PCN Number:	20221020003.1	PCN Date:	October 21, 2022
Title:	Qualification of additional Fab site (RFAB) and additional Assembly site (TIPI) for select LBC8LV devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Jan 21, 2023	Sample requests accepted until:	Nov 21, 2022*

*Sample requests received after Nov 21, 2022 will not be supported.

Change Type:					
☒	Assembly Site	☐	Design	☐	Wafer Bump Site
☒	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process
☐	Mechanical Specification	☐	Test Site	☒	Wafer Fab Site
☒	Packing/Shipping/Labeling	☐	Test Process	☒	Wafer Fab Materials
				☐	Wafer Fab Process

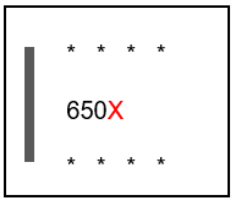
PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of an additional fab (RFAB) and assembly site (TIPI) option for the devices listed in the "Product Affected" section.

Current Site			Additional Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DP1DM5	LBC8LV	200 mm	RFAB	LBC8LV	300 mm

Material and Package marking differences between Assembly sites

	TFME	TIPI
Wire type	1.0mil Au	0.96mil Cu
Mount compound	A-09	4226215
Mold compound	R-13	4222198
Package Marking	 * * * * = BINARY DATECODE ▮ = PIN 1 STRIPE	 * * * * = BINARY DATECODE ▮ = PIN 1 STRIPE

Reason for Change:

Continuity of Supply

1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties
2) Maximize flexibility within our Assembly/Test production sites.
3) Cu is easier to obtain and stock

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
DP1DM5	DM5	USA	Dallas
RFAB	**RFB**	**USA**	**Richardson**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TFME	NFM	CHN	Chongchuan
TIPI	**PHI**	**PHL**	**Baguio City**

Sample product shipping label (not actual product label)

Product Affected:

SN6505ADBVR	SN6505ADBVT	SN6505BDBVR	SN6505BDBVT

Qualification Report

Approve Date 18-OCTOBER -2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN6505ADBVR	QBS Reference: TLV2401QDBVRQ1
HAST	A2	Biased HAST	130C	96 Hours	-	3/231/0
UHAST	A3	Autodave	121C/15psig	96 Hours	1/77/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-
HTOL	B1	Life Test	150C	408 Hours	-	-
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0

SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	3/30/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-

Type	#	Test Name	Condition	Duration	QBS Reference: UCC27517AQDBVRQ1	QBS Reference: AMC23C12QDWVRQ1
HAST	A2	Biased HAST	130C	96 Hours	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	3/135/0	-
HTOL	B1	Life Test	150C	408 Hours	-	3/231/0
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	3/2400/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	3/30/0	-
ESD	E2	ESD CDM	-	250 Volts	-	-
ESD	E2	ESD HBM	-	1000 Volts	-	-
LU	E4	Latch-Up	Per JESD78	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	-

QBS: Qual By Similarity
Qual Device SN6505ADBVR is qualified at MSL1 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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Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com

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