



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20250725000.1

**Qualification of MIHO8 as an additional Fab site option and
TI CDAT as an additional Assembly site option for the Select Devices
Change Notification / Sample Request**

Date: July 28, 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.

Sincerely,

Change Management Team
SC Business Services

20250725000.1

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
ESD752DCKR	NULL

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

PCN Number:	PCN# 20250725000.1	PCN Date:	July 28, 2025
Title:	Qualification of MIHO8 as an additional Fab site option and TI CDAT as an additional Assembly site option for the Select Devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	October 26, 2025	Sample requests accepted until:	September 26, 2025*
*Sample requests received after September 26, 2025 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 type="checkbox"/>	Wafer Fab Material
<input checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input type="checkbox"/>	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing the qualification of MIHO as an additional Fab site option & TI CDAT as an additional Assembly site 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	200mm	MIHO	VDIODE	200mm

Construction differences are as follows:

	Current site	Additional site
Assembly site	TFME	CDAT
Mount Compound	SID#A-09	4229877
Bond wire diam/material	1.0mil Au	1.0mil Cu
Mold Compound	SID#R-27	4222198
Lead finish	NiPdAu	Matte Sn
MSL level	3	1

Upon expiry of this PCN, TI will combine lead finish solutions in a single standard part number. For example, a customer order for 7500 units of a specific TI part number with 2500 units SPQ (Standard Pack Quantity per reel) may be fulfilled in the following ways:

- 3 reels of NiPdAu finish
- 3 reels of Matte Sn finish
- 2 reels of Matte Sn and 1 reel of NiPdAu finish
- 2 reels of NiPdAu and 1 reel of Matte Sn finish

Qual details are provided in the Qual Data Section.

Reason for Change:

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	IEC 62474
<input checked="" type="checkbox"/> No Change			

Changes to product identification resulting from this PCN:

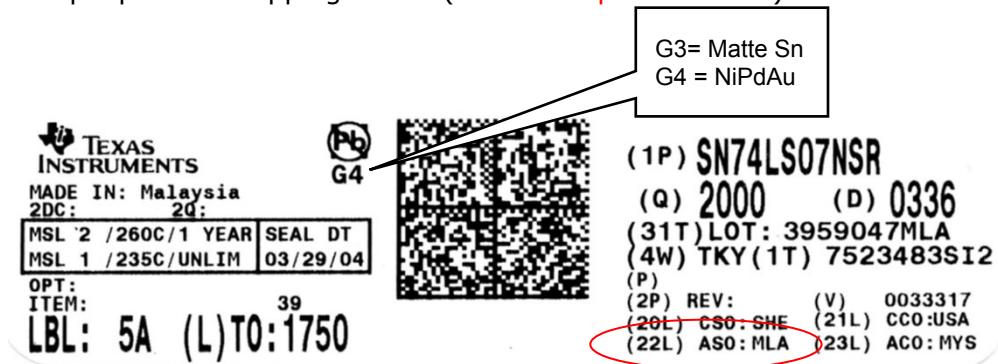
Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
CFAB	CU3	CHN	Chengdu
MIHO8	MH8	JPN	Ibaraki

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TFME	NFM	CHN	Chongchuan
CDAT	CDA	CHN	Chengdu

Sample product shipping label (not actual product label)



Product Affected:

ESD752DCKR

Automotive New Product Qualification Summary (As per AEC-Q101 and JEDEC Guidelines)

Approve Date 23-FEBRUARY -2025

Product Attributes

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

QBS: Qual By Similarity, also known as Generic Data
Qual Device ESD2CAN24DBZRQ1 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: <u>ESD2CAN24DBZRQ1</u>	Qual Device: <u>TSM24ADBZRQ1</u>
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

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
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

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

Automotive New Product Qualification Summary
(As per AEC-Q101 and JEDEC Guidelines)
 Approve Date 20-February-2025

Product Attributes

Attributes		Qual Device: ESD2CAN24DCKRQ1	Qual Device: ESD752DCKR	QBS Reference: ESD2CAN24DCKRQ1	QBS Reference: ESD2CANFD36DCKRQ1
Automotive Grade Level		Grade 1	-	Grade 1	Grade 1
Operating Temp Range (C)		-40 to 125	-40 to 125	-40 to 125	-40 to 125
Product Function		Interface	-	Interface	Interface
Wafer Fab Supplier		CFAB	CFAB	CFAB	CFAB
Assembly Site		CDAT	CDAT	TFME	CDAT
Package Group		SOT	SOT	SOT	SOT
Package Designator		DCK	DCK	DCK	DCK
Pin Count		3	3	3	3

