PCN Number: 20230530001.1 May 30, 2023 PCN Date: Title: Qualification of LFAB as an additional Wafer Fab site option for select devices **Customer Contact:** PCN Manager Dept: Quality Services **Sample Requests** Proposed 1st Ship Date: Aug 30, 2023 Jun 30, 2023* accepted until: *Sample requests received after June 30, 2023 will not be supported. **Change Type:** ☐ Assembly Site Wafer Bump Material Design Assembly Process Data Sheet Wafer Bump Process Wafer Fab Site Assembly Materials Part number change Mechanical Specification Test Site Wafer Fab Material ☐ Packing/Shipping/Labeling ☐ Test Process Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of LFAB as an additional Wafer Fab site option for the products listed in the "Product Affected" section of this document.

С	urrent Fab Site	9	Additional Fab Site			
Current Fab Site	Process	Process Wafer Diameter		Process	Wafer Diameter	
TSMC-F14	F021	300mm	LFAB	F65	300mm	
DMOS6	F65	300mm	LFAD	FOJ	300111111	

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:

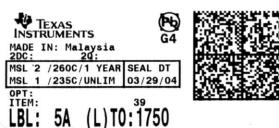
Current Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City	
DMOS6	DM6	USA	Dallas	
TSMC-F14	T14	TWN	Tainan City	

Additional Fab Site Information:

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
LFAB	LHI	USA	Lehi

Sample product shipping label (not actual product label)



(1P) SN74LS07NSR (a) 2000 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483S12 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACC (23L) ACO: MYS

Product Affected:									
CC2640R2FRGZR (CC2640R2FRHBT	CC2640R2LRGZR	FRE014RHBR	1					
CC2640R2FRGZT (CC2640R2FRSMR	CC2640R2LRHBR							
CC2640R2FRHBR (CC2640R2FRSMT	FRE014RGZR							

Qualification Report Approve Date 22-May-2023

Qualification Results

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

Туре	#	Test Name	Condition	Duration	Qual Device: CC2640R2FRGZR	Qual Device: CC2640R2FRSMR	QBS Reference: CC2640R2Fx	QBS Reference: CC2642R1FRGZR	QBS Reference: TMS320F28379SPTPQ
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	3/231/0	2/154/0	-
UHAST	А3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	-	-
UHAST	А3	Unbiased HAST	110C/85%RH	264 Hours	-	-	-	2/154/0	-
тс	A4	Temperature Cycle	-55C/125C	700 Cycles	-	1/77/0	3/231/0	-	-
тс	A4	Temperature Cycle	-55C/125C	1000 Cycles	-	-	-	2/154/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/215/0	-	-
HTSL	A6	High Temperature Storage Life	150C	500 Hours	-	-	-	2/90/0	-
HTOL	B1	Life Test*	125C	1000 Hours	-	-	3/231/0	-	3/231/0
HTOL	B1	Life Test*	125C	500 Hours	-	-	-	2/154/0	-
EDR	В3	NVM Data Retention*	150C	1000 Hours	-	-	-	-	3/231/0
EDR	В3	NVM Data Retention*	150C	500 Hours	-	-	-	2/78/0	-

Туре	#	Test Name	Condition	Duration	Qual Device: CC2640R2FRGZR	Qual Device: CC2640R2FRSMR	QBS Reference: CC2640R2Fx	QBS Reference: CC2642R1FRGZR	QBS Reference: TMS320F28379SPTPQ
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	-	3/2400/0
ESD	E2	ESD CDM	-	500 Volts	1/3/0	1/3/0	1/3/0	-	-
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	1/3/0	-	-

- QBS: Qual By Similarity
- Qual Device CC2640R2FRGZR is qualified at MSL3 260C
- Qual Device CC2640R2FRSMR is qualified at MSL3 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
- *HTOL/Life Test and EDR/NVM Data Retention units were W/E precycled prior to these stress tests

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

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

Location	E-Mail
WW Change Management Team	PCN www admin_team@list.ti.com

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