

**PCN# 20250417001.1
Adding TI Melaka (TIEM) as an additional Assembly site
for select package devices
Change Notification / Sample Request**

Date: April 23, 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

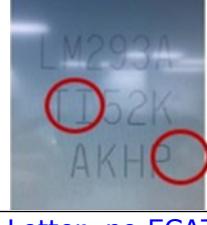
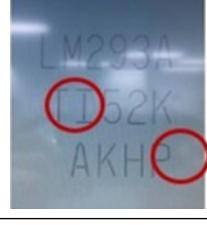
20250417001.1
Change Notification / Sample Request
Attachments

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
ISO7730FDWR	ISO7730FDWR
ISO6721RFBDR	NULL
ISO6731DWR	NULL
ISO7740FDWR	ISO7740FDWR
ISO6741FDWR	NULL
ISO7731FDWR	ISO7731FDWR
ISO7720FDWR	ISO7720FDWR
ISO7741FDWR	ISO7741FDWR
ISO6720FBDR	NULL
ISO6740FDWR	NULL
UCC21550ADWR	NULL
ISO6721RBDR	NULL
ISO7742FDWR	ISO7742FDWR
ISO7721FDWR	ISO7721FDWR
ISO6721FBDR	NULL
ISO6731FDWR	NULL
ISO7721FBDWR	ISO7721FBDWR
ISO7761DWR	NULL
ISO7731BDWR	ISO7731BDWR
ISO6742FDWR	NULL
ISO1640BDR	NULL
ISO7741FBDWR	NULL
ISO7762DWR	NULL
ISO7763FDWR	NULL
ISO7760FDWR	NULL
UCC21550BDWR	NULL
ISO7740DWR	ISO7740DWR
ISO7760DWR	ISO7760DWR
ISO7761FDWR	ISO7761FDWR
ISO7731FBDWR	ISO7731FBDWR
ISO7731DWR	ISO7731DWR
ISO7741DWR	ISO7741DWR
ISO7741BDWR	NULL
ISO6721BDR	NULL
ISO7742DWR	ISO7742DWR
ISO7763DWR	ISO7763DWR
ISO6740DWR	NULL
ISO7721DWR	NULL
ISO6720BDR	NULL
ISO6741DWR	NULL
ISO7762FDWR	595-ISO7762FDWR

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

PCN Number:	20250417001.1			PCN Date:	April 23, 2025	
Title:	Adding TI Melaka (TIEM) as an additional Assembly site for select package devices					
Customer Contact:	Change Management team		Dept:	Quality Services		
Proposed 1st Ship Date:	July 22, 2025		Estimated Sample Availability:	June 22, 2025		
*Sample requests received after June 22, 2025 will not be supported.						
Change Type:						
<input checked="" type="checkbox"/> Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material		
<input checked="" 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		
PCN Details						
Description of Change:						
Texas Instruments is pleased to announce TI Melaka (TIEM) as an additional Assembly site for select devices in the SOIC package. Material differences between sites as follows.						
Group 1 (No material differences between sites)						
	Current	Additional				
Assembly Site	TI Malaysia	TI Melaka				
Wire diam/type*	0.96mil Au, 1.0mil Cu	0.8mil Cu				
Topside marking (Sample)			TI Logo, ECAT (G4) TI Letter, no ECAT**			
*Applicable for ISO1640BDR						
**Topside marking is applicable for both Current & additional site						
Group 2						
	Current	Additional				
Assembly Site	TI Malaysia, TI Taiwan	TI Melaka				
Wire diam/type	0.96mil Au, 1.0mil Cu, 0.8mil Cu	0.8mil Cu				
Topside marking (Sample)			TI Logo, ECAT (G4) TI Letter, no ECAT*			
*Topside marking is applicable for both Current & additional site						
Reason for Change:						
Continuity of supply.						

