




PCN Number:	20190424001.1		PCN Date:	Apr 29, 2019																			
Title:	Qualification of DMOS6 as an additional Wafer Fab Site option for select devices in LBC8 Technology																						
Customer Contact:	PCN Manager		Dept:	Quality Services																			
Proposed 1st Ship Date:	Jul 29, 2019		Estimated Sample Availability:	Date provided at sample request.																			
Change Type:																							
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input 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 its DMOS6 fabrication facility as an additional Wafer Fab source for the selected devices listed in "Product Affected" section.																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Current Sites</th> <th colspan="3">Additional Sites</th> </tr> <tr> <th>Current Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> <th>Additional Fab Site</th> <th>Process</th> <th>Wafer Diameter</th> </tr> </thead> <tbody> <tr> <td>RFAB</td> <td>LBC8</td> <td>300mm</td> <td>DMOS6</td> <td>LBC8</td> <td>200mm</td> </tr> </tbody> </table>						Current Sites			Additional Sites			Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter	RFAB	LBC8	300mm	DMOS6	LBC8	200mm
Current Sites			Additional Sites																				
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter																		
RFAB	LBC8	300mm	DMOS6	LBC8	200mm																		
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																							
Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City																				
RFAB	RFB	USA	Richardson																				
New Fab Site																							
Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City																				
DMOS6	DM6	USA	Dallas																				
Sample product shipping label (not actual product label)																							
   <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>MADE IN: Malaysia 2DC: 20:</p> <table border="1" style="font-size: small;"> <tr> <td>MSL 2 / 260C / 1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 / 235C / UNLIM</td> <td>03/29/04</td> </tr> </table> <p>OPT: ITEM: 39 LBL: 5A (L)T0:1750</p> </div> <div style="width: 45%;"> <p>(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CC0: USA (22L) AS0: MLA (23L) AC0: MYS</p> </div> </div>						MSL 2 / 260C / 1 YEAR	SEAL DT	MSL 1 / 235C / UNLIM	03/29/04														
MSL 2 / 260C / 1 YEAR	SEAL DT																						
MSL 1 / 235C / UNLIM	03/29/04																						
Product Affected Group:																							
AFE4420YZR		AFE4420YZT																					

Qualification Report

Approve Date 22-Mar-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: AFE4420YZR	QBS Product Reference: AFE4420YZR	QBS Process Reference: CD3700A0YKHR	QBS Process Reference: CD3700A0YKHR	QBS Process Reference: PCD3258A00DYFPR (DM6/JCAP)	QBS Package Reference: LM3566YFFR
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	-	3/90/0	-	3/90/0
CDM	ESD - CDM	1000 V	-	-	2/6/0	1/3/0	1/3/0	-
CDM	ESD - CDM	1500 V	-	1/3/0	-	-	-	3/9/0
HBM	ESD - HBM	1500 V	1/3/0	1/3/0	-	-	-	-
HBM	ESD - HBM	2500 V	-	-	2/6/0	1/3/0	1/3/0	3/9/0
LU	Latch-up	(per JESD78)	-	1/6/0	-	-	-	-
HTOL	Life Test, 140C	480 Hours	-	-	2/154/0	4/180/0	-	-
HTOL	Life Test, 150C	500 Hours	1/77/0	1/77/0	-	-	-	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	1/77/0	1/77/0	1/77/0	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	-	-	3/164/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	1/77/0	1/77/0	-	2/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	1/77/0	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	-	-	3/231/0
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	1/77/0	1/77/0	-	-
PD	Physical Dimensions	(per mechanical drawing)	-	-	1/30/0	1/20/0	-	-
SBS	Bump-shear	36 bumps / min 5 units per lot	-	-	1/30/0	1/5/0	-	-
SD	Pb Free Surface Mount Solderability	Pb Free/Solder-	-	-	-	1/22/0	-	-

- QBS: Qual By Similarity

- Qual Device AFE4420YZR 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

For questions regarding this notice, e-mails can be sent to the regional contacts shown below, or you can contact 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