

PCN Number:	20260702001.1	PCN Issued	July 06, 2026
Qualify TIEM as an additional Assembly site for select devices		Sample request deadline:	September 04, 2026
		Estimated 1st ship date:	October 04, 2026
September 04, 2026* will not be supported.			

Change type(s)
Assembly Site Packing/Shipping/Labeling Test Site

PCN Details

Description of Change:			
Texas Instruments is pleased to announce the qualification of TI Melaka (TIEM) as an additional Assembly site for the list of devices shown below. No material differences between sites.			
	Current site		Additional Site
Assembly site	CDAT	CLARK	TIEM
Marking appearance	With ECAT (G4)	With ECAT (G4)	Remove ECAT(G4)
Qual details are provided in the Qual Data Section.			
Reason for Change:		Continuity of supply.	

Anticipated impact on Form, Fit, Function, Quality or Reliability:	Review the Standard Data Packet for more details on the changes.			
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	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change
Changes to product identification resulting from this PCN:	Assembly Site Information			
	Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
	CDAT	CDA	CHN	Chengdu
	CLARK	QAB	PHL	Angeles City, Pampanga

	TIEM	CU6	MYS	Melaka
Sample product shipping label (not actual product label):				

Products Affected:		
DP83822HFRHBR	DP83822HRHBRG4	DP83822IFRHBTG4
DP83822HFRHBT	DP83822HRHBT	DP83822IRHBR
DP83822HFRHBTG4	DP83822IFRHBR	DP83822IRHBRG4
DP83822HRHBR	DP83822IFRHBT	DP83822IRHBT

Automotive Qualification Summary
(As per AEC-Q100 Rev. J and JEDEC Guidelines)
 Approve Date 15-May-2026

Product Attributes

Attributes	Qual Device: <u>DP83822IRHBR</u>	QBS Process Reference: <u>DS90UH941ASRTDTQ1</u>	QBS Package Reference: <u>LM26LVQSD-130/NOPB</u>	QBS Package Reference: <u>BQ24735RGR</u>	QBS Package Reference: <u>MSPM0G3507SRGZR</u>
Automotive Grade Level	-	Grade 2	Grade 0	-	-
Operating Temp Range (C)	-40 to 85	-40 to 105	-40 to 150	-40 to 85	-40 to 125
Product Function	-	Signal Chain,Interface	Interface	-	-
Wafer Fab Supplier	DMOS6	DMOS6	MAINEFAB	RFAB	LFAB
Assembly Site	TIEMA	SCSAT	TIEMA	TIEMA	TIEMA
Package Group	QFN	QFN	QFN	QFN	QFN
Package Designator	RHB	RTD	NGF	RGR	RGZ
Pin Count	32	64	6	20	48

QBS: Qual By Similarity, also known as Generic Data
 Qual Device DP83822IRHBR 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: DP83822IRHBR	QBS Process Reference: DS90UH941ASRTDQ1
Test Group A - Accelerated Environment Stress Tests									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL3 260C	-	-	3/0/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	3/231/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65/150C	500 Cycles	-	3/231/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temperature Storage Life	150C	500 Hours	-	3/135/0
Test Group B - Accelerated Lifetime Simulation Tests									
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test	105C	1000 Hours	-	3/231/0
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate	125C	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	-	3/15/0
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	-	3/15/0
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
SD	C3	-	1	22	PB-Free Solderability	Precondition w. 155C Dry Bake (4 hrs +/- 15 minutes)	-	1/22/0	-
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	Completed Per Process Technology Requirements
TDDB	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
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	-	-	1/6/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	3/90/0
FTY	E6	-	1	1	Final Test Yield	-	-	1/1/0	-
Additional Tests									
BLR	T1	-	-	-	Board Level Reliability - Temp Cycle	-40/125C	1000 Cycles	-	1/32/0
MQ	-	-	-	-	Manufacturability (Assembly)	(per mfg. Site specification)	-	1/1/0	-

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-2508-084

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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