



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN Number:	20260717000.2	PCN Issued	August 06, 2026
Qualification of RFAB as an additional Fab site option, Design change, BOM change Datasheet update, TI CDAT and TI CLARK-AT as an additional Assembly/Test site options for select devices		Sample request deadline:	October 05, 2026
		Estimated 1st ship date:	February 02, 2027
Sample requests received after October 05, 2026 will not be supported.			

Change Type(s)	Assembly Site Assembly Material Packing/Shipping/Labeling Design Data Sheet/Electrical Specification Test Site Test Process Wafer Fab Site Wafer Fab Material Wafer Fab Process
ZVEI ID	SEM-PA-07, SEM-PA-08, SEM-PA-11, SEM-PA-18, SEM-PW-02, SEM-PW-09, SEM-PW-13, SEM-EQ-03, SEM-DS-01, SEM-DE-02, SEM-DE-03, SEM-PS-04, SEM-TF-01

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of a new fab & process technology (FFAB, LBC7) and additional Assembly/Test site (CDAT and Clark-AT) option for selected devices as listed below in the product affected section.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
FFAB	ASLC10	200mm	RFAB	LBC7	300mm

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

Construction Differences are as follows:

	Current	Additional	Additional
Assembly Site	MLA	CDAT	Clark-AT
Bond Wire Composition/diameter	Cu, 0.96mil	Cu, 0.8mil	Cu, 0.8mil
Mold Compound	4208625	4222198	4222198
Mount Compound	4205846	4207123	4207123
MSL	MSL3	MSL1	MSL1

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 shown below. The links to the revised datasheets are available in the table below.

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
SN74AVC4T245-Q1	SCES792C	SCES792D	http://www.ti.com/product/SN74AVC4T245-Q1



SN74AVC4T245-Q1

SCES792D – NOVEMBER 2009 – REVISED MAY 2026

Changes from Revision C (February 2024) to Revision D (May 2026)	Page
• Updated the <i>Thermal Information</i> for the RGY package.....	7

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 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:

- These devices include new die with schematic or behavior changes.
- There are changes in the electrical tables.
- Device quality has been impacted.
- Review updated datasheets and/or the Standard Data Packet for more details on the changes. Evaluating samples is encouraged.

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
FFAB	TID	DEU	Freising
RFAB	RFB	USA	Richardson

Die Rev:
Current

New

Die Rev [2P]	Die Rev [2P]
-	A

Assembly/Test Site Information

Assembly/ Test Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
Malaysia	MLA	MYS	Kuala Lumpur
CDAT	CDA	CHN	Chengdu
CLARK AT	QUA	PHL	Pampanga

Sample product shipping label (not actual product label):



Products Affected:

74AVC4T245QRGRQ1

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

FAB5 AVC4T RGY-CDAT (Automotive)
Approve Date 08-July -2025

Product Attributes

Attributes	Qual Device: 74AVC4T245QRGRQ1	QBS Process Reference: SN325700Y YRQ1	QBS Package Reference: CAVC4T74Q8QB8RQ1	QBS Package Reference: PSN74AVC4T245B8QB8R	QBS Package Reference: SN74HC594QWRKSRQ1	QBS Package Reference: TX90104EQWBQARQ1	QBS Product Reference: 74AVC4T245QWBQBRQ1	QBS Product Reference: 74AVC4T74QWBQBRQ1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	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	-40 to 125	-40 to 125	-40 to 125
Product Function	Logic	Logic	Logic	Logic	Logic	Logic	Logic	Logic
Water Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB	RFAB
Assembly Site	CDAT	PHI	CDAT	CDAT	CDAT	CDAT	CDAT	CDAT
Package Group	QFN	SOT	QFN	QFN	QFN	QFN	QFN	QFN
Package Designator	RGY	DYY	BQB	BQB	RKS	BQA	BQB	BQB
Pin Count	16	16	16	16	20	14	16	16

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device 74AVC4T245QRGRQ1 is qualified at MSL1260C

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: 74AVC4T245QRGRQ1	QBS Process Reference: SN325700Y YRQ1	QBS Package Reference: CAVC4T74Q8QB8RQ1	QBS Package Reference: PSN74AVC4T245B8QB8R	QBS Package Reference: SN74HC594QWRKSRQ1	QBS Package Reference: TX90104EQWBQARQ1	QBS Product Reference: 74AVC4T245QWBQBRQ1	QBS Product Reference: 74AVC4T74QWBQBRQ1
Test Group A - Accelerated Environment Stress Tests															
PC	A1	JEDEC J-STD-020 JESD22-A13	3	77	Preconditioning	MSL1260C	-	1/400	3/400	1/400	1/400	1/400	400	1/400	-
HAST	A2	JEDEC JESD22-A13	3	77	Bias ed HAST	130C/85%RH	96 Hours	-	3/2310	1/770	1/770	1/770	1/770	1/770	-
AC/UHAST	A3	JEDEC JESD22-A130/JESD22-A138	3	77	Autoclave	121C/15psig	96 Hours	-	3/2310	1/770	1/770	-	-	-	-
AC/UHAST	A3	JEDEC JESD22-A130/JESD22-A138	3	77	Unbias ed HAST	130C/85%RH	96 Hours	-	-	-	-	1/770	1/770	1/770	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-55C/150C	500 Cycles	1/770	3/2310	1/770	1/770	1/770	3/2310	1/770	-
TC-SP	A4	ML-STD883 Method 2011.1	1	5	Port Temp Cycle Bond Pull	-	-	1/50	-	-	-	-	1/50	1/50	-

