

PCN Number:	20201201000.1	PCN Date:	Jan. 11, 2021
Title:	Qualification of MIHO8 as an additional Fab site option for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Apr. 11, 2021	Estimated Sample Availability:	Date provided at sample request.
Change Type:			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	Part number change

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its MIHO8 fabrication facility as an additional Wafer Fab source for the selected devices listed in the "Product Affected" section.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
MAINEFAB	ABCD5HV	200 mm	MIHO8	ABCD5HV	200 mm

Qual details are provided in the Qual Data Section.

Reason for Change:

Continuity of Supply

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

None

Changes to product identification resulting from this PCN:

Current:

Current Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
MAINEFAB	CUA	USA	South Portland

New Fab Site:

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
MIHO8	MH8	JPN	Ibaraki

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 20:
 MSL 2 / 260C / 1 YEAR SEAL DT
 MSL 1 / 235C / UNLIM 03/29/04
 OPT: 39
 ITEM:
LBL: 5A (L)T0:1750

(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV. (V) 0033317
 (20L) CSO: SHE (21L) CCO: USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

ISO1042BDW	ISO1042BDWV	ISO1042DW	ISO1042DWV
ISO1042BDWR	ISO1042BDWVR	ISO1042DWR	ISO1042DWRV

Qualification Report

Approve Date 13-Oct-2020

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>ISO1042QDWQ1</u>	QBS Product Reference: <u>ISO1042DW (PG1.1)</u>	QBS Product Reference: <u>ISO1042DW(PG1.0)</u>	QBS Process Reference: <u>ISO7741FQDWQ1</u>	QBS Process Reference: <u>TCAN1042HVDRQ1 (PG 2.0)</u>	QBS Package Reference: <u>ISO1042DW (PG1.1)</u>	QBS Package Reference: <u>ISO1042DW(PG1.0)</u>
AC	Autoclave 121C	96 Hours	-	1/77/0	2/154/0	3/231/0	3/231/0	1/77/0	2/154/0
CDM	ESD - CDM	1500 V	-	1/3/0	-	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	-	-	-	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-	3/2400/0	3/2400/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	3/231/0	3/231/0	-	1/77/0
HBM	ESD - HBM (All Pins)	8000 V	-	1/3/0	-	-	-	-	-
HBM	ESD - HBM (Bus Pins Only)	16000 V	-	1/3/0	-	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	1/77/0	2/154/0	3/231/0	-	1/77/0	2/154/0
HTOL	Life Test, 150C	300 Hours	-	-	-	-	3/231/0	-	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	1/77/0	2/154/0	-	3/135/0	1/77/0	2/154/0
HTSL	High Temp Storage Bake 175C	500 Hours	-	-	-	3/231/0	-	-	-
LU	Latch-up	(Per JESD78)	-	1/6/0	-	-	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	-	3/231/0	3/231/0	3/231/0	-
WBP	Bond Pull	Wires	1/76/0	3/182/0	-	3/228/0	3/228/0	3/182/0	-
WBS	Bond Shear	Wires	1/76/0	3/182/0	-	3/228/0	3/228/0	3/182/0	-

- QBS: Qual By Similarity

- Qual Device ISO1042QDWQ1 is qualified at LEVEL3-260C

- Device ISO1042QDWQ1 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

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