



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

**PCN#20220202000.1**

**Qualification of TI Malaysia as an alternate Assembly site for select Devices  
Change Notification / Sample Request**

**Date:** February 16, 2022

**To:** TOKYO ELECTRON DEVICE (DSTR) 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 **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If additional data is required, requests must be received within **30 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 PCN Team ([PCN ww admin team@list.ti.com](mailto:PCN_admin_team@list.ti.com)). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team  
SC Business Services


**20220202000.1**  
**Attachment: 1**

**Products Affected:**

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty four (24) months. The corresponding customer part number is also listed, if available.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
ISO7760FDWR	null
ISO7762FDWR	null
ISO7762DW	null
ISO7760DW	null
AMC1204BDWR	null

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

<b>PCN Number:</b>	20220202000.1		<b>PCN Date:</b>	February 16, 2022
<b>Title:</b>	Qualification of TI Malaysia as an alternate Assembly site for select devices			
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	May 17, 2022	<b>Estimated Sample Availability:</b>	Date provided at sample request	
<b>Change Type:</b>				
<input checked="" type="checkbox"/> Assembly Site	<input type="checkbox"/> Design	<input type="checkbox"/> Wafer Bump Site		
<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Material		
<input type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input type="checkbox"/> Wafer Bump Process		
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Site	<input type="checkbox"/> Wafer Fab Site		
<input type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input type="checkbox"/> Wafer Fab Materials		
		<input type="checkbox"/> Wafer Fab Process		
<b>PCN Details</b>				
<b>Description of Change:</b>				
Texas Instruments Incorporated is announcing the qualification of TI Malaysia as an additional Assembly & Final site for the devices listed below. There are no construction differences between the 2 sites.				
<b>Reason for Change:</b>				
Supply continuity				
<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 (22L)</b>	<b>Assembly Country Code (23L)</b>	<b>Assembly City</b>	
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City	
<b>TI Malaysia</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>	
Sample product shipping label (not actual product label)				
 <p> <b>TEXAS INSTRUMENTS</b>  MADE IN: Malaysia  2DC: 20:  MSL 2 /260C/1 YEAR SEAL DT  MSL 1 /235C/UNLIM 03/29/04  OPT: 39  ITEM: 39  LBL: 5A (L)T0:1750 </p> <p> (1P) SN74LS07NSR  (Q) 2000 (D) 0336  (31T) LOT: 3959047MLA  (4W) TKY (1T) 7523483SI2  (P)  (2P) REV: (V) 0033317  (20L) CS0: SHE (21L) CC0:USA  (22L) AS0: <u>MLA</u> (23L) AC0: MYS </p>				

**Product Affected:**

AMC1204BDW	ISO7760DWR	ISO7762FDW	UCC21540DWR
AMC1204BDWR	ISO7760FDW	ISO7762FDWR	UCC21541DW
AMC1204DW	ISO7760FDWR	UCC21540ADWR	UCC21541DWR
AMC1204DWR	ISO7762DW	UCC21540DW	UCC21542DWR
ISO7760DW	ISO7762DWR		



TI Information  
Selective Disclosure

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

Type	Test Name / Condition	Duration	Qual Device: AMC1204QDWRQ1	QBS Product Reference: AMC1204QDWRQ1	QBS Process Reference: AMC1200STDUBRQ1	QBS Package Reference: AMC1305M25QDWRQ1
AC	Autoclave 121C	96 Hours	1/80/0	3/231/0	3/231/0	3/231/0
CDM	ESD - CDM	1500 V	-	1/3/0	1/3/0	1/3/0
ED	Electrical Distribution	Cpk>1.67	1/30/0	3/90/0	3/90/0	1/30/0
ELFR	Early Life Failure Rate, 125C	24 Hours	-	3/2400/0	3/840/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0	3/231/0
HBM	ESD - HBM	4000 V	-	1/3/0	-	1/3/0
HTOL	Life Test, 150C	300 Hours	-	-	3/231/0	-
HTOL	Life Test, 150C	408 Hours	1/77/0	3/231/0	-	1/77/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	3/231/0	-
HTSL	High Temp Storage Bake 175C	500 Hours	1/45/0	1/77/0	-	3/231/0
LI	Lead Pull to Destruction	Leads	-	1/24/0	1/24/0	1/24/0
LU	Latch-up	Per AEC-Q100-004	-	1/6/0	-	1/6/0
PD	Physical Dimensions	Cpk>1.67	1/30/0	3/30/0	3/30/0	3/30/0
SD	Solderability	Pb	1/15/0	1/15/0	3/36/0	1/15/0
SD	Solderability	Pb Free	1/15/0	1/15/0	3/36/0	1/15/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0	3/231/0
WBP	Bond Pull, Cpk>1.67	Wires	1/30/0	3/90/0	3/228/0	3/90/0
WBS	Wire Bond Shear, Cpk>1.67	Wires	1/30/0	3/90/0	3/228/0	3/90/0

- QBS: Qual By Similarity  
- Qual Device AMC1204QDWRQ1 is qualified at LEVEL3-260C  
- Device AMC1204QDWRQ1 contains multiple dies.  
- 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/>  
**Green/Pb-free Status:**

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ISO7760DW	Qual Device: ISO7760FDW	QBS Package Reference: ISO6741QDWRQ1
AC	Autoclave 121C	96 Hours	1/77/0	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0
HTSL	High Temp Storage Bake 175C	500 Hours	-	-	3/135/0
SD	Surface Mount Solderability	PB Solder	-	-	1/15/0
SD	Surface Mount Solderability	PB-Free Solder	-	-	1/15/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	3/231/0
WBP	Bond Pull	Wires	1/76/0	1/76/0	3/228/0
WBS	Ball Bond Shear	Wires	1/76/0	1/76/0	3/228/0

- QBS: Qual By Similarity

- Qual Devices ISO7760FDW and ISO7760DW are qualified at LEVEL2-260C

- Devices ISO7760DW and ISO7760FDW contains multiple dies.

- 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/>

**Green/Pb-free Status:**

Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20210106-137645

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: UCC21540DWR
AC	Autoclave 121C	96 Hours	1/77/0
CDM	ESD - CDM	1500 V	1/3/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0
HBM	ESD - HBM	4000 V	1/3/0
HTOL	Life Test, 125C	1000 Hours	1/77/0
LU	Latch-up	(per JESD78)	1/6/0
MSL	Thermal Path Integrity, JEDEC, L2	Level 2-260C	1/12/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0
YLD	Yield Evaluation	(per mfg. Site specification)	1/Pass

- 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/>

**Green/Pb-free Status:**

Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20210226-138824

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
WW PCN Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

### IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI’s products are provided subject to TI’s Terms of Sale ([www.ti.com/legal/termsofsale.html](http://www.ti.com/legal/termsofsale.html)) or other applicable terms available either on [ti.com](http://ti.com) or provided in conjunction with such TI products. TI’s provision of these resources does not expand or otherwise alter TI’s applicable warranties or warranty disclaimers for TI products.