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device:	QES Process Reference:	QES Package Reference:	QES Package Reference:	QES Package Reference:	QES Package Reference:	QES Package Reference:	QES Product Reference:	QES Product Reference:
								74AVC4T2450RBQRB01	SM725TQD-VBQ01	Q-AN0477749BQRB01	PSM74AVC4T2450BQRB	SM74AVC4T2450WBQRB01	TS55184EJ-WBQ-AR01		74AVC4T2450WBQRB01	74AVC4T2450WBQRB01
TC-SAM	A4	-	3	3	Post TC SAM	<50% delamination	-	1/20	-	-	-	-	-	-	-	-
HTSL	A6	JEDIEC JESD022-A103	1	46	High Temperature Storage Life	150°C	1000 Hours	-	3/2150	1/450	1/450	1/450	-	-	-	-
HTSL	A6	JEDIEC JESD022-A103	1	46	High Temperature Storage Life	175°C	500 Hours	-	-	-	-	-	1/460	1/460	-	-
Test Group B - Accelerated Lifetime Simulation Tests																
HTOL	B1	JEDIEC JESD022-A103	3	77	Life Test	125°C	1000 Hours	-	-	-	-	1/770	1/770	1/770	-	-
HTOL	B1	JEDIEC JESD022-A103	3	77	Life Test	150°C	300 Hours	-	3/2310	1/770	1/770	-	-	-	-	-
ELFR	B2	AEC Q100-002	3	200	Early Life Failure Rate	150°C	24 Hours	-	3/24000	-	-	-	-	-	-	-
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	1/20	3/300	1/600	1/200	3/300	3/300	1/200	1/200	1/200
WBP	C2	MIL-STD-883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires, Cpk=1.67	Wires	1/20	3/300	1/600	1/200	3/300	3/300	1/200	1/200	1/200
SD	C3	JEDIEC J-STD-012	1	15	PB Solderability	>95% Lead Coverage	-	-	1/150	1/150	1/150	-	1/150	-	-	-
SD	C3	JEDIEC J-STD-012	1	15	PB-Free Solderability	>95% Lead Coverage	-	1/150	1/150	1/150	1/150	-	1/150	1/150	-	-
PD	C4	JEDIEC JESD022-B100 and B102	3	10	Physical Dimensions	Cpk=1.67	-	1/100	3/200	1/100	1/100	3/200	3/200	1/100	1/100	1/100
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	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
TDB	D2	JESD035	-	-	Time Dependent Electrical 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	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
HCI	D3	JESD66-A12	-	-	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	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
BTH	D4	-	-	-	Bias Temperature Humidity	-	-	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	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	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 V/0.1s	-	1/20	1/20	1/20	1/20	1/20	1/20	1/20	1/20
ESD	E3	AEC Q100-011	1	3	ESD CDM	-	500 V/1ns	-	1/20	1/20	1/20	1/20	1/20	1/20	1/20	1/20
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	-	1/60	1/60	1/60	1/60	1/60	1/60	1/60	1/60

- * Preconditioning was performed for Automotive (Auto) based HAST, THB based HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- * The following are equivalent HTOL options based on an activation energy of 0.7eV: 125°C/1k Hours, 140°C/200 Hours, 150°C/200 Hours, and 155°C/240 Hours
- * The following are equivalent HTSL options based on an activation energy of 0.7eV: 150°C/1k Hours, and 170°C/420 Hours
- * The following are equivalent Temp Cycle options per JESD47: 55°C/250 Cycles and 45°C/1500 Cycles

Orderable Part Numbers

The following table contains a list of all TI Orderable Part Numbers (OPNs) released by this qualification per Product Qualification Family definition (AEC Q100 Appendix 1). Group E results shown above cover all part numbers listed here.

