

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20200323000.1 Qualification of AIZU as an additional Fab Site option for select CMOS7 devices Change Notification / Sample Request

Date: March 23, 2020 **To:** Newark/Farnell PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (PCN www admin team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team SC Business Services

20200323000.1 Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE LM73CIMK-0/NOPB LM73CIMKX-0/NOPB **CUSTOMER PART NUMBER**

null null

Technical details of this Product Change follow on the next page(s).

PCN Number: 202		200323000.1		PCI	N Date:	Mar 23, 2020				
Title: Qualification of A			of AI	IZU as an additional Fab Site option for select CMOS7 devices						
Cus	stomer	Contact:		PCN Manager Dept		Dept:	Quality Services		ity Services	
Proposed 1 st Ship Date:			:	Jun	un 23, 2020 Estimated Samp Availability:		le	Date provided at sample request.		
Change Type:										
Assembly Site				Assembly Pro	embly Process		Assemb	ly Materials		
Design				Electrical Specification			Mechanical Specification			
Test Site					Packing/Ship	ping/Labelir	ıg	Test Process		
☐ Wafer Bump Site					Wafer Bump Material				Wafer Bump Process	
				Wafer Fab Materials			Wafer F	ab Process		
Part number of					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	CMOS7	200mm	AIZU	CMOS7	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)



OPT: ITEM: 5A (L)T0:1750 LBL:



(1P) SN74LS07NSR (D) 0336 31T)LOT: 3959047MLA 4W) TKY(1T) 7523483S12 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACC: MYS (23L) ACO: MYS

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: LM3668QDNTRQ1
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 0.7 eV: 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 bakewas 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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN ww admin team@list.ti.com

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