

<b>PCN Number:</b>	20220419001.1	<b>PCN Date:</b>	April 20, 2022
<b>Title:</b>	Qualification of DMOS6 as an additional Fab site option for select devices		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Jul 20, 2022	<b>Estimated Sample Availability:</b>	Date provided at sample request.
<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	Part number change

**PCN Details**

**Description of Change:**

Texas Instruments is pleased to announce the qualification of its DMOS6 fabrication facility as an additional Wafer Fab source for the selected devices listed in the "Product Affected" section.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
RFAB	LBC9	300 mm	DMOS6	LBC9	300 mm

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

**Changes to product identification resulting from this PCN:**

**Current:**

Current Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
RFAB	RFB	USA	Richardson

**New Fab Site:**

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
<b>DMOS6</b>	<b>DM6</b>	<b>USA</b>	<b>Dallas</b>

Sample product shipping label (not actual product label)

**Product Affected:**

BQ25170DSGR	BQ25170DSGT
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## Qualification Report

Approve Date 07-Apr-2022

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: BQ25170DSGR	QBS Product Reference: BQ25171QWDRCR	QBS Product Reference: Q25171QWDRCR01	QBS Package Reference: BQ25170DSGR
AC	Autoclave 121C	96 hours	-	-	3/231/0	1/77/0
CDM	ESD - CDM	2000 V	1/3/0	-	1/3/0	1/3/0
ED	Electrical Characterization	(per Datasheet parameters)	1/Pass	-	3/90/0	-
ELFR	Early Life Failure Rate, 125C	48 hours	-	-	1/800/0	-
HAST	Biased HAST, 130C/85%RH	96 hours	-	-	3/231/0	1/77/0
HBM	ESD - HBM	4000 V	1/3/0	-	1/3/0	1/3/0
HTOL	Life Test, 125C	1000 hours	-	1/77/0	1/77/0	-
HTSL	High Temp Storage Bake 150C	1000 hours	-	-	3/231/0	1/77/0
LU	Latch-up	Latchup (Per JESD78, Class I)	1/6/0	-	-	1/6/0
LU	Latch-up	Latchup (Per JESD78, Class II)	1/6/0	-	-	1/6/0
LU	Latch-up	Per AEC Q100-004	-	-	1/6/0	-
MSL	Moisture Sensitivity	(MSL 2 / 260C)	-	-	1/12/0	-
MSL	Thermal Path Integrity, JEDEC, L2	(MSL 2 / 260C)	-	-	-	1/12/0
PTC	Power Temperature Cycle, -40/125C	1000 cycles	-	-	1/45/0	-
SD	Pb Free Surface Mount Solderability	Pb Free Solder	-	-	-	1/22/0
TC	Temperature Cycle, -65/150C	500 cycles	-	-	3/231/0	1/77/0
XRAY	X-ray	(top side only)	-	-	-	1/5/0

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

- QBS: Qual By Similarity

- Qual Device BQ25170DSGR is qualified at LEVEL2-260C

- 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

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

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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