**PCN Number:** 20240221013.1 **PCN Date:** February 22, 2024

**Title:** Qualification of TIPI as an additional Assembly site for select devices

Customer Contact: Change Management team Dept: Quality Services

Proposed 1<sup>st</sup> Ship Date: May 22, 2024 Sample Requests accepted until: \$CRF\_SamplesAcc eptedUntil\$\*

March 23, 2024 will not be supported.

# **Change Type:**

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

#### **PCN Details**

## **Description of Change:**

Texas Instruments Incorporated is announcing the qualification of TIPI as an additional Assembly site for set of devices listed below. Construction differences are as follows:

	AP3	IIPI
Wire type/diam	0.8mil Au	0.8mil Cu
Mount Compound	101375377	4205412
Mold Compound	101342201	4206745

#### **Reason for Change:**

Supply continuity

- 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties
- 2) Maximize flexibility within our Assembly/Test production sites.
- 3) Cu is easier to obtain and stock

# 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>	IEC 62474
No Change			

#### **Changes to product identification resulting from this PCN:**

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
AMKOR P3	AP3	PHL	Binan
TI Philippines	PHI	PHL	Baguio City

Sample product shipping label (not actual product label)



# **Qualification Report**

Approve Date 23-January-2024

## **Qualification Results**

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

Туре	#	Test Name	Condition	Duration	Qual Device: <u>AFE5828ZAV</u>
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	3/231/0
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	1/77/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0
FTY	E6	Final Test Yield		-	3/3/0

QBS: Qual By Similarity

Qual Device AFE5828ZAV is qualified at MSL3 260C

Qual Device AFE5828ZAV 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 0.7 eV: 150 C/1 k Hours, and 170 C/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 Tl's external Web site: http://www.ti.com/

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

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