



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20251031003.1

**Qualification of MIHO using qualified Process Technology, additional Assembly site
and BOM options for select devices
Change Notification / Sample Request**

Date: November 05, 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

20251031003.1
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
ESD562DBZR	NULL
TSM24CADBZR	NULL
ESD652DBZR	NULL
ESD752DBZR	NULL
ESDS552DBZR	NULL
TSM24ADBZR	NULL
ESD762DBZR	NULL
ESDS452DBZR	NULL
ESD2CANFD24DBZR	NULL
TSM24BDBZR	NULL

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

PCN Number:	20251031003.1		PCN Date:	November 05, 2025	
Title:	Qualification of MIHO using qualified Process Technology, additional Assembly site and BOM options for select devices				
Customer Contact:	Change Management Team		Dept:	Quality Services	
Proposed 1st Ship Date:	February 03, 2026		Sample requests accepted until:	January 04, 2026*	
*Sample requests received after January 04, 2026 will not be supported.					
Change Type:					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Assembly Process	<input 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 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 addition of MIHO using the VDIODE qualified process technology and additional Assembly BOM 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	VDIODE	200 mm	MIHO	VDIODE	300 mm
Construction differences are as follows:					
	Current		Additional		
Assembly Site	TIPI		CDAT		
Lead Finish	NiPdAu		Post plate-AG Spot		
Mount compound	4226215		4229877		
Qual details are provided in the Qual Data Section.					
Reason for Change:					
Adding a 2 nd source facility for 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	
<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change	
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
MIHO	MH6	JPN	Miho, Ibaragi-ken

**Assembly Site
Information:**

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TIPI	PHI	PHL	Baguio City
CDAT	CDA	CHN	Chengdu

Sample product shipping label (not actual product label):



Product Affected

ESD562DBZR	ESD762DBZR	ESDS452DBZR	ESDS552DBZR
ESD652DBZR	ESD752DBZR	TSM24BDBZR	TSM24CADBZR
ESD2CANFD24DBZR	TSM24ADBZR		

For alternate parts with similar or improved performance, please visit the product page on [TI.com](https://www.ti.com)

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Name	Condition	Duration	Qual Device: ESDS452DBZR	Qual Device: ESDS552DBZR	Qual Device: ESDS62DBZR	Qual Device: ESDS62DBZR	Qual Device: ESD752DBZR	Qual Device: ESD762DBZR	Qual Device: ESD852DBZR	Qual Device: ESD852DBZR	QBS Reference: ESD2CAN24DBZRQ1	QBS Reference: TSM36ADBZR	QBS Reference: ESDS552DBZR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	1/77/0	1/77/0	-	-	-	-	-	1/77/0	3/231/0	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	2/154/0	1/77/0	-	-	-	-	-	3/231/0	1/77/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	2/154/0	1/77/0	-	-	-	-	-	3/231/0	1/77/0	-
HTOL	B1	High Temperature Reverse Bias	125C	1000 Hours	-	-	-	-	-	-	-	-	-	3/231/0	-
HTOL	B1	High Temperature Reverse Bias	125C	2000 Hours	-	-	-	-	-	-	-	-	3/231/0	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	-	-	-	-	-	1/10/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	-	-	-	-	-	1/10/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	1/22/0	-	-	-	-	-	-	-	-	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	-	-	-	-	-	3/90/0	-	-
ESD	E2	ESD CDM	-	250 Volts	-	1/3/0	-	-	-	-	-	-	-	1/3/0	1/3/0
ESD	E2	ESD CDM	-	500 Volts	-	-	-	-	-	-	-	-	1/60/0	-	-
ESD	E2	ESD HBM	-	1000 Volts	-	1/3/0	-	-	-	-	-	-	-	1/3/0	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	-	-	-	-	-	1/80/0	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	1/30/0	-	-	-	-	-	-	-	3/90/0	1/30/0

