

PCN Number:	20230323000.1	PCN Date:	March 23, 2023
Title:	Qualification of LFAB as an additional Wafer Fab site option for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Jun 23, 2023	Sample Requests accepted until:	Apr 23, 2023

***Sample requests received after April 23, 2023 will not be supported.**

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 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 addition of LFAB 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	New Fab Site	Process	Wafer Diameter
TSMC-F14	F021	300mm	LFAB	F65	300mm
UMC12i / DM6	F65	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:

Device Symbol:

2.3 Package Symbolization and Revision Identification

Figure 2-1 and Table 2-1 describe package symbolization and the device revision code.

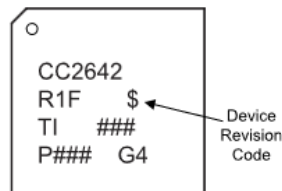


Figure 2-1. Package Symbolization for Silicon Revision E

Table 2-1. Revision Identification

DEVICE REVISION CODE	SILICON REVISION
E	PG2.1 (see following NOTE)
F	PG3.0 (see following NOTE)

Note

- PG2.1 and PG3.0 are functionally equivalent and share the same data sheet specifications.
- PG3.0 was introduced to support the release into additional wafer fab sites.

Current Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
TSMC-F14	T14	TWN	Tainan City
UMC 12i	UMI	SGP	Singapore
DMOS6	DM6	USA	Dallas

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)



MADE IN: Malaysia
2DC: 20:

MSL 2 / 260C / 1 YEAR	SEAL DT
MSL 1 / 235C / UNLIM	03/29/04

OPT:
ITEM: 39
LBL: 5A (L)T0:1750



(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483SI2
(P)
(2P) REV: (V) 0033317
(20L) CSO: SHE (21L) CCO: USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

CC2642R1FRGZR	CC2652P1FRGZR	CC2652R1FRGZR	CC2652R1FRGZT
CC2642R1FRGZT			

Qualification Report
Approve Date 16-March-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: CC2642R1FRGZR	QBS Reference: CC2642R1TWRGZRQ1
HAST	A2	Biased HAST	110C/85%RH	264 Hours	2/154/0	3/231/0
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	2/154/0	3/231/0
TC	A4	Temperature Cycle	-55C/125C	1000 Cycles	2/154/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	500 Hours	2/90/0	3/135/0
HTOL	B1	Life Test*	105C	1000 Hours	-	3/231/0
HTOL	B1	Life Test*	125C	500 Hours	2/154/0	-
EDR	B3	NVM Data Retention*	150C	1000 Hours	-	3/231/0
EDR	B3	NVM Data Retention*	150C	500 Hours	2/78/0	-
EDR	B3	NVM W/E Cycling	-	30K Full Bank/ 60K Single Sector Cycles	2/154/0	3/231/0
ELFR	B2	Early Life Failure Rate	105C	48 Hours	-	2/1600/0
ELFR	B2	Early Life Failure Rate	125C	24 Hours	2/1600/0	1/800/0
ESD	E2	ESD CDM	-	500 Volts	1/3/0	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/6/0	1/6/0

- QBS: Qual By Similarity
- Qual Device CC2642R1FRGZR 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 to 30K/60K Cycles prior to these stress tests.

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 contact shown below or your local Field Sales Representative.

Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com

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