

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20170207002 Qualification of AMKOR P3 as Additional Assembly and Test Site for Select VSON-CLIP Package Devices Change Notification / Sample Request

Date: February 13, 2017 **To:** PREMIER FARNELL PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN www admin team@list.ti.com).

Sincerely,

PCN Team SC Business Services

20170207002 Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE CSD87335Q3DT **CUSTOMER PART NUMBER**

null

Technical details of this Product Change follow on the next page(s).

PCN Date: Feb 13, 2017	DOUB 1 20170207002											
Package Devices	· · · · · · · · · · · · · · · · · · ·											
Proposed 1st Ship Date: May 13, 2017 Change Type:												
Change Type: Assembly Site Design Wafer Bump Site Wafer Bump Material Wafer Bump Process Description of Specification Test Site Wafer Fab Brocess Wafer Fab Materials Wafer Fab	Customer Contact: PCN Manager Dept: Quality Services											
Change Type:	Proposed 1 st	Ship Da	ite:	May 13	, 2017						•	
Assembly Site	Change Type	e:								I		
Assembly Materials					Desigr	1			Wafe	r Bump	Site	
Mechanical Specification	Assembly	Process			Data S	Sheet			Wafe	r Bump	Mate	erial
Packing/Shipping/Labeling	Assembly	[,] Materia	S		Part n	umber change			Wafe	r Bump	Proc	ess
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	Mechanic	al Specif	ication			ite			Wafe	r Fab S	Site	
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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								Ш	Wafe	r Fab P	roces	S
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TI Clark QAB 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 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.	and Test Site	and Test Site for select devices listed in the "Product Affected" Section. Current assembly sites and										
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Material Differences: TI Clark	TI Clark		QAE	3		PHL	Ar	ngel	es City,	Pampa	anga	
TI Clark	Amkor P3		AP3	<u> </u>		PHL		В	iñan, L	.aguna		
Mold compound	Material Diff	erences	:									
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 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.				TI Cla	rk	AMKOR P3	3					
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Changes to product identification resulting from this PCN:	Material Declaration production data and will be available following the production release. Upon production release the revised reports can be											
changes to produce accommendation resoluting from this result												

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)



ECAT: E4 = NiPdAu ECAT: E3 = Matte Sn

(Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483SI2

(1P) SN74LS07NSR

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

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

Product Affected:

	1		1
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

Туре	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

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

⁻ 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: