

PCN Number:	20211209002.1		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:					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<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 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
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	
<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change	
				IEC 62474	
				<input checked="" type="checkbox"/> 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	Taiwan		
Assembly Site Information:					
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City		
TI CLARK	QAB	PHL	Angeles City, Pampanga		
CDAT	CDA	CHN	Chengdu		

Sample product shipping label (not actual product label)





MADE IN: Malaysia
2DC: 20:

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

OPT:
ITEM: 39
LBL: 5A (L)T0:1750

(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483SI2
(P)
(2P) REV: (V) 0033317
~~(20L) CSO: SHE (21L) CCO: USA~~
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

TPS548B28RWWR	TPS54JB20RWWR
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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: TPS54JB20RWWR	QBS Product Device: TPS54JA20RWW	QBS Process: TPS5486RJR	QBS Product: TPS54JB00RWWR PG1.0	QBS Product: TPS54JB00RWWR PG2.0
AC	Autoclave 121C	96 Hours	-	-	3/231/0	1/77/0	-
CDM	ESD - CDM	500 V	1/3/0	1/3/0	3/9/0	2/6/0	1/3/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0	-	Pass
EDR	Power Cycling Disturb 25C	10K power up/down cycles	-	1/77/0	-	-	-
HAST	Biased HAST, 110C/85%RH	264 Hours	-	-	3/231/0	3/231/0	-
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	3/9/0	2/6/0	1/3/0
HTOL	Life Test, 150C	300 Hours	1/77/0	1/77/0	-	2/154/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0	-	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	3/231/0	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	3/231/0	-	-
LU	Latch-up, 125C, 100mA	Per JESD78	1/6/0	1/6/0	-	2/12/0	1/6/0
LU	Latch-up	Per JESD78	1/6/0	1/6/0	3/18/0	2/12/0	1/6/0
TC	Temperature Cycle, - 55/125C	700 Cycles	1/77/0	1/77/0	3/231/0	3/231/0	-
TC	Temperature Cycle, - 65/150C	500 Cycles	-	-	-	3/231/0	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	2/154/0	-

- QBS: Qual By Similarity

- Qual Devices TPS54JA20RWWR is qualified at LEVEL2-260C

- 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

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