

PCN Number:	20180622001.1		PCN Date:	Jun 25, 2018
Title:	Qualification of DMOS6 as an additional Wafer Fab Site option for select devices in C021 Technology			
Customer Contact:	PCN Manager		Dept:	Quality Services
Proposed 1st Ship Date:	Sep 25, 2018	Estimated Sample Availability:	Date provided at sample request.	
Change Type:				
☐ Assembly Site	☐ Assembly Process	☐ Assembly Materials		
☐ Design	☐ Electrical Specification	☐ Mechanical Specification		
☐ Test Site	☐ Packing/Shipping/Labeling	☐ Test Process		
☐ Wafer Bump Site	☐ Wafer Bump Material	☐ Wafer Bump Process		
☒ Wafer Fab Site	☐ Wafer Fab Materials	☐ Wafer Fab Process		
	☐ Part number change			
PCN Details				
Description of Change:				
This change notification is to announce the addition of DMOS6 as an additional Wafer Fab site option for the products listed in the product affected section of this document.				
Current Wafer Fab Site		Process	Wafer Diameter	
TSMC-F14		C021	300mm	
Additional Fab Site		Process	Wafer Diameter	
DMOS6		C021	300mm	
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	
TSMC-F14	T14	TWN	Tainan City	
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)				
Product Affected Group:				
CC2564CRVMR	CC2564CRVMT	CC2564CYFVR	CC2564CYFVT	

Qualification Report

Orca CC256x ROM C Product Qualification for QFN Fab: TSMC14 & TI – DMOS6 Assembly Sites: Amkor K1 & Amkor P1 for QFN, Clark for WCSP

Approved 04/04/2018

Product Attributes

	Qual Device 1: BL6450QVRMR	Qual Device 2: BL6450QVRMR	Qual Device 3: BL6450QVRM	Qual Device 4: XCC2567YFVT
Assembly Site	AMKOR K1	AMKOR P1	AMKOR P1	Clark
Package Family	QFN	QFN	QFN	WCSP
Flammability Rating				
Wafer Fab Supplier	TSMC-F14	TSMC-F14	DMOS6	DMOS6
Wafer Fab Process	1218C021.M6	1218C021.M6	1218C021.M6	1218C021.M6

- QBS: Qual By Similarity
- Qual Device BL6450QVRMR is qualified at LEVEL3-260C
- Qual Device XCC2567YFVT is qualified at LEVEL1-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device 1: BL6450QVRMR	Qual Device 2: BL6450QVRMR	Qual Device 3: BL6450QVRM	Qual Device 4: XCC2567YFVT
THB	Temperature and Humidity Bias, 85C/85%RH	1000 Hours	3/231/0	3/233/0	2/154/0	3/86/0
UHA	Unbiased Humidity, 110C/85%RH	264 Hours	3/231/0	-	3/231/0	-
UHA	Unbiased Humidity, 130C/85%RH	96 Hours	-	3/234/0	-	3/230/0
TC	Thermal Cycle, -55/125C	1000 Cycles	3/230/0	-	3/231/0	3/230/0
HTSL	High Temperature Storage Bake, 150C	1000 Hours	3/231/0	3/234/0	1/45/0	3/231/0
HTOL	Life Test, 125C	1000 Hours	3/230/0	-	3/231/0	-
WBS	Wire Bond Shear	(Cpk>1.67)	-	Pass	Pass	NA
WBP	Wire Bond Pull	(Cpk>1.67)	-	Pass	Pass	NA
PD	Physical Dimensions	(Cpk>1.67)	-	Pass	Pass	Pass
HBM	ESD-HBM	500V	1/3/0	-	1/3/0	1/3/0
CDM	ESD-CDM	250V	-	-	1/3/0	1/3/0
LU	Latch-up, High Temp	+/- 100 mA and 1.5 x Vmax @ max TJ	3/18/0	-	1/3/0	-
MQ	Manufacturability	(per mfg. Site specification)	Pass	Pass	Pass	Pass

- 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 : -65C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

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