PCN Number: 201			190918002.1					Da	ate:	Sep 26, 2019		
Title: Qualification of DMOS6 as an additional Fab site option for select devices									vices			
Customer Contact:			PCN Manager				Dept			Quality Services		
Proposed 1 st Ship Date:			Dec 26, 2019			Estimated Sample Availability:				Date provided at sample request.		
Change Type:			_					_	A			
Assembly Site			Assembly Process Electrical Specification							ly Materials ical Specification		
Design Test Site					ping/Labeling			=	Test Pro			
Wafer Bump Site				Wafer Bump					r Bump Process			
Wafer Fab Site			Wafer Fab Materials						Wafer Fab Process			
				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 F		e 1						nal Fab			
Current F Site	ab Proc	ess		Wafer Diameter		w Fab Site		Pr	ocess	Wafer Diameter		
RFAB	LBC	8LV		300mm	D	MOS6		LE	BC8LV	300mm		
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:												
Fab Site Information:												
			rigi	n Code (20L)	Chi	o Site Cou	untry	' Co	ode (21L) Chip Site City		
	RFAB			В		USA				Richardson		
DMOS	56		DM	6			USA		Dallas			
Sample product shipping label (not actual product label) TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20: MSL '2 /2600C/1 YEAR SEAL DT OFT: ITEM: 39 LBL: 5A (L)T0:1750 Product Affected: (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2D) CSO: SHE 21L) CCO:USA S3L) ACO: MYS												
LM36272YFFR LM36273YFFR LM36274YFFR												

Qualification Report

Approve Date 6-Sept-2019

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

				0.	ata Displayeu as. Is	lumber of lots / 1 ot	ai sample sizer i t	Jarralleu				
Туре	Test Name / Condition	Duration	Qual Device: LM36274YFFR	QBS Product Reference: LM36274YFFR	QBS Product Reference: LM3631YFFR	QBS Product Reference: LM3632YFFR	QBS Product Reference: LM36923YFF	QBS Process Reference: TA S2552YFFR	QBS Process Reference: TA S2553YFFR	QBS Package Reference (BUMP): BQ25898CYFFR	QBS Package Reference(BUMP): DRV2605YZFR	QBS Package Reference(Back- end): TPS623800YFFR
AC	Autoclave 121C	96 Hours	-	-	-	-	-	-	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0	2/60/0	1/30/0	-	-	1/15/0	1/15/0	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	1/305/0	-	-	-	3/3000/0	-	-	-
CDM	ESD - CDM	1000 V	1/3/0	2/6/0	-	2/6/0	-	-	-	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	2/6/0	-	2/6/0	1/3/0	-	-	-	-	-
HBM	ESD - HBM	2000 V	1/3/0	2/6/0	-	2/6/0	1/3/0	-	-	3/9/0	1/3/0	-
HBM	ESD - HBM	2500 V	1/3/0	2/6/0	-	2/6/0	1/3/0	-	-	-	-	-
FTY	Test Yield Summary	-	-	1/Pass	-	-	-	-	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/66/0	-	-	3/231/0	-	-	3/231/0	-
HTSL	High Temp, Storage Bake, 170C	420 Hours		-	-	-	-	3/228/0	-	3/231/0	3/231/0	-
HTSL	High Temp, Storage Bake, 150C	1000 Hours			2/154/0			-		-	-	-
	Life Test, 140C	480 Hours	-	-	-		-	-	-	-	3/231/0	-
	Life Test, 125C	1000 Hours	-		1/77/0	1/77/0	1/77/0		3/231/0	-	-	-
LU	Latch-up, 25C	(per JESD78)	1/6/0	2/12/0	1/6/0	1/6/0	1/6/0	-	-	-	-	-
LU	Latch-up, 85C	(per JESD78)	1/6/0	2/12/0	-	-	-		-	-	-	-
LU	Latch-up, 125C	(per JESD78)	-	2/12/0	-		1/6/0	-		-	-	-
LU	Latch-up, 150C	(per JESD78)	-	1/6/0	-	-	-	-		-	-	-
		(per mfg. Site			-			-				
MQ	Manufacturability (Assembly)	specification)	1/Pass	2/Pass	-	1/Pass	-	-	-	3/Pass	3/Pass	3/Pass
MQ	Manufacturability (BUMP)	(per mfg. Site specification)	-	1/Pass	-	-	-	-	-	3/Pass	3/Pass	-
MQ	Manufacturability (Fab)	(per mfg. Site specification)	1/Pass	-	-	-	-	-	-	-	-	-
PD	Physical Dimensions	-	-	-	-	-	-	-	-	3/15/0	3/15/0	-
SBS	Bump-shear	-	-	-	-			3/108/0	-	5/150/0	5/150/0	-
тс	Temperature Cycle, -65/150C	500 Cycles			-							
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	1/77/0	-	-	-	-	3/231/0	3/231/0	3/231/0
	Unbiased HAST 130C/85%RH	96 Hours		-	-			3/228/0		3/231/0	3/231/0	3/231/0
VQR	Visual Quality Reliability Inspection	Post Temp Cycle	-	-	-	-	-	-	-	3/6/0	-	3/6/0
VQR	Visual Quality Reliability Inspection	Post Unbiased HAST	-	-	-	-	-	-	-	3/6/0	-	3/6/0
BLR	Board Level Reliability, High Acceleration Shock 10kG	18 Cycles	-	-	-	-	-	-	-	3/99/0	3/99/0	-
BLR	Board Level Reliability, Random Vibration 5G 5-500Hz	30 Minutes	-	-	-	-	-	-	-	3/99/0	3/99/0	-
BLR	Board Level Reliability, Temp Cycle -40/85C	1000 Cycles	-	-	-	-	-	-	-	3/99/0	3/99/0	-
BLR	Board Level Reliability, Unbiased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-	-	-	-	-	3/99/0	3/99/0	-

- QBS: Qual By Similarity

- Qual Device LM36274YFFR 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					

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (<u>www.ti.com/legal/termsofsale.html</u>) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.