PCN Number:	20211210001.1	PCN Date:	December 13, 2021
Title:	Qualification of additional Fab site (UMC-F12) and additional Assembly site (CDAT) for select LBC9 devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Mar 13, 2022	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 Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of an additional fab (UMC-F12) and assembly site (CDAT) for the selected devices listed in the "Product Affected" section.

Current Fab Site			New Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**New Fab Site**	**Process**	**Wafer Diameter**
RFAB	LBC9	300 mm	UMC-F12	LBC9	300 mm

For the devices in in the group 1 device list below, construction differences are as follows:

	TI CLARK	CDAT
Mold Compound	4222790	4223495

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

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

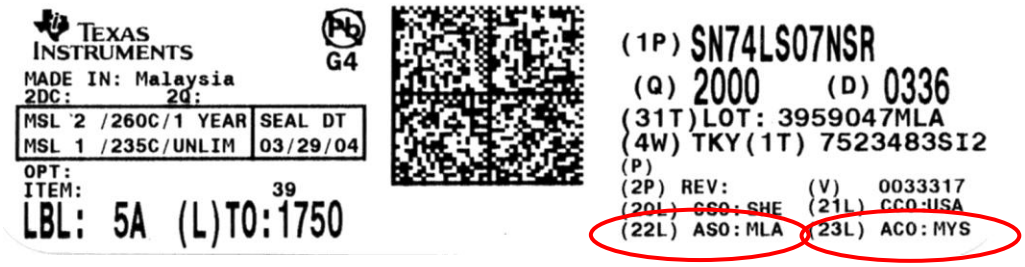
Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
RFAB	RFB	USA	Richardson
UMC-F12	**F12**	**TWN**	**Tainan**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
CLARK	QAB	PHL	Angeles City, Pampanga
CDAT	**CDA**	**CHN**	**Chengdu**

Sample product shipping label (not actual product label)



Product Affected:

Group 1 - Adding UMC-F12 Fab Site, CDAT Assembly Site and BOM updates:	
TPS62824DMQR	TPS6282533DMQR

Group 2 - Adding UMC-F12 Fab Site only:			
SN62825DMQR	TPS6282518DMQR	TPS62825DMQR	TPS6282618DMQR
SN62826DMQR	TPS6282518DMQT	TPS62825DMQT	TPS6282618DMQT
SN62827DMQR	TPS62826DMQR	TPS62826DMQT	

TI Information
Selective Disclosure

Qualification Report

Approve Date 06-December-2021

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: SN62825DMQR	Qual Device: SN62827DMQR	QBS Process Device: TPS51486RJER	QBS Package Device: SN62825DMQR
AC	Autoclave, 121C, 2 atm	96 Hours	-	-	3/231/0	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	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	-	3/9/0	-
CDM	ESD - CDM	500 V	1/3/0	-	3/9/0	-
HTOL	Life Test, 125C	1000 Hours	1/77/0	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0	2/154/0
LU	Latch-up	(per JESD78)	1/6/0	-	3/18/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	1/77/0	-	3/231/0	
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0

- Qual Device SN62825DMQR 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

TI Qualification ID: 20200520-134332

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