



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN# 20250731000.1**  
**Qualification of TI Melaka as an additional Assembly site**  
**for select package devices**  
**Change Notification / Sample Request**

**Date:** July 31, 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

**20250731000.1**  
**Change Notification / Sample Request**  
**Attachments**

**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
DRV8411PWPR	NULL
DRV8847PWPR	DRV8847PWPR
DRV8411APWPR	NULL

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

<b>PCN Number:</b>	20250731000.1			<b>PCN Date:</b>	July 31, 2025
<b>Title:</b>	Qualification of TI Melaka as an additional Assembly site for select package devices				
<b>Customer Contact:</b>	Change Management team		<b>Dept:</b>	Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	October 29, 2025		<b>Estimated Sample Availability:</b>	September 29, 2025	
<b>*Sample requests received after September 29, 2025 will not be supported.</b>					
<b>Change Type:</b>					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material
<input 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 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
<b>PCN Details</b>					
<b>Description of Change:</b>					
Texas Instruments is pleased to announce the Qualification of TI Melaka as an additional Assembly site for select package devices. Material differences between sites as follows.					
	<b>Current Site</b>		<b>Additional site</b>		
Assembly Site	TI Malaysia	TI Taiwan	TI Melaka		
Mount compound	4224264, 4211470	4208458	4211470		
Mold compound	4211649, 4205443	4211649	4228573		
Lead finish	NiPdAu	NiPdAu	Matte Sn		
Device Marking	TI logo*, Pin 1 dimple*, G4 marking*	TI letter, Pin 1 dot, remove G4 marking, Mold cavity ID	TI letter, Pin 1 dot, remove G4 marking, Mold cavity ID		
<p>* - Not all devices have TI logo/pin 1 dimple/G4 marking included in the symbolization, but for devices that do have, the proposed change applies in TI Melaka.</p> <p>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:</p> <ul style="list-style-type: none"> <li>• 3 reels of NiPdAu finish.</li> <li>• 3 reels of Matte Sn finish</li> <li>• 2 reels of Matte Sn and 1 reel of NiPdAu finish</li> <li>• 2 reels of NiPdAu and 1 reel of Matte Sn finish</li> </ul> <p>Qual details are provided in the Qual Data Section.</p>					
<b>Reason for Change:</b>					
Continuity of supply.					
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Impact on Environmental Ratings:</b>					
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.					
<b>RoHS</b>	<b>REACH</b>	<b>Green Status</b>	<b>IEC 62474</b>		
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change		
<b>Changes to product identification resulting from this PCN:</b>					
<b>Assembly Site</b>	<b>Assembly Site Origin</b>	<b>Assembly Country Code</b>	<b>Assembly City</b>		

	(22L)	(21L)	
TI Malaysia	MLA	MLA	Kuala Lumpur
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City
TI Melaka	GNZ	MYS	Melaka

Sample product shipping label (not actual product label)



#### Product Affected:

DRV8410PWPR	DRV8411PWPR	DRV8848LPWPR
DRV8411APWPR	DRV8847PWPR*	DRV8848PWPR*

\* G4 part numbers are available and will remain on NiPdAu flows. This PCN does not apply to existing G4 materials. Please visit TI's labeling and symbolization page for more information on material designators.

## Qualification Data

### Qualification of Universal BOM set for TSSOP Low Pin count

Approve Date 30-June-2025

### Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LMP7704MT/NOPB	Qual Device: LMH0346MH/NOPB	QBS Reference: LM5576QMH/NOPB	QBS Reference: LM5118Q1MH/NOPB
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-
UHAST	A3	Autoclave/UHAST	121C/15psig Or 130C/85%RH	96 Hours	3/231/0	-	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	-	3/135/0	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	3/66/0	3/66/0	-	-
FTY	E6	Final Test Yield	-	-	3/3/0	3/3/0	-	-

QBS: Qual By Similarity, also known as Generic Data

Qual Device LMP7704MT/NOPB is qualified at MSL1 260C

Qual Device LMH0346MH/NOPB is qualified at MSL3 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-2401-019

## Qualification Data

### 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/INOPB	Qual Device: LM25576QMHX/INOPB	Qual Device: LM5576QMHX/INOPB	Qual Device: LM5576QMH/INOPB	QBS Process Reference: BQ79600PWR01
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	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	-	-	-	-	3/All/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 JESD22-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	Completed Per Process Technology Requirements	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	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	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	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	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	-	-	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

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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

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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