

PCN Number:	20191003003.1	PCN Date:	Oct 10, 2019
Title:	Qualification of AIZU as an additional Fab Site option for select CMOS9T devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Jan 10, 2020	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"/>	Assembly Materials
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Mechanical Specification
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Packing/Shipping/Labeling
		<input type="checkbox"/>	Test Process
		<input type="checkbox"/>	Wafer Bump Material
		<input type="checkbox"/>	Wafer Bump Process
		<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 AIZU 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
MAINEFAB	CMOS9T	200mm	AIZU	CMOS9T	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
MAINEFAB	CUA	USA	South Portland

New Fab Site

Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City
AIZU	CU2	JPN	Aizuwakamatsu-shi

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) 7523483S12
 (P)
 (2P) REV: (V) 0033317
 (20L) CS0: SHE (21L) CCO: USA
 (22L) AS0: MLA (23L) ACO: MYS

Product Affected Group:

LP5907MFX-1.2/NOPB	LP5907MFX-2.5/NOPB	LP5907MFX-2.9/NOPB	LP5907MFX-3.2/NOPB
LP5907MFX-1.5/NOPB	LP5907MFX-2.8/NOPB	LP5907MFX-3.0/NOPB	LP5907MFX-3.3/NOPB
LP5907MFX-1.8/NOPB	LP5907MFX-2.85/NOPB	LP5907MFX-3.1/NOPB	LP5907MFX-4.5/NOPB

Qualification Report

Approve Date 11-Sep-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LP5907MFX- 1.2/NOPB	Qual Device: LP5907MFX-2.85/NO	Qual Device: LP5907MFX-4.5/NOPB	QBS Product/Process Reference: LP5907UVX-3.3-TL	QBS Package Reference: LP2985AIMS- 5.0/NOPB-TL	QBS Package Reference: LP5907MFX- 2.9/NOPB	QBS Package Reference: LP5907QMF: 4.5Q1
AC	Autoclave 121C	96 Hours	-	-	-	-	3/231/0	-	1/77/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	1/90/0	-	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-	3/2400/0	3/2400/0	-	2/800/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	3/231/0	-	1/77/0
HBM	ESD - HBM	2000 V	-	-	2/6/0	3/9/0	3/9/0	-	1/3/0
CDM	ESD - CDM	750 V	-	-	2/6/0	3/9/0	3/9/0	-	1/3/0
HTOL	Life Test, 125C	1000 Hours	-	-	-	3/231/0	3/231/0	-	1/77/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	3/231/0	3/231/0	-	-
HTSL	High Temp. Storage Bake, 175C	500 Hours	-	-	-	-	-	-	1/77/0
LU	Latch-up	(per JESD78)	-	-	2/12/0	3/18/0	-	-	1/6/0
SD	Solderability	8 Hours Steam Age, Pb-Free	-	-	-	-	-	1/15/0	-
SD	Solderability	Pb	-	-	-	-	-	1/15/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	3/231/0	3/231/0	-	1/77/0
WP	Bond Pull/Post 500 Temperature Cycle, -	Wires	-	-	-	-	-	-	1/30/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-	3/231/0	-	-	-
THB	Biased Temperature and Humidity, 85C/85%RH	500 Hours	-	-	-	3/231/0	-	-	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	3/231/0	-	-	-
WBP	Bond Pull	Wires	-	-	-	-	-	1/76/0	-
WBS	Ball Bond Shear	Wires	-	-	-	-	-	1/76/0	-
MQ	Manufacturability	Assembly	-	-	Pass	-	-	-	-
YLD	Yield (Test)	Yield	Pass	Pass	Pass	-	-	-	-

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL1-260C: LP5907MFX-2.85/NO, LP5907MFX-1.2/NOPB, LP5907MFX-4.5/NOPB

- 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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