



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20251211002.2

**Qualification of RFAB as an additional Fab site, Die change,
Probe site (CD-PR), Datasheet change and BOM option for select devices
Change Notification / Sample Request**

Date: December 11, 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

20251211002.2
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
LM25576QMHX/NOPB	926-LM25576QMHX/NOPB

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

PCN Number:	20251211002.2	PCN Date:	December 11, 2025
Title:	Qualification of RFAB as an additional Fab site, Die change, Probe site (CD-PR), Datasheet change and BOM option for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	June 09, 2026	Sample requests accepted until:	February 09, 2026*

*Sample requests received after February 09, 2026 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 RFAB as an additional Fab site option, probe site change, die change and BOM option for the devices listed below.

Current Fab Site			Additional Fab site		
Current Fab Site	Process	Wafer Diameter	Additional Fab site	Process	Wafer Diameter
MAINEFAB	ABCD	200mm	RFAB	LBC9	300mm

The die was also changed as a result of the process change.

Construction differences as follows:

	Current	Additional
Wire diam/type	1.30mil Au, 1.30mil Cu	1.30mil Cu
Mount compound	8075531	4211470
Mold compound	8095178	4228573
Probe Site	TIEM-PR	CD-PR

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.

Changes from Revision * (December 2017) to Revision A (December 2025)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Added charged-device model specification to ESD Ratings section with accompanying table notes.....	5
• Added Thermal Resistance Characteristics.....	5
• Updated Bias Current (I _{in}) from: 3.4mA to: 2mA.....	6
• Updated Shutdown Current (I _{in}) from: 57uA to: 48uA.....	6
• Updated BOOST UVLO Hysteresis from: 0.56V to: 0.8V.....	6
• Updated FB Bias Current from: 17nA to: 10nA.....	6
• Updated section title from: External Components to: Design Requirements.....	16
• Added Detailed Design Procedure section.....	16
• Added Application Curves section.....	23
• Added Power Supply Recommendations.....	24
• Moved Layout to Application and Implementation section.....	24

Changes from Revision B (April 2013) to Revision C (November 2025)	Page
• Changed the operating junction temperature from -40°C to 150°C to -40°C to $+125^{\circ}\text{C}$	1
• Deleted SIMPLE SWITCHER® branding from the data sheet.....	1
• Added WEBENCH links throughout the document.....	1
• Added <i>Pin Configuration and Functions</i> section, <i>ESD Ratings</i> table, <i>Thermal Information</i> table, <i>Feature Description</i> section, <i>Device Functional Modes</i> , <i>Application and Implementation</i> section, <i>Power Supply Recommendations</i> section, <i>Layout</i> section, <i>Device and Documentation Support</i> section, and <i>Mechanical, Packaging, and Orderable Information</i> section	1
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Changed all instances of legacy terminology to controller and peripheral.....	1
• Updated Figure 4-1	3
• Updated table note to the latest standards.....	5
• Added human body model spec to the <i>ESD Ratings</i> table.....	5
• Changed Bias Current (lin) from 3.4mA to 2mA.....	6
• Changed Shutdown Current (lin) from 57uA to 48uA.....	6
• Changed BOOST UVLO Hysteresis from 0.56V to 0.8V.....	6
• Changed FB Bias Current from 17nA to 10nA.....	6
• Added the <i>Power Dissipation</i> section.....	28
• Added the <i>Thermal Considerations</i> section.....	28

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
LM25576-Q1	SNVSB42	SNVSB42A	http://www.ti.com/product/LM25576-Q1
LM5576-Q1	SNOSB24B	SNOSB24C	http://www.ti.com/product/LM5576-Q1

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; see the standard data package for complete details.

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			
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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
MAINEFAB	CUA	USA	South Portland
RFAB	RFB	USA	Richardson

Die Rev:

Current

New

Die Rev [2P]	Die Rev [2P]
A, B	A

Sample product shipping label (not actual product label):



Product Affected:

LM25576QMHX/NOPB	LM5576QMH/NOPB	LM5576QMHX/NOPB
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Qualification Report

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

Approve Date 29-June-2025

Product Attributes

Attributes	Qual Device: LM5576QMH/NOPB	Qual Device: LM25576QMHX/NOPB	Qual Device: LM5576QMHX/NOPB	Qual Device: LM5576QMH/NOPB	QBS Process Reference: BQ79600PWRQ1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125
Product Function	Power Management	Power Management	Power Management	Power Management	Power Management
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA	MLA
Package Group	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP
Package Designator	PWP	PWP	PWP	PWP	PW
Pin Count	20	20	20	20	16