Type	#	Test Name	Condition	Duration	Qual Device: ESDS452DBZR	Qual Device: ESDS552DBZR	Qual Device: ESDS62DBZR	Qual Device: ESDS62DBZR	Qual Device: ESD752DBZR	Qual Device: ESD762DBZR	Qual Device: ESD852DBZR	Qual Device: ESD852DBZR	QBS Reference: ESD2CAN24DBZRQ1	QBS Reference: TSM36ADBZR	QBS Reference: ESDS552DBZR
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	-	-	-	-	-	-	3/75/0	-	-

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device ESDS452DBZR is qualified at MSL1 260C
- Qual Device ESDS552DBZR is qualified at MSL1 260C
- Qual Device ESDS62DBZR is qualified at MSL1 260C
- Qual Device ESDS62DBZR is qualified at MSL1 260C
- Qual Device ESD752DBZR is qualified at MSL1 260C
- Qual Device ESD762DBZR is qualified at MSL1 260C
- Qual Device ESD852DBZR is qualified at MSL1 260C
- Qual Device ESD852DBZR is qualified at MSL1 260C
- Qual Device ESD852DBZR 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 JEDEC47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-CHG-2403-053

Product Attributes

Attributes	Qual Device: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
Automotive Grade Level	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125
Product Function	Interface	Interface
Wafer Fab Supplier	MH8	MH8
Assembly Site	PHI	PHI
Package Group	SOT	SOT
Package Designator	DBZ	DBZ
Pin Count	3	3

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device ESD2CAN24DBZRQ1 and TSM24ADBZRQ1 are 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: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
Test Group A - Accelerated Environment Stress Tests									
PC	A1	JEDEC J-STD-020 JESD22-A113	-	0	Preconditioning	MSL1 260C	1 Step	2/0/0	1/0/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
HAST	A2.1	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
HAST	A2.1.2	-	3	1	Cross Section, post bHAST, 1X	Post stress cross section	Completed	2/2/0	1/1/0
HAST	A2.1.3	-	3	3	Wire Bond Shear, post bHAST, 1X	Post stress	-	2/6/0	1/3/0
HAST	A2.1.4	-	3	3	Bond Pull over Stitch, post bHAST, 1X	Post stress	-	2/6/0	1/3/0
HAST	A2.1.5	-	3	3	Bond Pull over Ball, post bHAST, 1X	Post stress	-	2/6/0	1/3/0
HAST	A2.2	JEDEC JESD22-A110	3	70	Biased HAST	130C/85%RH	192 Hours	2/154/0	1/77/0
ACU/HAST	A3	JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
TCHT	A4.1	JEDEC JESD22-A104 and Appendix 6	3	77	Temperature Cycle	-65C/150C	1000 Cycles	2/154/0	1/77/0
TC	A4.1	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	2/154/0	1/77/0
TC	A4.1.1	-	3	22	SAM Analysis, post TC 1X	Review for delamination	Completed	2/44/0	1/22/0
TC	A4.1.2	-	3	1	Cross Section, post TC, 1X	Post stress cross section	Completed	1/1/0	1/1/0
TC	A4.1.3	-	3	3	Wire Bond Shear, post TC, 1X	Post stress	-	1/3/0	1/3/0
TC	A4.1.4	-	3	3	Bond Pull over Stitch, post TC, 1X	Post stress	-	2/6/0	1/3/0
TC	A4.1.5	-	3	3	Bond Pull over Ball, post TC, 1X	Post stress	-	2/6/0	1/3/0
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-65C/150C	1000 Cycles	2/154/0	1/77/0
TC	A4.2.1	-	3	22	SAM Analysis, post TC, 2X	Review for delamination	Completed	2/44/0	1/22/0

