

<b>PCN Number:</b>	20230222000.1	<b>PCN Date:</b>	February 23, 2023
<b>Title:</b>	Qualification of RFAB as an additional Fab site option for select LBC8 devices		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1st Ship Date:</b>	May 22, 2023	<b>Sample requests accepted until:</b>	Mar 22, 2023*

**\*Sample requests received after March 22, 2023 will not be supported.**

**Change Type:**

<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<input checked="" type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
		<input type="checkbox"/>	Part number change		

**Notification Details**

**Description of Change:**

Texas Instruments is pleased to announce the qualification of its RFAB 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	New Fab Site	Process	Wafer Diameter
MIHO8	LBC8	200 mm	RFAB	LBC8	300 mm

Qual details are provided in the Qual Data Section.

**Reason for Change:**

Continuity of supply.

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

None.

**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
MIHO8	MH8	JPN	Ibaraki
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

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: 39  
**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:**

ISO1540DR	ISO1640BDR	ISO1641BDR
ISO1541DR	ISO1640DWR	ISO1641DWR

**Qualification Report**  
**Approve Date 09-February-2023**

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: ISO1640BDR	Qual Device: ISO1640DWR	Qual Device: ISO1641BDR	Qual Device: ISO1641DWR	QBS Reference: UCC23313QDWRQ1	QBS Reference: ISO1640BQDRQ1	QBS Reference: ISO6760QDWRQ1	QBS Reference: ISO6761QDWRQ1	QBS Reference: ISO6763QDWRQ1	QBS Reference: ISO6762QDWRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	-	3/231/0	3/231/0	1/77/0	-	1/77/0	1/77/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	3/231/0	3/231/0	1/77/0	-	1/77/0	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	-	-	-	3/231/0	3/231/0	1/77/0	1/77/0	1/77/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	-	1/45/0	-	-	-	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	-	3/135/0	-	1/45/0	1/45/0	1/45/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	-	3/231/0	-	1/77/0	1/77/0	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	-	3/2400/0	-	-	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	-	1/15/0	-	-	-	1/15/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	-	1/15/0	-	-	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	-	3/30/0	-	-	-	-	-
ESD	E2	ESD CDM	-	250 Volts	-	1/3/0	-	-	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	-	1/3/0	-	-	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/3/0	-	-	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-	-	3/90/0	3/90/0	-	-	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	1/1/0	1/1/0	-	-	-	-	-	-

- QBS: Qual By Similarity
- Qual Device ISO1640BDR is qualified at MSL2 260C

- Qual Device ISO1640DWR is qualified at MSL2 260C
- Qual Device ISO1641BDR is qualified at MSL2 260C
- Qual Device ISO1641DWR 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

**Qualification Report**  
**Approve Date 12-OCTOBER -2022**

**Qualification Results**

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

Type	#	Test Name	Condition	Duration	Qual Device: ISO1644DWR	QBS Reference: UCC23513QDWYQ1	QBS Reference: UCC21520ADW
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0
UHA	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	175C	300 Hours	-	-	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/2400/0	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	-	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	3/90/0	-

- QBS: Qual By Similarity
- Qual Device ISO1644DWR is qualified at MSL2 260C
- Qual Device ISO1643DWR is qualified at MSL2 260C
- Qual Device ISO1642DWR 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

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

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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