

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

# PCN#202202000.1A Qualification of TI Malaysia as an alternate Assembly site for select Devices Change Notification / Sample Request

**Date:** May 17, 2022

**Revision A** is to announce the <u>addition</u> of a new device that was not included on the original PCN notification.

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.

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.

PCN Team SC Business Services

#### 20220202000.1A 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.

DEVICE	<b>CUSTOMER PART NUMBER</b>
ISO7710DW	null
ISO7710DWR	null
ISO7710FDW	null
ISO7720DWR	null
ISO7720FDW	null
ISO7720FDWR	null
ISO7721BDW	null
ISO7721BDWR	null
ISO7721DW	null
ISO7721DWR	null
ISO7721FBDW	null
ISO7721FBDWR	null
ISO7721FDW	null
ISO7721FDWR	null
ISO7761DW	null
ISO7761FDW	null
ISO7763DW	null
ISO7763DWR	null
ISO7763FDW	null
ISO7763FDWR	null
ISO7710FDWR	null

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

PCN Nu	PCN Number: 20220202000.1A PCN Date: May 17, 202					May 17, 2022					
Title: Qualification of TI Malaysia as an alternate Assembly site for select devices											
Custom	Customer Contact: PCN Manager Dept: Quality Services										
Propose	Proposed 1 <sup>st</sup> Ship Date: May 17, 2022  Sample requests accepted until: June 19, 2022					19, 2022					
*Sample	e request	ts rece	eived after	· Jur	ne 19, 2	2022	will not be	e su	pporte	d.	
Change	Type:										
Asset Asset Asset Asset Asset Asset Asset Baset Asset Baset 	embly Site				Design				Wafe	r Bum	p Site
Asse	embly Prod	cess			Data Sheet			Wafe	r Bum	p Material	
Asse	embly Mat	erials		□ F	Part nun	nber (	change		Wafe	r Bum	p Process
Mec	hanical Sp	ecifica	tion		Test Site			Site			
Pack	king/Shipp	ing/La	beling		Test Pro	cess					Materials
									Wafe	r Fab I	Process
					PCN I	<b>Deta</b>	ils				
Descrip	tion of Ch	nange									
Revision A is to announce <u>additional</u> devices that was not included on the original PCN notification. The new devices are highlighted and <b>bolded</b> in the device list below. The expected first shipment date for the new devices will be 90 days from this notice (Aug 19, 2022) for the newly added devices only. The proposed 1 <sup>st</sup> ship date of May 17, 2022 still applies for the original set of devices.  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.											
Reason	for Chan	ge:									
Supply c	ontinuity										
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 R		RE	ACH	ACH Gr		<b>Green Sta</b>	reen Status		IE	C 62474	
$oxed{oxed}$ No Change $oxed{oxed}$ No Ch		🛛 No Cha	nge	ge 🛛 🖾 No Change		$oxed{oxed}$ No Change		hange			
Changes to product identification resulting from this PCN:											
	bly Site		mbly Site Ori (22L)		Assembly Country Code (23L)			A	ssembl	y City	
		TAI		TW			Chung H		lo, Nev	w Taipei City	
		MLA		MYS		Kuala Lumpur					
	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:



(1P) SN74LS07NSR

(Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483SI2

(P) (2P) REV:

(2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

#### **Product Affected:**

AMC1204BDW	ISO7720FDWR	ISO7760FDW	ISO7763DWR
AMC1204BDWR	<b>ISO7721BDW</b>	ISO7760FDWR	<b>ISO7763FDW</b>
AMC1204DW	ISO7721BDWR	<b>ISO7761DW</b>	ISO7763FDWR
AMC1204DWR	<b>ISO7721DW</b>	ISO7761DWR	UCC21540ADWR
<b>ISO7710DW</b>	<b>ISO7721DWR</b>	<b>ISO7761FDW</b>	UCC21540DW
ISO7710DWR	ISO7721FBDW	ISO7761FDWR	UCC21540DWR
<b>ISO7710FDW</b>	ISO7721FBDWR	ISO7762DW	UCC21541DW
ISO7710FDWR	<b>ISO7721FDW</b>	ISO7762DWR	UCC21541DWR
<b>ISO7720DW</b>	ISO7721FDWR	ISO7762FDW	UCC21542DWR
ISO7720DWR	ISO7760DW	ISO7762FDWR	
<b>ISO7720FDW</b>	ISO7760DWR	<b>ISO7763DW</b>	



TI Information Selective Disclosure

#### Qualification Results

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

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Туре	Test Name / Condition	Duration	Qual Device: AMC1204QDWRQ1	QBS Product Reference: <u>AMC1204QDWRQ1</u>	QBS Process Reference: <u>AMC1200STDUBRQ1</u>	QBS Package Reference: <u>AMC1305M25QDWRQ1</u>
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 AMC1204QDVRQ1 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

Туре	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 0.7eVt 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



TI Information Selective Disclosure

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

Туре	Test Name / Condition	Duration	Qual Device: <u>UCC21540DWR</u>
AC	Autoclave 121C	Autoclave 121C 96 Hours	
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