

**PCN# 20260313005.2**  
**Qualification of LFAB as an additional fab site and PHI as**  
**additional Assembly site for Select Devices**  
**Change Notification / Sample Request**

**Date:** March 13, 2026  
**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

**20260313005.2**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
AWR2243ABGABLQ1	AWR2243ABGABLQ1

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

<b>PCN Number:</b>	20260313005.2	<b>PCN Date:</b>	March 13, 2026						
<b>Title:</b>	Qualification of LFAB as an additional fab site and PHI as additional Assembly site for Select Devices								
<b>Customer Contact:</b>	Change Management team	<b>Dept:</b>	Quality Services						
<b>Proposed 1<sup>st</sup> Ship Date:</b>	September 09, 2026	<b>Sample requests accepted until:</b>	May 12, 2026						
<b>*Sample requests received after May 12, 2026 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 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 Materials							
<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 LFAB as an additional fab site and PHI as additional Assembly site for the devices listed below in the product affected section.									
<table border="1"> <thead> <tr> <th>Process Step</th> <th>Current</th> <th>Additional</th> </tr> </thead> <tbody> <tr> <td>Wafer Fab Site</td> <td>UMC-F12</td> <td>LFAB</td> </tr> </tbody> </table>				Process Step	Current	Additional	Wafer Fab Site	UMC-F12	LFAB
Process Step	Current	Additional							
Wafer Fab Site	UMC-F12	LFAB							
<table border="1"> <thead> <tr> <th>Process Step</th> <th>Current</th> <th>Additional</th> </tr> </thead> <tbody> <tr> <td>Assembly Site</td> <td>ANA</td> <td>PHI</td> </tr> </tbody> </table>				Process Step	Current	Additional	Assembly Site	ANA	PHI
Process Step	Current	Additional							
Assembly Site	ANA	PHI							
(No material differences between sites)									
Qual details are provided in the Qual Data Section.									
<b>Reason for Change:</b>									
Capacity increase to support demand and continuity of supply.									
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>									
Review the SDP for full evaluation of the change based on the customer use case.									
<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>Fab Site Information:</b>									
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City						
UMC-F12	F12	TWN	TAINAN						
<b>LFAB</b>	<b>LHI</b>	<b>USA</b>	<b>Lehi</b>						
<b>Assembly Site Information:</b>									
Assembly Site	Assembly Site	Assembly Site	Assembly Site City						

	Origin Code (22L)	Country Code (23L)	
ANA	AMP	KOR	Gwangju
<b>PHI</b>	<b>PHI</b>	<b>PHL</b>	<b>Baguio City</b>

Sample product shipping label (not actual product label):

**TEXAS INSTRUMENTS**  
 MADE IN: Malaysia  
 2DC: 2Q:  
 MSL 2 /260C/1 YEAR SEAL DT  
 MSL 1 /235C/UNLIM 03/29/04  
 OPT:  
 ITEM: 39  
**LBL: 5A (L)T0:1750**

(1P) SN74LS07NSR  
 (Q) 2000 (D) 0336  
 (31T) LOT: 3959047MLA  
 (4W) TKY (1T) 7523483SI2  
 (P)  
 (2P) REV: (V) 0033317  
 (20L) CSO: SHE (21L) CCO:USA  
 (22L) ASO: MLA (23L) ACO: MYS

**Product Affected:**

AWR2243ABGABLQ1	AWR2243APBGABLQ1	AWR2243AVBGABLRQ1
AWR2243ABGABLRQ1	AWR2243APBGABLRQ1	

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

AWR2243ABL UMC-F12 Fab with Additional Clark Bump and TIPI Assembly Sources  
Approve Date 05-March-2026

### Product Attributes

Attributes	Qual Device:	QBS Product Reference:
	<u>AWR2243APBGABLQ1</u>	<u>AWR1843ABGABLQ1</u>
Automotive Grade Level	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 140C Tj	-40 to 140C Tj
Product Function	Microprocessor	Microprocessor
<b>Die Attributes</b>		
Wafer Fab Supplier	UMC-F12	UMC-F12
Wafer Process	1118C014.M8	1118C014.M8
<b>Package Attributes</b>		
Assembly Site	PHI	PHI
Package Group	FCCSP	FCCSP
Package Designator	ABL	ABL
Package Size (mm)	10.4 x 10.4	10.4 x 10.4
Body Thickness (mm)	0.75	0.75
Pin Count	161	161
Lead Finish	SNAGCU	SNAGCU
Lead Pitch(mm)	0.65	0.65

QBS: Qual By Similarity, also known as Generic Data  
Qual Device AWR2243APBGABLQ1 is qualified at MSL3 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:	QBS Product Reference:
								<a href="#">AWR2243APBGABLO1</a>	<a href="#">AWR1843ABGABLO1</a>
<b>Test Group A - Accelerated Environment Stress Tests</b>									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL3 260C	-	3/300/0	3/900/0
HAST	A2	JEDEC JESD22-A110	3	77	Temperature Humidity Bias	85C/85%RH	1000 Hours	-	3/231/0
AC/UHAST	A3	JEDEC JESD22A102/JEDEC JESD22A118	3	77	Unbiased HAST	110C/85%RH	264 Hours	-	3/231/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-55C/150C	1000 Cycles	3/231/0	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	3/78/0
<b>Test Group B - Accelerated Lifetime Simulation Tests</b>									
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
<b>Test Group C - Package Assembly Integrity Tests</b>									
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	3/30/0	-
SBS	C5	JEDEC JESD22-B117	3	10	Solder Ball Shear	Cpk>1.67	-	3/30/0	-
<b>Test Group D - Die Fabrication Reliability Tests</b>									
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
TDDDB	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	-	-	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
BTI	D4	-	-	-	Bias Temperature Instability	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
SM	D5	-	-	-	Stress Migration	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
<b>Test Group E - Electrical Verification Tests</b>									
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0	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-2508-03

