

PCN Number:	20200212001.1	PCN Date:	Feb 18, 2020
Title:	Qualification of MIHO8 as an additional Wafer Fab Site option for select devices in LBC7 Technology		
Customer Contact:	<u>PCN Manager</u>	Dept:	Quality Services
Proposed 1st Ship Date:	May 18, 2020	Estimated Sample Availability:	Date provided at sample request.
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 type="checkbox"/> Wafer Fab Materials	<input type="checkbox"/> Wafer Fab Process	
	<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 "Product Affected" section.

Current Sites			Additional Sites		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DP1DM5	LBC7	200mm	MIHO8	LBC7	200mm

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

Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City
DP1DM5	DM5	USA	Dallas

New Fab Site

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

Sample product shipping label (not actual product label)



MADE IN: Malaysia
2DC: 20:

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) 7523483S12
(P)
(2P) REV: (Y) 0033317
(20L) CS0: SHE (21L) CCO: USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

TPS22945DCKR

TPS22945DCKRG4

Qualification Report**Approve Date 05-Feb-2020****Qualification Results**

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

Type	Test Name / Condition	Duration	Qual Device: TPS22945DCKR	QBS Process Reference: SN0406082PW	QBS Package Reference: TPS22942DCKR
AC	Autoclave (121C, 2 atm)	96 Hours	-	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	3/231/0
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	-
CDM	ESD - CDM	1000 V	1/3/0	1/3/0	-
HTOL	Life Test, 140C	480 Hours	-	3/231/0	-
HTOL	Life Test, 150C	300 Hours	-	-	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	3/231/0	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0

- QBS: Qual By Similarity

- Qual Device TPS22945DCKR is qualified at LEVEL1-260C

- 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

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