB, RFAB, MH8, MH8
Assembly Site	TAI	TAI
Package Group	SOIC	SSOP
Package Designator	DW	DP
Pin Count	16	28

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>ISO1410DWR</u>	QBS Reference: <u>ISOUSB211DPRQ1</u>
Test Group A - Accelerated Environment Stress Tests									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	No Fails	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	-	3/210/0
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	-	3/3/0
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
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	3/210/0	3/210/0
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	A6.1.1	-	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	-	3/132/0
HTSL	A6.2.1	-	3	1	Cross Section, post HTSL, 2X	Post stress cross section	Completed	-	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
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Qual Device ISO1410DWR is qualified at MSL2 260C

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TI Qualification ID: R-CHG-2503-064

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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