12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250806001.2
Qualification of additional Fab site (DFAB) and additional Assembly/Test site (FMX) options for select JI devices
Change Notification / Sample Request

Date: August 06, 2025
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) process.

TI 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, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 60 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

Changes outlined in this notification underscore our commitment to product longevity and supply continuity, as well as our continued efforts to transition to newer, more efficient manufacturing processes and technologies. Specifically, this particular notification is related to TI's multiyear transition plan for our two remaining 150-millimeter production lines (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). SFAB closure activities are expected to begin by the end of 2025. DFAB will remain open with a smaller set of 200mm technologies and GaN.

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. As always, we thank you for your continued business.

TI values customer engagement and feedback related to TI changes. Customers should contact TI if there are questions or concerns regarding a change notification.

Change Management Team
SC Business Services

20250806001.2
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.

DEVICE	CUSTOMER PART NUMBER
LT1014DMDW	LT1014DMDW
LM211QDRG4	NULL
LM211QDR	NULL
TL1431QD	NULL
TL1431QDG4	NULL
TL1431QDRQ1	NULL
LM211QDRQ1	LM211QDRQ1
TPS79801QDGNRQ1	NULL
LT1013DMDG4	NULL
TPS79850QDGNRQ1	NULL
TL1431QDRG4Q1	NULL
TL1431QDR	NULL
LT1013DMD	LT1013DMD

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

PCN Number:	20250806001.2	**PCN Date:**	August 06, 2025
Title:	Qualification of additional Fab site (DFAB) and additional Assembly/Test site (FMX) options for select JI devices		
Customer Contact:	Change Management team	**Dept:**	Quality Services
Proposed 1st Ship Date:	February 02, 2026	**Sample requests accepted until:**	October 05, 2025*

***Sample requests received after October 05, 2025 will not be supported.**

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 Materials
☒ Packing/Shipping/Labeling	☒ Test Process	☐ Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of DFAB and an additional Assembly/Test site (FMX) options for the devices listed below.

Group 1 Device:

Current Fab Site			Additional Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
SFAB	JI	150 mm	DFAB	JI	200 mm

	Current	New
Wafer Probe Test site	SH-BIP-1	No Probe

Group 2 Device:

Current Fab Site				Additional Fab Site			
Fab Site	**Process**	**Metallization**	**Wafer Diameter**	**Fab Site**	**Process**	**Metallization**	**Wafer Diameter**
SFAB	JI	2300A TiW/ 14K AlCu 2%	150 mm	DFAB	JI	2300A TiW/ 14K AlCu 0.5%	200 mm

	Current	New
Wafer Probe Test site	SH-BIP-1	CD-PR

Group 3 Device:

Current Fab Site				Additional Fab Site			
Fab Site	**Process**	**Metallization**	**Wafer Diameter**	**Fab Site**	**Process**	**Metallization**	**Wafer Diameter**
SFAB	JI	2300A TiW/ 7.6kA AlCu2%	150 mm	DFAB	JI	2300A TiW/ 7.6kA AlCu0.5%	200 mm

	Current	New
Wafer Probe Test site	SH-BIP-1	CD-PR

Group 4 Device:

Current Fab Site				Additional Fab Site			
Fab Site	Process	Metallization	Wafer Diameter	Fab Site	Process	Metallization	Wafer Diameter
SFAB	JI	2300A TiW/ 14K AICu 2%	150 mm	DFAB	JI	2300A TiW/ 14K AICu 0.5%	200 mm

	Current	New
Wafer Probe Test site	SH-BIP-1	No Probe

Group 5 Device: Construction differences are as follows:

Current Fab Site				Additional Fab Site			
Fab Site	Process	Metallization	Wafer Diameter	Fab Site	Process	Metallization	Wafer Diameter
SFAB	JI	2300A TiW/ 14K AICu 2%	150 mm	DFAB	JI	2300A TiW/ 14K AICu 0.5%	200 mm

	Current	New
Wafer Probe Test site	SH-BIP-1	CD-PR

	Current Site	Additional Site
Assembly/Test site	TAI	FMX
Mount compound	4042500	4147858
Mold compound	4205694	4211880

Group 6 Device: Construction differences are as follows:

Current Fab Site				Additional Fab Site			
Fab Site	Process	Metallization	Wafer Diameter	Fab Site	Process	Metallization	Wafer Diameter
SFAB	JI	2300A TiW/ 14K AICu 2%	150 mm	DFAB	JI	2300A TiW/ 14K AICu 0.5%	200 mm

	Current	New
Wafer Probe Test site	SH-BIP-1	CD-PR

	Current Site	Additional Site
Assembly/Test site	TAI	FMX

No material differences between sites

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter and 200-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and 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
☒ No Change	☒ No Change	☒ No Change	☒ 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
SH-BIP-1	SHE	USA	Sherman
DL-LIN	**DLN**	**USA**	**Dallas**

