PCN Number: 203			200723000.1			PCN	PCN Date: Jul 27, 2020			
Title: Qualification of A			IZU as an additional Fab Site option for select CMOS7 devices							
Cus	stomer	Contact:		PCN Manager		Dept:		Qual	Quality Services	
Proposed 1 st Ship Date:			:	Oct 27, 2020		Estimated Sample Availability:		Date provided at sample request.		
Change Type:										
Assembly Site				Assembly Process				Assembly Materials		
Design				Electrical Specification				Mechanical Specification		
Test Site					Packing/Shipping/Labeling				Test Process	
☐ Wafer Bump Site				Wafer Bump Material				Wafer Bump Process		
			Wafer Fab Materials				Wafer Fab Process			
•				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	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)



MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04

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



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

Product Affected:

LM48512TL/NOPB LM48512TLX/NOPB

Qualification Report

Approve Date 23-Jun-2020

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

Туре	Test Name / Condition	Duration	Qual Device: LM48512TL/NOPB	QBS Process Reference: <u>LP5521TM_TL</u>
PC	Preconditioning, L1	Level 1-260C	-	3/231/0
CHAR	Electrical Characterization	Per Datasheet Parameters	1/30/0	-
HAST	Biased HAST, 110C/85%RH	264 Hours	-	3/231/0
AC	Autoclave 121C	ACLV 96hrs/121C,100%RH	-	3/231/0
TC	Temperature Cycle, -40/125C	1000 Cycles	-	3/230/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	1/77/0
HTOL	Life Test, 125C	1000 Hours	-	3/231/0
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/915/0
HBM	ESD - HBM	4000 V	1/3/0	-
HBM	ESD - HBM	1000 V	-	3/9/0
CDM	ESD - CDM	1500 V	1/3/0	-
CDM	ESD - CDM	250 V	-	3/9/0
LU	Latch-up	Per JESD78	1/6/0	3/18/0

- QBS: Qual By Similarity
- Qual Device LM48512TL/NOPB is qualified at LEVEL1-260CG
- 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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