PCN Number:	201906060			<b>PCN Date</b>		June 7 2019	
Qualification of additional Fab site (DMOS6) and Assembly site (CDAT) options for the BQ25910YFFR/T							
<b>Customer Contact:</b>	PCN M	PCN Manager			Qua	Quality Services	
Proposed 1 <sup>st</sup> Ship Date: Sept 7 201				ated Samp bility:		Date provided at sample request.	
Change Type:							
Assembly Site	A	Assembly Process Assembly Materials					
Design		☐ Electrical Specification			Mechanical Specification		
Test Site		acking/Shipp		g 🔲 T	Test Process		
	V	Vafer Bump I	Material		Wafer Bump Process		
	V	Vafer Fab Ma	terials		Nafer Fab	Process	
	P	art number o	change				
	<u> </u>		etails	•			
<b>Description of Change</b>							
Texas Instruments is pleased to announce the qualification of an additional fab (DMOS6) and assembly (CDAT) site for the BQ25910YFFR/T.							
Curren	t Fab Site			Addition	al Fab S	ab Site	
Fab Site Process	Bump Site	Wafer Diameter	Fab Site	Process	Bump Site	Wafer Diameter	
RFAB LBC9	Clark-BP	300 mm	DMOS6	LBC9	CDAT-B	P 300 mm	
There are no material difference between devices currently manufactured and devices built with this manufacturing option.  Reason for Change:  Continuity of Supply							
Anticipated impact on	Form Fit F	function O	ıality or Re	liahility (n	nsitive	/ negative):	
None	101111, 110, 1	unction, Qu	durey of ite	mubiney (p	ositive j	inegative)i	
Anticipated impact on	Material De	claration					
No Impact to the 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:							
changes to product id	entification	resulting in	om this PC	dN:			
Fab Site Information:							
		te Origin (20L)	Chip Site C	Chip Site Country Cod		` ' ' '	
RFAB RFB		USA			Richardson		
DMOS6	D	M6	USA		Dallas		
Assembly Site Information:  Assembly Site							
Assembly Site Assembly Site Origin (22L)			DHI	Coue (ZIL)	Angeles City Pampanga		

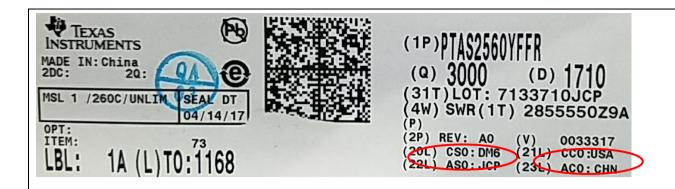
**CHN** 

**CDA** 

Sample product shipping label (not actual product label)

**CDAT** 

Chengdu



**Product Affected:** 

BQ25910YFFR BQ25910YFFT



TI Information Selective Disclosure

## **Qualification Results**

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

Туре	Test Name / Condition	Duration	Qual Device: BQ25910YFF	QBS Product Reference: <u>BQ25910YFF</u>	QBS Product Reference: BQ25970YFF	QBS Product Reference: BQ25970YFFR	QBS Package Reference: BQ25970YFFR	QBS Package Reference: SN2600A0YZF
CLHTOL	Corner Lot Life Test FF, 125C	1000 Hours	-	-	-	-	-	1/45/0
CLHTOL	Corner Lot Life Test FS, 125C	1000 Hours	-	-	-	-	-	1/45/0
CLHTOL	Corner Lot Life Test SF, 125C	1000 Hours	-	-	-	-	-	1/45/0
CLHTOL	Corner Lot Life Test SS, 125C	1000 Hours	-	-	-	-	-	1/45/0
ED	ED Electrical Characterization	Per Datasheet	Pass	Pass	-	Pass	Pass	Pass
ED		Parameters						
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-	-	-	3/3000/0
ELFR	Early Life Failure Rate, 140C	24 Hours	-	-	1/800/0	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	-	3/231/0
HBM	ESD - HBM	3000 V	1/3/0	-	-	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	-	1/3/0	1/3/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	-	3/231/0
HTOL	Life Test, 140C	480 Hours	-	3/231/0	3/231/0	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	-	-	2/154/0
HTSL	High Temp. Storage Bake ,170C	420 Hours	-	3/231/0	3/231/0	-	-	-
LU	Latch-up	(per JESD78)	2/12/0	1/6/0	-	1/6/0	2/12/0	3/18/0
PD	Physical Dimensions		1/5/0	-	-	-	1/5/0	3/60/0
SBS	Bump-shear		1/50/0	-	3/150/0	-	1/50/0	3/15/0
SD	Surface Mount Solderability	Pb Free	1/22/0	-	-	-	1/25/0	3/15/0
SD	Surface Mount Solderability	Pb	1/22/0	-	-	-	1/25/0	-
TC	Temperature Cycle, -40 /85C	1039 Cycles	-	-	-	-	-	3/99/0
TC	Temperature Cycle, -55/125C	700 Cycles	-	3/231/0	3/231/0	-	-	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	-	3/231/0

- QBS: Qual By Similarity

- Qual Device BOZ9910YFF 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 HTSL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/1420 Hours, 150C/300 Hours, and 155C/240 Hours

   The following are equivalent HTSL options based on an activation energy of 0.7eV: 160C/1k Hours, and 170C/220 Hours

   The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -66C/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: TBQ25910YFFR
ED	Electrical Characterization	Per Datasheet Parameters	Pass
ELFR	Early Life Failure Rate, 140C	24 Hours	3/2400/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
HAST	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0
HBM	ESD - HBM	3000 V	3/9/0
CDM	ESD - CDM	1500 V	3/9/0
HTOL	Life Test, 140C	480 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, -55/125C	700 Cycles	3/231/0

<sup>-</sup> Qual Device BQ25910YFFR is qualified at LEVEL1-260C

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

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN ww admin team@list.ti.com

<sup>-</sup> Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

<sup>-</sup> The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1kHours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

<sup>-</sup> 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