Assembly/Test Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TAI	TAI	TWN	Chung Ho, New Taipei City
FMX	**MEX**	**MEX**	**Aguascalientes**

Sample product shipping label (not actual product label)

Group 1 Product Affected: Wafer fab site, Wafer probe test site

TS321QDBVRQ1

Group 2 Product Affected: Wafer fab site, Wafer probe test site

LT1014DMDW	TL1431QDR	TL1431QDRQ1
SN103592DR	TL1431QDRG4Q1	TL1431QYPCT

Group 3 Product Affected: Wafer fab site, Wafer probe test site

TPS79801QDGNRQ1	TPS79850QDGNRDL	TPS79850QDGNRQ1

Group 4 Product Affected: Wafer fab site, Wafer probe test site

LM211QD	LM211QDRQ1	MLA00269DR
LM211QDRG4Q1	LM211QDRG4	MLA00332DR
LM211QDR	LM211QDRRB	MLA00407DR

Group 5 Product Affected: Wafer fab site, Wafer probe test site, Assembly/Test site

TL1431QD	TL1431QDRDL
TL1431QDG4	TL1431QDRG4

Group 5 Product Affected: Wafer fab site, Wafer probe test site, Assembly/Test site

LT1013DMD	LT1013DMDG4

For alternate parts with similar or improved performance, please visit the product page on TI.com

Automotive Qualification Summary
(As per AEC-Q100 Rev. H and JEDEC Guidelines)

Approve Date 04-June-2025

Product Attributes

Attributes	Qual Device: TPS79801QDGNRQ1
Automotive Grade Level	Grade 1
Operating Temp Range (C)	-40 to 125
Product Function	Power Management
Wafer Fab Supplier	DL-LIN
Assembly Site	UTL2
Package Group	VSSOP
Package Designator	DGN
Pin Count	8

QBS: Qual By Similarity, also known as Generic Data
Qual Device TPS79801QDGNRQ1 is qualified at MSL2 260C
Qual Device TPS79801QDGNRQ1 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: TPS79801QDGNRQ1
Test Group A - Accelerated Environment Stress Tests								
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	3/0/0
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	Unbiased HAST	130C/85%RH	96 Hours	3/231/2[1]
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	3/231/1[1]
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	1/5/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	1/45/0
Test Group B - Accelerated Lifetime Simulation Tests								
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	3/231/0
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
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	3/90/0
SD	C3	JEDEC J-STD-002	1	15	PB Solderability	>95% Lead Coverage	-	1/15/0
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

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
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	1000 Volts	1/3/0
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	1/3/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	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-2203-030
[1]-EIPD damage between pins 1 & 8. FA and 8D report are available upon request.

Automotive Qualification Summary
(As per AEC-Q100 Rev. H and JEDEC Guidelines)

Approved 05-Dec-2016

Product Attributes

Attributes	Qual Device: LM2902KAVQDRQ1	Qual Device: LM2904AVQDRQ1	Qual Device: SN104569DR	Qual Device: ULQ2003AQDRQ1	QBS Package Reference: ULQ2003AQDRQ1
Operating Temp Range	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Product Function	Signal Chain	Signal Chain	Signal Chain	Interface	Interface
Wafer Fab Supplier	SFAB	SFAB	SFAB	SFAB	SFAB
Die Revision	E	E	A	C	C
Assembly Site	FMX	FMX	FMX	FMX	FMX
Package Type	SOIC	SOIC	SOIC	SOIC	SOIC
Package Designator	D	D	D	D	D
Ball/Lead Count	14	8	14	16	16

QBS: Qual By Similarity

Qual Devices qualified at LEVEL1-260CG: SN104569DR, ULQ2003AQDRQ1, LM2902KAVQDRQ1, LM2904AVQDRQ1