QBS: Qual By Similarity, also known as Generic Data

Qual Device ESD2CAN24DCKRQ1 is qualified at MSL1 260C

Qual Device ESD752DCKR 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: ESD2CAN24DCKRQ1	Qual Device: ESD752DCKR	QBS Reference: ESD2CAN24DCKRQ1	QBS Reference: ESD2CANFD36DCKRQ1
Test Group A - Accelerated Environment Stress Tests											
PC	A1	JEDEC J-STD-020 JE5D22-A113	-	0	Preconditioning	MSL1 260C	1 Step	2/0/0	-	-	1/0
PC	A1	JEDEC J-STD-020 JE5D22-A113	-	0	Preconditioning	MSL3 260C	1 Step	-	-	3/0/0	-
HAST	A2	JEDEC JE5D22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	1/77/0	-	3/231/0	2/154
HAST	A2.1	JEDEC JE5D22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	1/77/0	-	-	2/154
HAST	A2.1.2	-	3	1	Cross Section, post bHAST, 1X	Post stress cross section	Completed	1/1/0	-	-	2/2
HAST	A2.1.3	-	3	3	Wire Bond Shear, post bHAST, 1X	Post stress	-	1/3/0	-	-	2/6
HAST	A2.1.4	-	3	3	Bond Pull over Stitch, post bHAST, 1X	Post stress	-	1/3/0	-	-	2/6
HAST	A2.1.5	-	3	3	Bond Pull over Ball, post bHAST, 1X	Post stress	-	1/3/0	-	-	2/6
HAST	A2.2	JEDEC JE5D22-A110	3	70	Biased HAST	130C/85%RH	192 Hours	1/77/0	-	-	2/154
HAST	A2.2.1	-	3	22	SAM Analysis, post bHAST 2X	Review for delamination	Completed	1/22/0	-	-	2/44
HAST	A2.2.2	-	3	1	Cross Section, post bHAST, 2X	Post stress cross section	Completed	1/1/0	-	-	2/2
HAST	A2.2.3	-	3	3	Wire Bond Shear, post bHAST, 2X	Post stress	-	1/3/0	-	-	2/6
HAST	A2.2.4	-	3	3	Bond Pull over Stitch, post bHAST, 2X	Post stress	-	1/3/0	-	-	2/6

HAST	A2.2.5	-	3	3	Bond Pull over Ball, post bHAST, 2X	Post stress	-	1/3/0	-	-	2/6
AC/UHAST	A3	JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	2/154/0	-	3/231/0	1/77
TC	A4	JEDEC JESD22-A104 and Appendix 6	3	77	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	-
TC	A4.1	JEDEC JESD22-A104 and Appendix 6	3	77	Temperature Cycle	-65C/150C	1000 Cycles	-	-	3/231/0	-
TCHT	A4.1	JEDEC JESD22-A104 and Appendix 6	3	77	Temperature Cycle	-65C/150C	1000 Cycles	2/154/0	-	-	1/77
TC	A4.1	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	2/154/0	-	-	1/77
TC	A4.1.1	-	3	22	SAM Analysis, post TC, 1X	Review for delamination	Completed	2/44/0	-	-	1/22
TC	A4.1.2	-	3	1	Cross Section, post TC, 1X	Post stress cross section	Completed	2/2/0	-	-	1/1
TC	A4.1.3	-	3	3	Wire Bond Shear, post TC, 1X	Post stress	-	2/6/0	-	-	1/3
TC	A4.1.4	-	3	3	Bond Pull over Stitch, post TC, 1X	Post stress	-	2/6/0	-	-	1/3
TC	A4.1.5	-	3	3	Bond Pull over Ball, post TC, 1X	Post stress	-	2/6/0	-	-	1/3
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-65C/150C	1000 Cycles	2/154/0	-	-	1/77
TC	A4.2.1	-	3	22	SAM Analysis, post TC, 2X	Review for delamination	Completed	2/44/0	-	-	1/22
TC	A4.2.2	-	3	1	Cross Section, post TC, 2X	Post stress cross section	Completed	2/2/0	-	-	1/1
TC	A4.2.3	-	3	3	Wire Bond Shear, post TC, 2X	Post stress	-	2/6/0	-	-	1/3
TC	A4.2.4	-	3	3	Bond Pull over Stitch, post TC, 2X	Post stress	-	2/6/0	-	-	1/3
TC	A4.2.5	-	3	3	Bond Pull over Ball, post TC, 2X	Post stress	-	2/6/0	-	-	1/3
Test Group B - Accelerated Lifetime Simulation Tests											
Test Group C - Package Assembly Integrity Tests											
DPA	C1	AEC Q101-004	-	2	Destructive Physical Analysis	Per Q101-004	1 Step	-	-	1/2/0	-
DPA	C2	JESD22-B100	-	30	Physical Dimensions	Cpk>1.67	1 Step	1/30/0	-	1/30/0	1/30
WBP	C3	MIL-STD-750-2	-	10	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	1 Step	1/10/0	-	3/30/0	1/10
WBS	C4	AEC Q101-003	-	10	Wire Bond Shear	Minimum of 5 devices, 30 wires Cpk>1.67	1 Step	1/10/0	-	3/30/0	1/10
DS	C5	MIL-STD-750-2	-	5	Die Shear	MIL-STD-750-2 Method 2017	1 Step	1/5/0	-	3/15/0	1/5
RSH	C6	JESD22-B107	-	30	Solder Heat	260C, 10 seconds	1 Step	1/30/0	-	-	-

SD	C10	JEDEC J-STD-002	-	15	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	1 Step	-	-	1/15/0	-
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	3/3000/0	-	-	-
ESD	E3	AEC Q101-001	3	10	ESD HBM	Room Temp	2000 Volts	-	-	1/10/0	1/10
ESD	E4	AEC Q101-005	3	10	ESD CDM	Room Temp	250 Volts	-	-	1/10/0	-
ESD	E4	AEC Q101-005	3	10	ESD CDM	Room Temp	750 Volts	1/10/0	-	-	1/10

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-2402-039

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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