PCN Number:		20240202009.1		PCN Date:	February 02, 2024
Title:	Qualification Option for se	of RFAB as an additional Felect devices	ab site	option, Die Re	evision, and BOM
Custome	Contact:	Change Management	Team	Dept:	Quality Services
Proposed	1 <sup>st</sup> Ship Date	<b>e:</b> May 2, 2024	acc	Sample requests epted until:	Mar 2, 2024*

\*Sample requests received after March 2, 2024 will not be supported.

**Change Type:** 

3 - 71 -			
Assembly Site	Design		Wafer Bump Material
Assembly Process	Data Sheet		Wafer Bump Process
Assembly Materials	Part number change	$\boxtimes$	Wafer Fab Site
Mechanical Specification	Test Site	$\boxtimes$	Wafer Fab Material
Packing/Shipping/Labeling	Test Process		Wafer Fab Process

# **PCN Details**

# **Description of Change:**

Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab option in addition to a BOM option for the devices listed below.

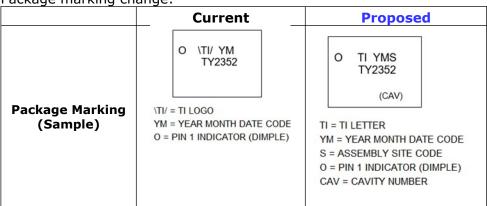
Cı	ırrent Fab Sit	:e	Additional Fab Site			
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter	
DL-LIN	LINCMOS	150 mm	RFAB	LBC9	300 mm	

The die was also changed as a result of the process change.

#### Additional BOM items are as follows:

	Current	Proposed
Die Thickness	10.5 mil	7.5 mil
Wire diam	0.96mil	0.80mil

Package marking change:



Qual details are provided in the Qual Data Section.

## **Reason for Change:**

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

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

None

## **Impact on Environmental Ratings**

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	<b>Green Status</b>	<b>IEC 62474</b>
No Change	No Change	No Change	No Change

## Changes to product identification resulting from this PCN:

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

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City	
DL-LIN	DLN	USA	Dallas	
RFAB	RFB	USA	Richardson	

### Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
F C	Δ

Sample product shipping label (not actual product label):



# **Product Affected:**

TLC352IPWR	TLC372CPWR	TLV2352IPWR	
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For alternate parts with similar or improved performance, please visit the product page on  $\overline{\text{TI.com}}$ 

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

Туре	#	Test Name	Condition	Duration	Qual Device: TLC352IPWR	QBS Reference: LM2902BQPWRQ1	QBS Reference: TPS43000PW	QBS Reference: SN74LV8T245QPWRQ1	QBS Reference: TPS71550DCKRM3	QBS Reference: LM2901BQPWRQ1	QBS Reference: PSN2012025A12AACJR	QBS Reference: PSN2012025A12CACJR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	1/77/0		1/77/0		
UHAST	А3	Unbiased HAST	110C/85%RH	264 Hours		3/231/0	-	-	-	-	-	-
UHAST	А3	Unbiased HAST	130C/85%RH	96 Hours		-	-	1/77/0	-	1/77/0		
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	-	-			-		
тс	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	1/77/0	-	1/77/1		
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	3/231/0	-	-	-	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0		-			
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	1/45/0	-	1/77/0	-	-
HTOL	B1	Life Test	125C	1000 Hours		-	-	-	3/231	-	2/154/0	1/77/0
HTOL	B1	Life Test	150C	300 Hours	-	-	-	1/77/0	-	-		
HTOL	B1	Life Test	150C	408 Hours	-	3/231/0	-	-	-	-		
ESD	E2	ESD CDM		1000 Volts	1/3/0	-	-			-		
ESD	E2	ESD HBM		2000 Volts	1/3/0	-	-			-		
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	-	-	-	-	-
CHAR	<b>E</b> 5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-	-	-	-	-

- . OBS: Oual By Similarity
- Qual Device TLC352IPWR is qualified at MSL1 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-2310-049

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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