

<b>PCN Number:</b>	20200109000.1		<b>PCN Date:</b>	Jan 14, 2020
<b>Title:</b>	Qualification of DMOS6 as an additional Wafer Fab Site option for select devices in F021 Technology			
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Apr 14, 2020	<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"/> 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 type="checkbox"/> Wafer Fab Materials	<input checked="" type="checkbox"/> Wafer Fab Process		
	<input type="checkbox"/> 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 Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
TSMC-F14	F021	300 mm	DMOS6	F65	300 mm

In support of the qualification of the DMOS6 Wafer Fab site, the flash design library was changed to allow production in the new fab site. The change does not impact device functionality, and device performance is accounted for in the respective datasheet specifications.

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
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)

 <b>TEXAS INSTRUMENTS</b> MADE IN: Malaysia 2DC: 2d: <table border="1"> <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> OPT: ITEM: 39 <b>LBL: 5A (L)T0:1750</b>	MSL '2 / 260C / 1 YEAR	SEAL DT	MSL 1 / 235C / UNLIM	03/29/04	 	(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS
MSL '2 / 260C / 1 YEAR	SEAL DT					
MSL 1 / 235C / UNLIM	03/29/04					

**Product Affected Group:**

CC2640R2FRGZR	CC2640R2FRHBR	CC2640R2FRSMR	FRE014RGZR
CC2640R2FRGZT	CC2640R2FRHBT	CC2640R2FRSMT	FRE014RHBR

**Qualification Report**  
Approve Date 10-DEC-2019

**Qualification Results**

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

Type	Test Name / Condition	Duration	Qual Device: CC2640R2FRGZR	Qual Device: CC2640R2FRSMR	QBS Package Reference: CC2640R2FRGZR	QBS Package Reference: CC2640R2FRHBR	QBS Package Reference: CC2640R2FRSMR
HTOL	High Temp. Operating Life, 125C, 100K W/E cycle preconditioning	1000 Hours	3/231/0	-	-	-	-
HTSL	High Temp. Storage Bake, 150C, 100K W/E cycle preconditioning	1000 Hours	3/215/0	-	-	-	-
AC	Autoclave 121C	96 Hours	3/231/0	-	1/77/0	1/77/0	1/77/0
HAST	Biased HAST, 110C/85%RH	264 Hours	3/231/0	-	1/77/0	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	1/77/0	1/77/0	1/77/0
TC	Temperature Cycle, -55/125C	700 Cycles	3/231/0	1/77/0	1/77/0	1/77/0	1/77/0
CDM	ESD CDM	750 V	1/3/0	1/3/0	-	-	-
HBM	ESD HBM	2500 V	1/3/0	1/3/0	-	-	-
LU	Latch-up, High Temp	+/- 100 mA and 1.5 x Vmax @ max Tj	1/3/0	-	-	-	-

- QBS: Qualification By Similarity

- Qualification Devices CC2640R2FRGZR, CC2640R2FRHBR, and CC2640R2FRSMR are qualified at moisture sensitivity LEVEL3-260C.

- Preconditioning was performed for Autoclave, Biased HAST, Temperature Cycle, and HTSL.

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

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