PCN Numl	ber:	2022060	1001.1 PCN Date					ate:	June 02, 2022	
Title: Qualification of new Fab Site (MIHO8), die revision, Assembly site (MLA), assembly BOM options and datasheet updates								(MLA), assembly		
Customer Contact:			<u>PCN</u>	l Manager		Dep	ot:		Quality Services	
Proposed 1 st Ship Date:			Sep 2, 2022 Sample Re accepted u				· IIIII// / / / / / / / / / / / / / / /		July 2, 2022*	
*Sample requests received after July 2, 2022 will not be supported.										
Change Type:										
Assem	nbly Site		Assembly Process				\boxtimes	Assembly Materials		
□ Design □	Design							Mechanical Specification		
Test Site			Packing/Shipping/Labeling					Test Process		
☐ Wafer Bump Site			Wafer Bump Material					Wafer Bump Process		
	Fab Site		Wafer Fab Materials				X	Wafer	r Fab Process	
			Part number change						<u> </u>	
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	rocess Wafer Diameter		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.

Changes from Revision E (March 2019) to Revision F (May 2022)

Page

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

Changes to product identification resulting from this PCN:

Fab Site Information:

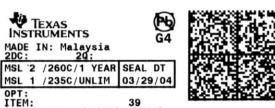
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DMOS5	DM5	USA	Dallas
MIHO8	MH8	JPN	Ibaraki

Die Rev:

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

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

Sample product shipping label (not actual product label)



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483S12 (P) (2P) REV: (V) 0033317 (20L) 650: SHE (21L) 660: USA (22L) ASO: MLA (23L) ACO: MYS

Product Affected: Group 1 Device List (Fab site, Design, Assembly site, & BOM qualification + Datasheet Changes) ISO1540DR ISO1541DR 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: ISO1540D	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	А3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	3/231/0	1/77/0	-	3/231/0
TC	A4	Temperature Cycle	-55C/125C	1000 Cycles	-	-	3/231/0	-	-	-	-
TC	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	B1	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:

Oualified 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 www admin team@list.ti.com

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) or other applicable terms available either on 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.