QBS: Qual By Similarity, also known as Generic Data

Qual Device LM5576QMH/NOPB is qualified at MSL1 260C

Qual Device LM25576QMHX/NOPB is qualified at MSL1 260C

Qual Device LM5576QMHX/NOPB is qualified at MSL1 260C

Qual Device LM5576QMH/NOPB 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: LM5576QMH/NOPB	Qual Device: LM25576QMHX/NOPB	Qual Device: LM5576QMHX/NOPB	Qual Device: LM5576QMH/NOPB	QBS Process Reference: BQ79600PWRQ1	
Test Group A - Accelerated Environment Stress Tests													
PC	A1	JEDEC J-STD-020 JEDEC JESD22-A113	3	77	Preconditioning	MSL1 260C	-	3/AII/0	-	-	-	-	-
PC	A1	JEDEC J-STD-020 JEDEC JESD22-A113	3	77	Preconditioning	MSL2 260C	-	-	-	-	-	-	3/AII/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-	-	3/231/0
AC/UHAST	A3	JEDEC A102/JEDEC JESD22-A118	3	77	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	3/231/0
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-	-	-

TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	-	-	-	3/231/0
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	-	-	-	-	3/135/0
Test Group B - Accelerated Lifetime Simulation Tests													
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	125C	1000 Hours	1/77/0	-	-	-	-	3/231/0
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	125C	48 Hours	-	-	-	-	-	3/2400/0
EDR	B3	AEC Q100-005	1	77	NVM Endurance, Data Retention, and Op Life	Per QSS-009-018	1 Step	-	-	-	-	-	3/231/0
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 Solderability	>95% Lead Coverage	-	-	-	-	-	-	1/15/0
SD	C3	JEDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	1/30/0	-	-	-	-	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					
TDBB	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	-
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	500 Volts	1/3/0	-	-	-	1/3/0	-
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	1/3/0	-	-	-	1/3/0	-
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0	3/90/0	3/90/0	1/30/0	2/60/0	

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-NPD-2310-138

**Automotive Qualification Summary
(As per AEC and JEDEC Guidelines)**
Q006 1.3mil Cu wire on Al pad in TSSOP at TIEMA
Approve Date 29-June-2025

Product Attributes

Attributes		Qual Device: LM5576QMH/NOPB
Automotive Grade Level	Grade 1	
Operating Temp Range (C)	-40 to 125	
Product Function	Power Management	
Wafer Fab Supplier	RFAB	
Assembly Site	TIEMA	
Package Group	TSSOP	
Package Designator	PWP	
Pin Count	20	

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: LM5576QMH/NOPB
Test Group A - Accelerated Environment Stress Tests								
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260C	-	3/All/0
PC	A1.1	-	3	22	SAM Precon Pre	Review for delamination	-	3/66/0
PC	A1.2	-	3	22	SAM Precon Post	Review for delamination	-	3/66/0
HAST	A2.1	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	3/231/0
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	3/3/0
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
TC	A4.1.1	-	3	22	SAM Analysis, post TC 1X	Review for delamination	Completed	3/66/0
TC	A4.2	JEDEC JESD22-A104 and Appendix 3	3	70	Temperature Cycle	-65C/150C	1000 Cycles	3/231/0
TC	A4.2.1	-	3	22	SAM Analysis, post TC, 2X	Review for delamination	Completed	3/66/0
TC	A4.2.2	-	3	1	Cross Section, post TC, 2X	Post stress cross section	Completed	3/3/0
TC	A4.2.3	-	3	3	Wire Bond Shear, post TC, 2X	Post stress	-	3/9/0
TC	A4.2.4	-	3	3	Bond Pull over Stitch, post TC, 2X	Post stress	-	3/9/0
TC	A4.2.5	-	3	3	Bond Pull over Ball, post TC, 2X	Post stress	-	3/9/0

HTSL	A6.1	JEDEC JESD22-A103	3	45	High Temperature Storage Life	150C	1000 Hours	3/135/0
HTSL	A6.2	JEDEC JESD22-A103	3	44	High Temperature Storage Life	150C	2000 Hours	3/135/0
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
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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-NPD-2310-138

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).

ZVEI ID: SEM-DE-03 SEM-DE-01, SEM-DS-01, SEM-PW-13, SEM-PW-02, SEM-PW-09, SEM-PA-14, SEM-PA-07, SEM-PA-08, SEM-PA-11, SEM-TF-01

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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