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

AWR2243 ABL TI Lehi Fab (LFAB) with Clark Bump and TIPI Assembly  
Approve Date 09-March-2026

## Product Attributes

Attributes	Qual Device:	QBS Reference:	QBS Reference:
	<u>AWR2243ABGABLQ1</u>	<u>AWR1843ABGABLQ1</u>	<u>AWR1843ABGABLQ1</u>
Automotive Grade Level	Grade 1	Grade 1	Grade 1
Operating Temp Range (C)	-40 to 140C TJ	-40 to 140C TJ	-40 to 140C TJ
Product Function	Microprocessor	Microprocessor	Microprocessor
<b>Die Attributes</b>			
Wafer Fab Supplier	LFAB	UMC-F12	LFAB
Wafer Process	1118C014.M8	1118C014.M8	1118C014.M8
<b>Package Attributes</b>			
Assembly Site	PHI	PHI	ANA
Package Group	FCCSP	FCHIP	FCCSP
Package Designator	ABL	ABL	ABL
Package Size (mm)	10.4 x 10.4	10.4 x 10.4	10.4 x 10.4
Body Thickness (mm)	0.75	0.75	0.75
Pin Count	161	161	161
Lead Finish	SNAGCU	SNAGCU	SNAGCU
Lead Pitch(mm)	0.65	0.65	0.65

QBS: Qual By Similarity, also known as Generic Data  
Qual Device AWR2243ABGABLQ1 is qualified at MSL3 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>AWR2243ABGABLQ1</u>	QBS Package, Process, Product Reference: <u>AWR1843ABGABLQ1</u>	QBS Package, Process, Product Reference: <u>AWR1843ABGABLQ1</u>
<b>Test Group A - Accelerated Environment Stress Tests</b>										
PC	A1	JEDEC J-STD-020 JESD22A113	3	77	Preconditioning	MSL3 260C	-	3/270/0	3/873/0	3/231/0
HAST	A2	JEDEC JESD22A110	3	77	Temperature Humidity Bias	85C/85%RH	1000 Hours	-	3/231/0	3/231/0
AC/UHAST	A3	JEDEC JESD22A102/JEDEC JESD22A118	3	77	Unbiased HAST	110C/85%RH	264 Hours	-	3/231/0	3/231/0

TC	A4	JEDEC JESD22A104 and Appendix 3	3	77	Temperature Cycle	-55C/150C	1000 Cycles	3/231/0	-	-
HTSL	A6	JEDEC JESD22A103	1	45	High Temperature Storage Life	150C	1000 Hours	-	1/45/0	1/45/0
<b>Test Group B - Accelerated Lifetime Simulation Tests</b>										
HTOL	B1	JEDEC JESD22- A108	3	77	Life Test	125C	1000 Hours	1/78/0	3/231/0	3/231/0
ELFR	B2	AEC Q100008	3	800	Early Life Failure Rate	125C	48 Hours	-	3/2400/0	3/2400/0
<b>Test Group C - Package Assembly Integrity Tests</b>										
PD	C4	JEDEC JESD22B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	1/10/0	3/30/0	-
SBS	C5	AEC Q100010, Q003	3	10	Solder Ball Shear	Cpk>1.67	-	1/10/0	3/30/0	-
BST	C7	JESD22B117	3	5	Bump Shear Test	20 bumps/pillars from a minimum of 5 devices. Cpk > 1.67	-	-	1/5/0	1/5/0
<b>Test Group D - Die Fabrication Reliability Tests</b>										
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
TDDDB	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	-	-	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
BTI	D4	-	-	-	Bias Temperature Instability	-	-	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
<b>Test Group E - Electrical Verification Tests</b>										
ESD	E2	AEC Q100002	1	3	ESD HBM	-	500, 1000, 1500, 2000 Volts	1/3/0 (per voltage)	-	-
ESD	E3	AEC Q100011	1	3	ESD CDM	-	250, 500 Volts (750V Corner Pins)	1/3/0 (per voltage)	-	-
LU	E4	AEC Q100004	1	3	Latch-Up	Per AEC Q100- 004	-	1/3/0	-	-
ED	E5	AEC Q100009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	1/30/0	3/90/0	3/90/0
<b>Additional Tests</b>										
BLR	T1	-	-	-	Board Level Reliability - Temp Cycle	-40C/125C	1000 Cycles	-	1/32/0	-

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 Cycle

**Ambient Operating Temperature by Automotive Grade Level:**

Grade 0 (or E): -40C to +150C

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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-2512-015

[1]-Digital TFT Fail. See attached fail summary. Fab/SAW corrective actions applied and test was repopulated & passed. This result is discounted.

[2]-ADC DCCOR fail

[3]-Digital TFT Fail. See attached fail summary. Fab/SAW corrective actions applied and test was repopulated & passed. This result is discounted.

[4]-Digital TFT Fail. See attached fail summary. Fab/SAW corrective actions applied and test was repopulated & passed. This result is discounted.

[5]-Digital TFT Fail. See attached fail summary. Fab/SAW corrective actions applied and test was repopulated & passed. This result is discounted.

[6]-Digital TFT Fail. See attached fail summary. Fab/SAW corrective actions applied and test was repopulated & passed. This result is discounted.

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-PA-18, SEM-PW-13

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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