

PCN# 20220601001.1 Qualification of new Fab Site (MIHO8), die revision, Assembly site (MLA), assembly BOM option and datasheet updates Change Notification / Sample Request

Date:June 02, 2022To: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 (<u>PCN ww admin team@list.ti.com</u>). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team SC Business Services

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 twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
ISO1540D	null
ISO1540DR	null
ISO1541D	null
ISO1541DR	null

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

PCN Number: 20220603				1001.1 PCI			N Da	ate:	June 02, 2022		
Title					b Site (MIHO8), die heet updates	revision	, As	sem	bly site	(MLA), assembly	
Cust	omer Co	ntact		PCN	<u> Manager</u>		De	pt:		Quality Services	
Proposed 1 st Ship Date:						e Requests ted until:			July 2, 2022*		
*Sample requests received after July 2, 2022 will not be supported.											
Char	nge Type										
	Assembly	Site		\boxtimes	Assembly Process			\boxtimes	Assembly Materials		
\boxtimes	Design			\boxtimes	Electrical Specifica	ation			Mech	anical Specification	
	Test Site				Packing/Shipping/	Labeling			Test Process		
	Wafer Bur	np Sit	e	Wafer Bump Material					Wafer Bump Process		
	Wafer Fab	Site			Wafer Fab Materia	ls		\boxtimes	Wafe	r Fab Process	
					Part number chan	ge					
	Wafer Bur		:e	Packing/Shipping/Labeli					Wafe	r Bump Process	

PCN Details

Description of Change:

Texas Instruments is pleased announce the qualification of a new Fab Site (MIHO8), die revision, Assembly site (MLA), assembly BOM options and datasheet updates for the devices listed in the "Product Affected" section.

Cu	rrent Fab Site		Additional Fab Site			
Current Fab Site	Process	Wafer Diameter	New Fab Site	Process	Wafer Diameter	
DMOS5	50HPA07ISO	200 mm	MIHO8	LBC8	200 mm	

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

Qual details are provided in the Qual Data Section.

BOM/Assembly options are as follows:

	TAI	MLA
Bond wire diameter composition, diameter	Au, 0.96 mil	1mil PCC Die-> LF .96mil Au Die->Die
Mold Compound	4209640	4211880

The datasheet number will be changing:

Product Family	Current Datasheet Number	New Datasheet Number		
ISO1540, ISO1541	SLLSEB6E	SLLSEB6F		

The product datasheet(s) is being updated as summarized below:

ISO1540/1

4 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

С	hanges from Revision E (March 2019) to Revision F (May 2022)	Page
•	Editorial and cosmetic changes throughout the document	1
•	Updated electrical and switching parameters	6
•	Updated 'DIN VDE V 0884-11:2017-01' to 'DIN EN IEC 60747-17 (VDE 0884-17)' and removed reference	ces to
	'CSA/IEC 60950-1'	9

Reason for Change:

Supply continuity.

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
🛛 No Change	🛛 No Change	🛛 No Change	🛛 No Change

Changes to product identification resulting from this PCN:

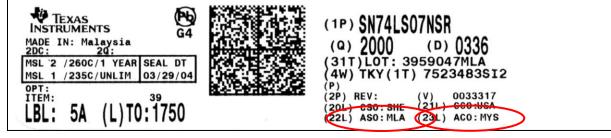
Fab Site Information:									
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City						
DMOS5	DM5	USA	Dallas						
MIHO8	MH8	JPN	Ibaraki						

Die Rev:

Current	New				
Die Rev [2P]	Die Rev [2P]				
В	Α				

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City		
TAI	TAI	TWN	Chung Ho, New Taipei City		
MLA	MLA	MYS	Kuala Lumpur		

Sample product shipping label (not actual product label)



Product Affected:

Group 1 Device List (Fab site, Design, Assembly site, & BOM qualification + Datasheet Changes)ISO1540DRISO1541DR

Group 2 Device List (Datasheet Changes only)

ISO1540D ISO1541D

Selective Disclosure



Qualification Report Approve Date 24-MARCH -2022

Qualification Results

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

Туре	#	Test Name	Condition	Duration	Qual Device: <u>ISO1540D</u>	Qual Device: <u>ISO1541D</u>	QBS Reference: AMC1200STDUBRQ1	QBS Reference: ISO7741FQDWQ1	QBS Reference: ISO1640DWR	QBS Reference: <u>ISO1641DWR</u>	QBS Reference: ISO6741DWR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	3/231/0	-	-	3/231/0
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0	-	-	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	3/231/0	1/77/0	-	3/231/0
тс	A4	Temperature Cycle	-55C/125C	1000 Cycles	-	-	3/231/0	-	-	-	-
тс	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	3/231/11	1/77/0	-	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	3/231/0	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	3/231/0	-	-	-
HTOL	В1	Life Test	125C	1000 Hours	-	-	3/231/0	3/231/0	-	-	3/231/0
ELFR	B2	Early Life Failure Rate	125C	24 Hours	-	-	3/840/0	-	-	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0	-	-	3/2400/0
WBS	C1	Ball Shear	76 balls, 3	Wires	-	-	-	-	1/76/0	1/76/0	-

WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	-	-	-	-	1/76/0	1/76/0	-
ESD	E2	ESD CDM	-	1500 Volts	-	-	-	1/3/0	1/3/0	1/3/0	1/3/0
ESD	E2	ESD HBM	-	6000 Volts	-	-	-	1/3/0	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	-	-	-	1/3/0	1/3/0	1/3/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	-	3/90/0	3/90/0	1/30/0	1/30/0	1/30/0

QBS: Qual By Similarity

Qual Device ISO1540D is qualified at MSL2 260C

Qual Device ISO1541D 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/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: R-CHG-2203-022

[1]-EOS. Discounted: QTS_487131-1

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

Location	E-Mail
WW Change Management Team	PCN ww admin team@list.ti.com

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