

PCN Number:	20200901001.1		PCN Date:	Sep 18, 2020	
Title:	Qualification of additional Fab site (RFAB) and Assembly site (CARZ) options for select LBC7 devices				
Customer Contact:	PCN Manager		Dept:	Quality Services	
Proposed 1st Ship Date:	Dec 18, 2020		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 checked="" 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 (RFAB) and assembly (CARZ) site for selected devices as listed below in the product affected section.					
Current Site			Additional Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
FFAB	LBC7	200 mm	RFAB	LBC7	300 mm
For the devices in the group 2 device list below, construction differences are as follows:					
	TI Clark - Current	Carsem - New			
Mount compound	4207768	SID#435143			
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					
Anticipated impact on Material Declaration					
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website .		
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		
FR-BIP-1	TID	DEU	Freising		
RFAB	RFB	USA	Richardson		
Assembly Site Information:					
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City		
TI Clark	QAB	PHL	Angeles City		
Carsem	CSZ	CHN	Jiangsu		

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) TO: 1750

(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483S12
(P)
(2P) REV: (V) 0033317
(20L) CSO: SHE (21L) CCO: USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

Group 1 Device List (Adding RFAB)

TCA1116PWR	TCA9555DBT	TPS70918DRVR	TPS70933DRVR
TCA6416APWR	TCA9555PWR	TPS70918DRVT	TPS70933DRVT
TCA9539PWR	TCA9555RGER	TPS70930DRVR	TPS70950DRVR
TCA9539RGER	TPS22946YZPR	TPS70930DRVT	TPS70950DRVT
TCA9555DBR			

Group 2 Device List (Adding RFAB and CARZ AT)

TLV62084ADSGR	TLV62084ADSGT
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Qualification Report

Approve Date 6-October-2010

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS51217DSC
ED	Electrical Characterization	Per Datasheet Parameters	Pass
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
AC	Autoclave, 121C	96 Hours	3/231/0
HBM	ESD - HBM	2000 V	3/9/0
CDM	ESD - CDM	500 V	3/9/0
HTOL	Life Test, 135C	635 Hours	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0
LU	Latch-up	(per JESD78)	3/18/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/18/0

- Qual Device TPS51217DSC 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 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 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



Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TLV62084DSGR	QBS Process Reference: TPS2543QRTE	QBS Package Reference: TPS61021DSG	QBS Package Reference: TPS62170DSG
AC	Autoclave, 2 atm, 121C	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
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	-	-
CDM	ESD - CDM	500 V	1/3/0	1/3/0	-	-
HTOL	Life Test, 150C	300 Hours	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	2/90/0	2/90/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	3/231/0

- QBS: Qual By Similarity
 - Qual Device TLV62084DSGR is qualified at LEVEL2-260C
 - This also qualifies TLV62084ADSGR
 - 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

Qualification Report

Approve Date 25-June-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS70633DRVR	QBS Process Reference: TPS2543QRTE	QBS Package Reference: PGA900ARHHR
ED	Electrical Characterization	Per Datasheet Parameters	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	1000 V	1/3/0	1/3/0	-
CDM	ESD - CDM	500 V	1/3/0	1/3/0	-
HTOL	Life Test, 150C	300 Hours	-	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 175C	500 Hours	-	3/135/0	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0

- QBS: Qual By Similarity
 - Qual Device TPS70633DRVR 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

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