PCN Number: 20			200323000.1				PCN Date: Mar 23, 2020				
Title: Qualification of AIZU as an additional Fab Site option for select CMOS7 devices											
Customer Contact:		PCN Manager			Dept:				Quality Services		
Proposed 1 st Ship Date:		Jun 23, 2020			Estimated Sample Availability:				Date provided at sample request.		
Change T	vpe:						-			ounn	
Assembly Site		Assembly Pro						Ass	Assembly Materials		
Design			Electrical Spec							Mechanical Specification	
Test Site		Packing/Shipp							Test Process		
Wafer Bump Site		e	Wafer Bump I							Wafer Bump Process	
Water Bump Site			Wafer Fab Ma							Wafer Fab Process	
			Part number change								
	PCN Details										
Descriptio	on of Cha	nge:				Cland					
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.											
	Cur	rent Sit	es				Add	Additional Sites			
Curren	-	Process		Wafe		Additiona	il F	Proc	ess		Wafer
	Fab Site			Diame		Fab Site					Diameter
MAINEF	AB	CMOS7		200m	m	AIZU		CMO	S7		200mm
Qual detail Reason fo Continuity	or Change	e:	he Ç	ual Data	Section	1.					
Anticipate	ad impact	t on For	m F	it Eunct	ion O	uality or I	Doliahi	lity	(noci	itivo	/ negative):
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative): None											
Changes to product identification resulting from this PCN:											
Current											
Chip Site	Site Chip Site		Origi	in (20L)	Chip S	Site Countr	y Code	(21	L) () Chip Site City	
MAINEFA	B C	CUA		. ,	USA					Sout	h Portland
New Fab Site											
Chip Site			Origi	IN (20L)		Site Countr	y Code	(21	-		Site City
AIZU	C	CU2			JPN	JPN				Aizu	wakamatsu-shi
Sample product shipping label (not actual product label) TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2(260C/1 YEAR SEAL DT MSL 2 /260C/1 YEAR SEAL DT MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750 (not actual product label) (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) 2DC: SO: SHE (2TL) CCO:USA (2TL) CCO:USA (2TL) CCO:USA											
Product Affected Group:											
LM73CIMK-0/NOPB LM73CIMKX-0/NOPB											

Qualification Report

Approve Date 27-Jan-2020

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: <u>LM73CIMKX0NOPB</u>	QBS Process Reference: <u>LM3668QDNTRQ1</u>
PC	Preconditioning Level 1	Level 1 260C	1/320/0	3/800/0
HTOL	Life Test, 125C	1000 Hours	1/80/2 (Note 1)	3/231/0
AC	Autoclave 121C	96 Hours	1/77/0	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	3/231/0
TC	Temperature Cycle, -65/150C	500CYC	1/77/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	1/77/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	3/231/0
HBM	ESD - HBM	1000 V	1/3/0	-
CDM	ESD - CDM	750 V	1/3/0	-
LU	Latch-up	Per JESD78	1/6/0	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	-
WBS	Wire Bond Shear	Cpk > 1.67	1/80/0	-
WBP	Wire Bond Pull	Cpk > 1.67	1/80/0	-

- QBS: Qual By Similarity

- Qual Device LM73CIMKX-0/NOPB 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

Note1: Two units failed ATE after 1000 hours oplife. Units failed due to data retention issue. Production bake was implemented to remove weak device at wafer sort

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

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