PCN Number:	20181207002.1	**PCN Date:**	Dec 18, 2018
Title:	Assembly site move from Amkor P1 to TI Taiwan for Select Devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Mar 18, 2019	**Estimated Sample Availability:**	Date provided at sample request

Change Type:

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

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing the Assembly site move from Amkor P1 to TI Taiwan for select devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.

Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City
Amkor P1	AKR	PHL	Muntinlupa
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City

Material Differences:

	Amkor P1	TI Taiwan
Mount compound	101375281	4147858
Mold compound	101323397	4211880
Lead Finish	Matte Sn	NiPdAu

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.

Reason for Change:

Amkor P1 discontinuing SOIC 28DW package production line
Continuity of supply.

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

None

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI Eco-Info website. There is no impact to the material meeting current regulatory compliance requirements with this PCN change.

Changes to product identification resulting from this PCN:

Sample Product Shipping Label (not actual product label)
Assembly Site

Amkor P1	Assembly Site Origin (22L)	ASO: AKR
TI Taiwan	Assembly Site Origin (22L)	ASO: TAI

Product Affected:

COP8SGE728M8/NOPB	COP8SGR728M8/NOPB	SM72295MA/NOPB	SM72295MAX/NOPB

Qualification Report

COP8SGE728M8/NOPB COP8SGR728M8/NOPB SOIC 28DW Device Qual in TAI

Approve Date 07-Dec-2018

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: COP8SGE728M8/NOPB	QBS Package Reference: SM72295MA/NOPB	QBS Package Reference: TPIC6C596DRQ1
AC	Autoclave 121C	96HRS		3/229/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours		-	3/231/0
HTOL	Life Test, 125C	1000 Hours		-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours		-	3/135/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	1/Pass	3/Pass	3/Pass
TC	Temperature Cycle, -65/150C	500 Cycles		3/231/0	3/231/0
CDM	ESD - CDM	1500 V	2/6/0		
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0		

- QBS: Qual By Similarity
- Qual Device COP8SGE728M8/NOPB is qualified at LEVEL3-260CG

- 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/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

SM72295MA TITL Offload Qualification Report

Approve Date 06-Dec-2018

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: SM72295MA/NOPB	QBS Package Reference: TPIC6C596DRQ1
AC	Autoclave 121C	96HRS	3/229/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
HTOL	Life Test, 125C	1000 Hours	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	3/135/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/Pass	3/Pass
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0

- QBS: Qual By Similarity
- Qual Device SM72295MA/NOPB is qualified at LEVEL3-260CG
- 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/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com