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

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			

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City
TI Malaysia	MLA	MYS	Kuala Lumpur
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City
TI Melaka	CU6	MYS	Melaka

Sample product shipping label (not actual product label)



Group 1 Product Affected:

ISO1640BDR	ISO6721BDR	ISO6721RFBDR
ISO6720BDR	ISO6721FBDR	ISO6721RFBDRG4
ISO6720FBDR	ISO6721RBDR	

Group 2 Product Affected:

ISO6731DWR	ISO7730DWR	ISO7742DWR
ISO6731FDWR	ISO7730FDWR	ISO7742FDWR
ISO6740DWR	ISO7731BDWR	ISO7760DWR
ISO6740FDWR	ISO7731DWR	ISO7760FDWR
ISO6741DWR	ISO7731FBDWR	ISO7761DWR
ISO6741FDWR	ISO7731FDWR	ISO7761FDWR
ISO6742DWR	ISO7740DWR	ISO7762DWR
ISO6742FDWR	ISO7740FDWR	ISO7762FDWR
ISO7720DWR	ISO7741BDWR	ISO7763DWR
ISO7720FDWR	ISO7741DWR	ISO7763FDWR
ISO7721BDWR	ISO7741DWWRG4	UCC21550ADWR
ISO7721DWR	ISO7741FBDWR	UCC21550BDWR
ISO7721FBDWR	ISO7741FDWR	
ISO7721FDWR	ISO7741FDWWRG4	

Group 1 Qualification Data
 Automotive Qualification Summary
 (As per AEC-Q100 Rev. J and JEDEC Guidelines)
 Approve Date 11-December-2024

Product Attributes

Attributes		Qual Device: <u>ISO6721FBQDRQ1</u>	Qual Device: <u>UCC21330BQDRQ1</u>	QBS Process Reference: <u>UCC23513QDWYQ1</u>	QBS Product Reference: <u>UCC21330BQDRQ1</u>
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	Power Management	Power Management	Power Management
Wafer Fab Supplier		RFAB, RFAB	RFAB, RFAB, RFAB	RFAB, RFAB	RFAB, RFAB, RFAB
Assembly Site		TIEMA	TIEMA	TAI	MLA
Package Group		SOIC	SOIC	SOIC	SOIC
Package Designator		D	D	DWY	D
Pin Count		8	16	6	16

QBS: Qual By Similarity, also known as Generic Data

Qual Device ISO6721FBQDRQ1 is qualified at MSL2 260C

Qual Device UCC5350MCQDRQ1 is qualified at MSL2 260C

Qual Device UCC5350SBQDRQ1 is qualified at MSL2 260C

Qual Device UCC5350SBQDRQ1 is qualified at MSL2 260C

Qual Device UCC21330BQDRQ1 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>ISO6721FBQDRQ1</u>	Qual Device: <u>UCC21330BQDRQ1</u>	QBS Process Reference: <u>UCC23513QDWYQ1</u>	QBS Product Reference: <u>UCC21330BQDRQ1</u>
Test Group A - Accelerated Environment Stress Tests											
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL2 260C	-	No Fails	-	-	-
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	MSL3 260C	-	-	No Fails	-	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-
AC/UHAST	A3	JEDEC JESD22-A102/JEDEC JESD22-A118	3	77	Autoclave	121C/15psig	96 Hours	1/77/0	3/231/0	-	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/231/0	-	-
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	150C	1000 Hours	-	3/135/0	-	-
Test Group B - Accelerated Lifetime Simulation Tests											
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	-
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	1/30/0	3/90/0	-	-
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull	Minimum of 5 devices, 30 wires Cpk>1.67	Wires	1/30/0	3/90/0	-	-
SD	C3	JEDEC J-STD-002	1	15	PB-Free Solderability	>95% Lead Coverage	-	-	1/15/0	-	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions	Cpk>1.67	-	1/10/0	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
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
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
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
Type	#	Test Spec	Min Lot Qty	SS / Lot	Test Name	Condition	Duration	Qual Device: ISO6721FBQDRQ1	Qual Device: UCC21330BQDRQ1	QBS Process Reference: UCC23513QDWYQ1	QBS Product Reference: UCC21330BQDRQ1
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	-	-	-	1/6/0	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	1/30/0

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-2311-002

Group 2 Qualification Data
 SPM- ISO to TIMelaka-16DW- Commercial devices
 Approve Date 11-DECEMBER -2024

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

Type	#	Test Name	Condition	Duration	Qual Device: ISO7763DWR	Qual Device: UCC21550BDWR	Qual Device: ISO1176TDWR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	3/231/0	1/77/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	3/231/0	-	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	3/231/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	1/22/0	-	1/22/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device ISO7763DWR is qualified at MSL2 260C

Qual Device UCC21550BDWR is qualified at MSL2 260C

Qual Device ISO1176TDWR is qualified at MSL2 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-2412-016

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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