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: LM2902KAVQDRQ1	Qual Device: LM2904AVQDRQ1	Qual Device: SN104569DR	Qual Device: ULQ2003AQDRQ1	QBS Package Reference: ULQ2003AQDRQ1
Test Group A – Accelerated Environment Stress Tests												
	PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning	Level 1-260C	Pass	Pass	Pass	Pass	Pass
			AEC-Q006	-	-	Post-Preconditioning	-	Pass	Pass	Pass	Pass	-
	HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	-	3/231/0
			AEC-Q006	3	11	HAST SAM	Post 96 Hours	-	3/33/0	-	-	1/11/0
			AEC-Q006	3	3	HAST Bond Pull (Ball Bond)	Post 96 Hours	-	3/9/0	-	-	-
			AEC-Q006	3	3	HAST Bond Pull (Stitch Bond)	Post 96 Hours	-	3/9/0	-	-	-
			AEC-Q006	3	3	HAST Bond Shear	Post 96 Hours	-	3/9/0	-	-	-
			AEC-Q006	3	1	HAST Cross-Section	Post 96 Hours	-	3/3/0	-	-	-
	HAST	A2	JEDEC JESD22-A110	3	70	Biased HAST, 130C/85%RH	192 Hours	-	3/210/0	-	-	3/210/0
			AEC-Q006	3	11	HAST SAM	Post 192 Hours	-	3/33/0	-	-	1/11/0
			AEC-Q006	3	2	HAST Bond Pull (Ball Bond)	Post 192 Hours	-	3/6/0	-	-	-
			AEC-Q006	3	2	HAST Bond Pull (Stitch Bond)	Post 192 Hours	-	3/6/0	-	-	-
			AEC-Q006	3	2	HAST Bond Shear	Post 192 Hours	-	3/6/0	-	-	-
			AEC-Q006	3	1	HAST Cross-Section	Post 192 Hours	-	3/3/0	-	-	-
	AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
	AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	192 Hours	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
	TC	A4	JEDEC JESD22-A104	3	77	Temperature Cycle, -	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
			and Appendix 3			65/150C						
			AEC-Q006	3	11	Temp Cycle SAM	Post 500 Cycles	3/33/0	3/33/0	-	3/33/0	3/33/0
			AEC-Q006	3	3	Temp Cycle Bond Pull (Ball Bond)	Post 500 Cycles	3/9/0	3/9/0	-	3/9/0	-
			AEC-Q006	3	3	Temp Cycle Bond Pull (Stitch Bond)	Post 500 Cycles	3/9/0	3/9/0	-	3/9/0	-
			AEC-Q006	3	3	Temp Cycle Bond Shear	Post 500 Cycles	3/9/0	3/9/0	-	3/9/0	-
			AEC-Q006	3	1	Temp Cycle Cross-Section	Post 500 Cycles	-	3/3/0	-	3/3/0	3/3/0
	TC-BP	A4	MIL-STD883 Method 2011	1	30	Post Temp. Cycle Bond Pull	Wires	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0
	TC	A4	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle, - 65/150C	1000 Cycles	3/210/0	3/210/0	3/210/0	3/210/0	3/210/0
			AEC-Q006	3	11	Temp Cycle SAM	Post 1000 Cycles	3/33/0	3/33/0	-	3/33/0	3/33/0
			AEC-Q006	3	3	Temp Cycle Bond Pull (Ball Bond)	Post 1000 Cycles	3/6/0	3/6/0	-	3/6/0	-
			AEC-Q006	3	3	Temp Cycle Bond Pull (Stitch Bond)	Post 1000 Cycles	3/6/0	3/6/0	-	3/6/0	-
			AEC-Q006	3	3	Temp Cycle Bond Shear	Post 1000 Cycles	3/6/0	3/6/0	-	3/6/0	-
			AEC-Q006	3	1	Temp Cycle Cross-Section	Post 1000 Cycles	-	3/3/0	-	3/3/0	3/3/0
	PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle	1000 Cycles	N/A	N/A	N/A	N/A	-
	HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 150C	1000 Hours	-	-	-	-	1/45/0
	HTSL	A6	JEDEC JESD22-A103	1	44	High Temp Storage Bake 150C	2000 Hours	-	-	-	-	1/44/0
			AEC-Q006	3	1	HTSL Cross-Section	Post 2000 Hours	-	-	-	-	3/3/0
Test Group B – Accelerated Lifetime Simulation Tests												
	HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 150C	408 Hours	-	-	-	-	3/231/0
	EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	N/A	N/A	N/A	N/A	-
Test Group C – Package Assembly Integrity Tests												
	WBS	C1	AEC Q100-001	1	30	Bond Shear (Cpk>1.67)	Wires	3/90/0	3/90/0	3/90/0	3/90/0	-
	WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull (Cpk>1.67)	Wires	3/90/0	3/90/0	3/90/0	3/90/0	-
	SD	C3	JEDEC JESD22-B102	1	15	Solderability	Pb Free	-	-	-	-	1/15/0
	SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability	Pb	-	-	-	-	1/15/0
Test Group E – Electrical Verification Tests												
	ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67	-	3/90/0	-	-	3/90/0

A1 (PC): Preconditioning:

Performed for THB, Biased HAST, AC, uHAST &TC samples, as applicable.

Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E): -40°C to +150°C

Grade 1 (or Q): -40°C to +125°C

Grade 2 (or T): -40°C to +105°C

Grade 3 (or I) : -40°C to +85°C

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
Green/Pb-free Status:
Qualified Pb-Free(SMT) and Green

Change Number: C1407210
TI Qualification ID: 20150818-115047

ZVEI ID's: SEM-PW-02, SEM-PW-07, SEM-PW-13, SEM-PA-11, SEM-PA-07, SEM-PA-18, SEM-TF-01, SEM-QG-01

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.