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
TC	A4.2.2	-	3	1	Cross Section, post TC, 2X	Post stress cross section	Completed	1/1/0	1/1/0
TC	A4.2.3	-	3	3	Wire Bond Shear, post TC, 2X	Post stress	-	2/6/0	1/3/0
TC	A4.2.4	-	3	3	Bond Pull over Stitch, post TC, 2X	Post stress	-	2/6/0	1/3/0
TC	A4.2.5	-	3	3	Bond Pull over Ball, post TC, 2X	Post stress	-	2/6/0	1/3/0
Test Group B - Accelerated Lifetime Simulation Tests									
HTRB	B1.1	MIL-STD-750-1	3	77	High Temperature Reverse Bias	125C	1000 Hours	2/154/0	1/77/0
HTRB	B1.2	MIL-STD-750-1	3	77	High Temperature Reverse Bias	125C	2000 Hours	2/154/0	1/77/0
Test Group C - Package Assembly Integrity Tests									
DPA	C2	JESD22-B100	-	30	Physical Dimensions	Cpk>1.67	1 Step	2/60/0	1/30/0
WBP	C3	MIL-STD-750-2	-	10	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	1 Step	1/10/0	1/10/0
WBS	C4	AEC-Q101-003	-	10	Wire Bond Shear	Minimum of 5 devices, 30 wires Cpk>1.67	1 Step	2/20/0	1/10/0
DS	C5	MIL-STD-750-2	-	5	Die Shear	MIL-STD-750-2 Method 2017	1 Step	2/10/0	1/5/0
RSH	C8	JESD22-B107	-	30	Solder Heat	260C, 10 seconds	1 Step	1/30/0	1/30/0
SD	C10	JEDEC J-STD-002	-	15	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	1 Step	1/10/0	1/10/0
SD	C10	JEDEC J-STD-002	-	15	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	1 Step	1/15/0	1/15/0
Test Group D - Die Fabrication Reliability Tests									
Test Group E - Electrical Verification Tests									
EV	E0	JESD22-B101	3	1000	Visual/Mechanical	Per JESD22 B-101	1 Step	1/1000/0	1/1000/0
ESD	E3	AEC Q101-001	3	10	ESD HBM	Room Temp	2000 Volts	1/10/0	1/10/0
ESD	E4	AEC Q101-005	3	10	ESD CDM	Room Temp	750 Volts	1/10/0	1/10/0
Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device	Qual Device

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, HTSL, and IOL, as applicable
- Passing results reflect shift analysis per Q101 requirements

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 : HTRB, 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-2405-014 and R-CHG-2405-054

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Name	Condition	Duration	Qual Device: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	2/154/0	1/77/0
HTOL	B1	High Temperature Reverse Bias	125C	2000 Hours	2/154/0	1/77/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	1/10/0	1/10/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	1/15/0	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	2/60/0	1/30/0
ESD	E2	ESD CDM	-	750 Volts	1/10/0	1/10/0
ESD	E2	ESD HBM	-	2000 Volts	1/10/0	1/10/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	2/50/0	1/25/0

- QBS: Qual By Similarity, also known as Generic Data
- Qual Devices ESD2CAN24DBZRQ1 and TSM24ADBZRQ1 are 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

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-CHG-2405-014

Product Attributes

Attributes	Qual Device: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
Automotive Grade Level	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125
Product Function	Interface	Interface
Wafer Fab Supplier	MH8	CFAB
Assembly Site	PHI	PHI
Package Group	SOT	SOT
Package Designator	DBZ	DBZ
Pin Count	3	3

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device ESD2CAN24DBZRQ1 is qualified at MSL1 260C
- Qual Device TSM24ADBZRQ1 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: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
Test Group A - Accelerated Environment Stress Tests									
PC	A1	JEDEC J-STD-020 JESD22-A113	-	0	Preconditioning	MSL1 260C	1 Step	2/0/0	1/0/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
HAST	A2.1	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
HAST	A2.1.2	-	3	1	Cross Section, post bHAST, 1X	Post stress cross section	Completed	2/2/0	1/1/0
HAST	A2.1.3	-	3	3	Wire Bond Shear, post bHAST, 1X	Post stress	-	2/6/0	1/3/0
HAST	A2.1.4	-	3	3	Bond Pull over Stitch, post bHAST, 1X	Post stress	-	2/6/0	1/3/0
HAST	A2.1.5	-	3	3	Bond Pull over Ball, post bHAST, 1X	Post stress	-	2/6/0	1/3/0
HAST	A2.2	JEDEC JESD22-A110	3	70	Biased HAST	130C/85%RH	192 Hours	2/154/0	1/77/0
AC/UHAST	A3	JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	2/154/0	1/77/0
TCHT	A4.1	JEDEC JESD22-A104 and Appendix 6	3	77	Temperature Cycle	-65C/150C	1000 Cycles	2/154/0	1/77/0
TC	A4.1	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	2/154/0	1/77/0
TC	A4.1.1	-	3	22	SAM Analysis, post TC 1X	Review for delamination	Completed	2/44/0	2/44/0

