PCN Number:	20230329004.1	**PCN Date:**	March 30, 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 29, 2023	**Sample Requests accepted until:**	Apr 29, 2023*

***Sample requests received after April 29, 2023 will not be supported.**

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:

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**
UMC12i	F65	300mm	LFAB	F65	300mm

Qual details are provided in the Qual Data Section.

Reason for Change:

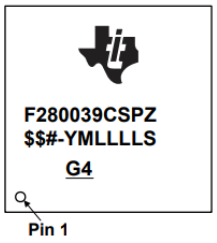
Continuity of supply

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

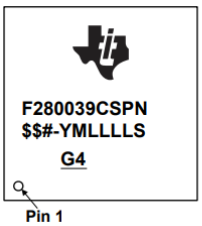
Changes to product identification resulting from this PCN:

Device Symbol:



$$ = Wafer Fab Code (one or two characters)
# = Silicon Revision Code
YM = 2-digit Year/Month Code
LLLL = Assembly Lot Code
S = Assembly Site Code per QSS 005-120

G4 = ECAT



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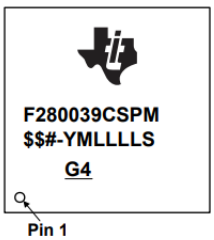

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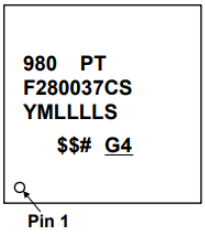


980 = TI EIA Code
YM = 2-digit Year/Month Code
LLLL = Assembly Lot Code
S = Assembly Site Code per QSS 005-120
$$ = Wafer Fab Code (one or two characters)
= Silicon Revision Code

G4 = ECAT

Original Fab Field:

$$ = $7 → UMC 12i

Updated Fab Field:

$$ = $7 → UMC 12i

Or

$$ = 3L → LFAB

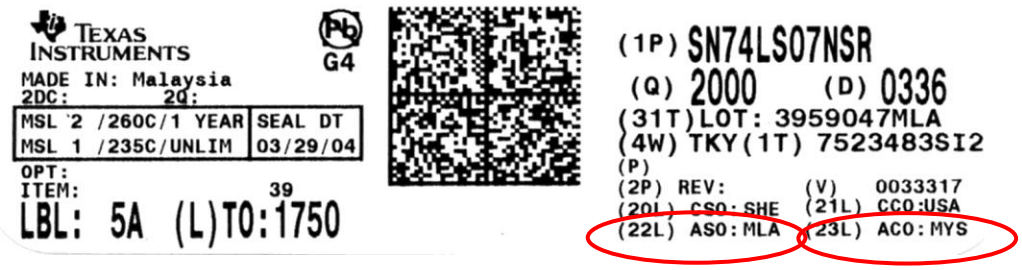
Current Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
UMC 12i	UMI	SGP	Singapore

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)



Product Affected:

F280034SPM	F280037CSPT	F280037SPN	F280039CSPN
F280037CSPM	F280037SPM	F280037SPNR	F280039CSPZ
F280037CSPN	F280037SPMR	F280039CSPM	

Change Qualification Report
Approve Date 28-MARCH -2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qualification Device: F280039CSPZ	Wafer fab QBS Reference: TMS320F28379SPTPQ
HAST	A2	Biased HAST	130C/85%RH	96 Hours	QBS	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	QBS	3/231/0
TC	A4	Temperature Cycling	-65C150C	500 cycles	QBS	3/231/0
HTOL	B1	Life Test	125C	1000 Hours	-	0/231/0
HTOL	B1	Life Test	125C	500 Hours	3/231/0	-
HTSL	B3	High Temperature Storage Life	150C	1000 hours	-	3/231/0
HTSL	B3	High Temperature Storage Life	150C	500 hours	3/231/0	
ESD	E2	ESD CDM	-	500 Volts	1/3/0	
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	
LU	E4	Latch-Up	Per JESD78	-	1/6/0	

- QBS: Qual By Similarity
- Qual Device F28003xxCSPZ 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
- Flash memory was cycled with programming/erasing operations prior to HTOL and HTSL which serves as flash memory data retention 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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