PCN Number: 202			230815000.1				PCN Date:		August 16, 2023	
Title: Qualification of LFAB as an additional Wafer Fab site option for select devices										
<b>Customer Contact:</b>		Chan	Change Management team			Dept:			Quality Services	
Proposed 1 <sup>st</sup> Ship Date: Nov						ple Requests pted until:			Sep 16, 2023*	
*Sample requests rece	eived	after	Se	ptember 16, 2	2023	will n	ot b	e sup	pported.	
Change Type:										
Assembly Site			Design			☐ Wafer Bump Material				
Assembly Process			☐ Data Sheet				Wafe	Wafer Bump Process		
Assembly Materials			☐ Part number change				$\boxtimes$	Wafer Fab Site		
■ Mechanical Specification			Test Site				Wafe	Vafer Fab Material		
☐ Packing/Shipping/Labeling			☐ Test Process				Wafe	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 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:**

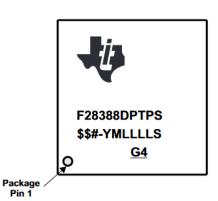
Continuity of supply

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

None

# Changes to product identification resulting from this PCN:

Device Symbol:



YMLLLLS = Lot Trace Code

YM = 2-Digit Year/Month Code

LLLL = Assembly Lot
S = Assembly Site Code
\$\$ = Wafer Fab Code as applicable
# = Silicon Revision Code

Original Fab Field:

 $$$ = $7 \rightarrow UMC 12i$ 

Updated Fab Field:

\$\$ = 3L → LFAB

### **Current Fab Site Information:**

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
UMC12i	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)

TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20:

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

OPT: ITEM:

LBL: 5A (L)T0:1750



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483812

(2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA 23L) ACO: MYS

## **Product Affected:**

F28384DPTPS	F28385SZWTSR	F28388DPTPS	F28388SPTPSR
F28384DZWTS	F28386DPTPS	F28388DPTPSR	F28388SZWTS
F28384SPTPS	F28386DZWTS	F28388DZWTS	F28388SZWTSR
F28384SZWTS	F28386SPTPS	F28388DZWTSR	
F28385DZWTSR	F28386SZWTS	F28388SPTPS	

#### **Qualification Results**

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

Туре	#	Test Name	Condition	Duration	Qual Device: <u>F28388DZWTS</u>	Qual Device: F28388DPTPS	Wafer fProcess Qualification QBS Reference: <u>TMS320F28379SPTPQ</u>
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0
EDR	B3	Endurance and data retention	150C	1000 Hours			3/231/0
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	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	1/6/0

- QBS: Qual By Similarity
- Qual Device F28388DZWTS is qualified at MSL3 260C
- Qual Device F28388DPTPS 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

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

TI Qualification ID: R-CHG-2307-056

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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