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: ESD2CAN24DBZRQ1	Qual Device: TSM24ADBZRQ1
TC	A4.1.2	-	3	1	Cross Section, post TC, 1X	Post stress cross section	Completed	1/1/0	1/1/0
TC	A4.1.3	-	3	3	Wire Bond Shear, post TC, 1X	Post stress	-	1/3/0	1/3/0
TC	A4.1.4	-	3	3	Bond Pull over Stitch, post TC, 1X	Post stress	-	2/6/0	1/3/0
TC	A4.1.5	-	3	3	Bond Pull over Ball, post TC, 1X	Post stress	-	2/6/0	1/3/0
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-65C/150C	1000 Cycles	2/154/0	1/77/0
TC	A4.2.1	-	3	22	SAM Analysis, post TC, 2X	Review for delamination	Completed	2/44/0	1/22/0
TC	A4.2.2	-	3	1	Cross Section, post TC, 2X	Post stress cross section	Completed	1/1/0	1/1/0
TC	A4.2.3	-	3	3	Wire Bond Shear, post TC, 2X	Post stress	-	2/6/0	1/3/0
TC	A4.2.4	-	3	3	Bond Pull over Stitch, post TC, 2X	Post stress	-	2/6/0	1/3/0
TC	A4.2.5	-	3	3	Bond Pull over Ball, post TC, 2X	Post stress	-	2/6/0	1/3/0

Test Group B - Accelerated Lifetime Simulation Tests

HTRB	B1.1	MIL-STD-750-1	3	77	High Temperature Reverse Bias	125C	1000 Hours	2/154/0	1/77/0
HTRB	B1.2	MIL-STD-750-1	3	77	High Temperature Reverse Bias	125C	2000 Hours	2/154/0	1/77/0

Test Group C - Package Assembly Integrity Tests

DPA	C2	JESD22-B100	-	30	Physical Dimensions	Cpk>1.67	1 Step	2/60/0	1/30/0
WBP	C3	MIL-STD-750-2	-	10	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	1 Step	1/10/0	1/10/0

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: <u>ESD2CAN24DBZRQ1</u>	Qual Device: <u>TSM24ADBZRQ1</u>
WBS	C4	AEC-Q101-003	-	10	Wire Bond Shear	Minimum of 5 devices, 30 wires Cpk>1.67	1 Step	2/20/0	1/10/0
DS	C5	MIL-STD-750-2	-	5	Die Shear	MIL-STD-750-2 Method 2017	1 Step	2/10/0	1/5/0
RSH	C8	JESD22-B107	-	30	Solder Heat	260C, 10 seconds	1 Step	1/30/0	1/30/0
SD	C10	JEDEC J-STD-002	-	15	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	1 Step	1/10/0	1/10/0
SD	C10	JEDEC J-STD-002	-	15	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	1 Step	1/15/0	1/15/0
Test Group D - Die Fabrication Reliability Tests									
Test Group E - Electrical Verification Tests									
EV	E0	JESD22-B101	3	1000	Visual/Mechanical	Per JESD22 B-101	1 Step	1/1000/0	1/1000/0
ESD	E3	AEC Q101-001	3	10	ESD HBM	Room Temp	2000 Volts	1/10/0	1/10/0
ESD	E4	AEC Q101-005	3	10	ESD CDM	Room Temp	750 Volts	1/10/0	1/10/0
Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device	QBS Reference

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, HTSL, and IOL, as applicable
- Passing results reflect shift analysis per Q101 requirements

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 : HTRB, 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-2405-014

TI Qualification ID: R-CHG-2405-054

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