PCN Number:	20170207002	**PCN Date:**	Feb 13, 2017
Title:	Qualification of AMKOR P3 as Additional Assembly and Test Site for Select VSON-CLIP Package Devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	May 13, 2017	**Estimated Sample Availability:**	Date provided at sample request

Change Type:

☒ Assembly Site
☐ Assembly Process
☒ Assembly Materials
☐ Mechanical Specification
☐ Packing/Shipping/Labeling

☐ Design
☐ Data Sheet
☐ Part number change
☒ Test Site
☐ Test Process

☐ Wafer Bump Site
☐ Wafer Bump Material
☐ Wafer Bump Process
☐ Wafer Fab Site
☐ Wafer Fab Materials
☐ Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing the qualification of AMKOR P3 as Additional Assembly and Test Site 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
TI Clark	QAB	PHL	Angeles City, Pampanga
Amkor P3	**AP3**	**PHL**	**Biñan, Laguna**

Material Differences:

	TI Clark	**AMKOR P3**
Mold compound	4208625	101390791
Lead finish	NiPdAu	Matte Sn

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

Reason for Change:

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 website.

Changes to product identification resulting from this PCN:

Sample product shipping label (not actual product label)

Assembly Site:

TI-CLARK	Assembly Site Origin (22L)	ASO: QAB	ECAT: E4
AMKOR P3	Assembly Site Origin (22L)	ASO: AP3	ECAT: E3

Sample product shipping label to show code location (not actual product label)


TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC: 2Q:
MSL 2 /260C/1 YEAR SEAL DT
MSL 1 /235C/UNLIM 03/29/04
OPT:
ITEM: 39
LBL: 5A (L)TO:1750
G4
(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T)LOT: 3959047MLA
(4W) TKY(1T) 7523483SI2
(P)
(2P) REV: (V) 0033317
(20L) CSO:SHE (21L) CCO:USA
(22L) ASO:MLA (23L) ACO:MYS

ECAT: E4 = NiPdAu
ECAT: E3 = Matte Sn

ASSEMBLY SITE CODES: TI-CLARK = I , AP3 = 3

Product Affected:

CSD58899Q3D	CSD87333Q3DT	CSD87334Q3DT	CSD87335Q3DT
CSD87333Q3D	CSD87334Q3D	CSD87335Q3D	

Qualification Report

Phase 7 Power Block Qual in Amkor P3: CSD87333Q3D, CSD87334Q3D, CSD87335Q3D

Approve Date 06-February-2017

Product Attributes

Attributes	Qual Device: CSD87333Q3D	Qual Device: CSD87334Q3D	Qual Device: CSD87335Q3D
Assembly Site	AMKOR P3 A/T PHIL	AMKOR P3 A/T PHIL	AMKOR P3 A/T PHIL
Package Family	DQZ	DQZ	DQZ
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	CFAB	CFAB	CFAB
Wafer Fab Process	NEXFET-LV 30N10	NEXFET-LV 30N10	NEXFET-LV 30N10

- QBS: Qual By Similarity
- Qual Device CSD87333Q3D is qualified at LEVEL1-260C
- Qual Device CSD87335Q3D is qualified at LEVEL1-260C
- Qual Device CSD87334Q3D is qualified at LEVEL1-260C
- Device CSD87333Q3D contains multiple dies.
- Device CSD87334Q3D contains multiple dies.
- Device CSD87335Q3D contains multiple dies

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: CSD87333Q3D	Qual Device: CSD87334Q3D	Qual Device: CSD87335Q3D
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/1/0 - Pass	3/1/0 - Pass	3/1/0 - Pass
PC	Preconditioning	(per the appropriate pkg level)	-	3/462/0	3/462/0
TC	**T/C -40C/125C	-40C/+125C (500,1000 Cycles)	-	3/231/0	3/231/0
TC	**T/C -55C/125C	-55C/+125C (500,1000 Cycles)	-	3/231/0	3/231/0

** Preconditioning was performed for Temperature Cycle as applicable

- 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