74AVC4T2450RGRQ1

Ambient Operating Temperature by Automotive Grade Level:

- * Grade 0 (or E): -40°C to +125°C
- * Grade 1 (or Q): -40°C to +125°C
- * Grade 2 (or T): -40°C to +105°C
- * Grade 3 (or B): -40°C to +85°C

E1 (TEST): Electrical test temperatures of QFN samples (High temperature according to Grade level):

- * RoomTemp: H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H23, H24, H25, H26, H27, H28, H29, H30, H31, H32, H33, H34, H35, H36, H37, H38, H39, H40, H41, H42, H43, H44, H45, H46, H47, H48, H49, H50, H51, H52, H53, H54, H55, H56, H57, H58, H59, H60, H61, H62, H63, H64, H65, H66, H67, H68, H69, H70, H71, H72, H73, H74, H75, H76, H77, H78, H79, H80, H81, H82, H83, H84, H85, H86, H87, H88, H89, H90, H91, H92, H93, H94, H95, H96, H97, H98, H99, H100, H101, H102, H103, H104, H105, H106, H107, H108, H109, H110, H111, H112, H113, H114, H115, H116, H117, H118, H119, H120, H121, H122, H123, H124, H125, H126, H127, H128, H129, H130, H131, H132, H133, H134, H135, H136, H137, H138, H139, H140, H141, H142, H143, H144, H145, H146, H147, H148, H149, H150, H151, H152, H153, H154, H155, H156, H157, H158, H159, H160, H161, H162, H163, H164, H165, H166, H167, H168, H169, H170, H171, H172, H173, H174, H175, H176, H177, H178, H179, H180, H181, H182, 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Automotive Qualification Summary
(As per AEC-Q100 Rev. J and JEDEC Guidelines)

FAB5 AVC4T RGY-CLARK (Automotive)
Approve Date 28-August-2025

Product Attributes

Attributes	Qual Device: 74AVC4T245QRGYRQ1	QBS Process Reference: SN325QDYVRQ1	QBS Package Reference: LP5812Q1.1DRVRO1	QBS Product Reference: 74AVC4T245QWBQBRQ1
Automotive Grade Level	Grade 1	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	Logic, Signal Chain	Power Management	Interface
Wafer Fab Supplier	RFAB	RFAB	MH8	RFAB
Assembly Site	CLARK-AT	PHI	CLARK-AT	CDAT
Package Group	QFN	SOT	QFN	QFN
Package Designator	RGY	DYY	DRV	BQB
Pin Count	16	16	6	16

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device 74AVC4T245QRGYRQ1 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: 74AVC4T245QRGYRQ1	QBS Process Reference: SN325QDYVRQ1	QBS Package Reference: LP5812Q1.1DRVRO1	QBS Product Reference: 74AVC4T245QWBQBRQ1
Test Group A - Accelerated Environment Stress Tests											
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL1 260 C	-	3/411/0	3/411/0	3/411/0	1/411/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	110 C/85%RH	264 Hours	3/231/0	-	-	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130 C/85%RH	96 Hours	-	-	-	1/77/0
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Auto dave	121 C/15psig	96 Hours	-	-	3/231/0	-
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	110 C/85%RH	264 Hours	3/231/0	-	-	-
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Unbiased HAST	130 C/85%RH	96 Hours	-	-	-	1/77/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	-	1/77/0
TC-BP	A4	MIL-STD883 Method 2011	1	5	Post Temp Cycle Bond Pull	-	-	1/5/0	-	-	1/5/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150 C	1000 Hours	1/45/0	-	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	175 C	500 Hours	-	-	-	1/45/0
Test Group B - Accelerated Lifetime Simulation Tests											

Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: 74A VC4T245Q RGYRQ1	QBS Process Reference: SN8257QDYYRQ1	QBS Package Reference: LP5312Q1LDRVRQ1	QBS Product Reference: 74A VC4T245QWBQBRQ1
HTOL	B1	JEDEC JESD2-A108	3	77	Life Test	125 C	1000 Hours	1/77/0	-	-	1/77/0
HTOL	B1	JEDEC JESD2-A108	3	77	Life Test	150 C	300 Hours	-	3/231/0	-	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	150 C	24 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	3/90/0	3/90/0	1/30/0
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	3/90/0	1/30/0
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	1/15/0	-	1/15/0
PD	C4	JEDEC JESD2-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	3/30/0	3/30/0	3/30/0	1/10/0
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
TDD8	D2	JESD85	-	-	Time Dependent Dielectric Breakdown	-	-	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
Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: 74A VC4T245Q RGYRQ1	QBS Process Reference: SN8257QDYYRQ1	QBS Package Reference: LP5312Q1LDRVRQ1	QBS Product Reference: 74A VC4T245QWBQBRQ1
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
SM	D5	-	-	-	Stress Migration	-	-	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	-	750 Volts	1/3/0	1/3/0	-	1/3/0
LU	E4	AEC Q100-004	1	3	Latch-Up	Per AEC Q100-004	-	-	1/6/0	-	1/6/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	1/30/0	3/90/0	-	2/60/0
Additional Tests											
BLR	T1	-	-	-	Board Level Reliability - Temp Cycle	-40/125C	1000 Cycles	1/32/0	-	-	-

- Preconditioning was performed for Auto drive, 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 0.7 eV: 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 0.7 eV: 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): -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):

- RoomHotCold : HTOL, ED
- RoomHot : THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU
- Room : ACuHAST

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-CHG-2308-059

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