

# 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

# PCN# 20141003001 Assembly site move from Amkor K1 to Amkor P1 for Select Devices Change Notification / Sample Request

**Date:** 10/7/2014

**To:** Newark/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 Phone: +1(214) 480-6037 Fax: +1(214) 480-6659

# 20141003001 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**ADC14L020CIVY/NOPB
ADC14L040CIVY/NOPB

**CUSTOMER PART NUMBER** 

null null

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

PCN Number: 20141003001 PCN Date: 10/07/2014 Title: Assembly site move from Amkor K1 to Amkor P1 for Select Devices **Customer Contact:** PCN Manager **Phone:** +1(214)480-6037 **Dept: Quality Services Estimated Sample** Date provided at **Proposed 1<sup>st</sup> Ship Date:** 01/07/2015 **Availability:** sample request Change Type: Assembly Site Wafer Bump Site Design **Assembly Process** Data Sheet Wafer Bump Material Wafer Bump Process **Assembly Materials** Part number change **Mechanical Specification** Wafer Fab Site Test Site Packing/Shipping/Labeling Test Process Wafer Fab Materials Wafer Fab Process **PCN Details Description of Change:** Assembly site move from Amkor K1 to Amkor P1 for Select Devices. No Material differences between sites. **Reason for Change:** Closure of the Amkor K1 as an assembly site. Continuity of supply. Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative): None Changes to product identification resulting from this PCN: Sample Product Shipping Label (not actual product label) Assembly Site Amkor K1 Assembly Site Origin (22L) ASO: AMN Amkor P1 Assembly Site Origin (22L) ASO: AKR TEXAS (1P) SN74LS07NSR INSTRUMENTS MADE IN: Malaysia (P) 0336 31T)LOT: 3959047MLA MSL 2 /260C/1 YEAR SEAL DT 4W) TKY(1T) 7523483SI2 MSL 1 /235C/UNLIM 03/29/04 (P) OPT: (2P) REV: (V) 0033317 (21L) CCO:USA 0033317 ITEM: (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

ASSEMBLY SITE CODES: AMN =7, AKR =4

Product Affected: Group 1 Devices			
ADC07D1520CIYB/NOPB	ADC08D1520CIYB/NOPB ADC12081CIVT/NOPB		
ADC081000CIYB/NOPB	ADC08D1520CIYB/S7002396	ADC12081CIVTX/NOPB	
ADC081500CIYB/NOPB	ADC08D500CIYB	ADC12L063CIVY/NOPB	
ADC083000CIYB/NOPB	ADC08D500CIYB/NOPB	ADC12L066CIVY/NOPB	
ADC083000CIYB/S7002214	ADC08D500CIYB/S7002554	ADC12L080CIVY/NOPB	
ADC08500CIYB/NOPB	ADC08D500CIYB/S7002952	ADC14L020CIVY/NOPB	
ADC08B3000CIYB/NOPB	ADC08D502CIYB/NOPB	ADC14L040CIVY/NOPB	
ADC08D1000CIYB/NOPB	ADC10321CIVT	LM97835CIYB/NOPB	
ADC08D1010DIYB/NOPB	ADC10321CIVT/NOPB	LMH6585VV/NOPB	
ADC08D1020CIYB/NOPB	ADC12010CIVY/NOPB	LMV1089VY/NOPB	
ADC08D1020CIYB/S7002991	ADC12020CIVY/NOPB	LMV1089VYX/NOPB	
ADC08D1500CIYB	ADC12040CIVY/J7001342	SCAN90CP02VY/NOPB	
ADC08D1500CIYB/NOPB	ADC12040CIVY/NOPB	SCAN90CP02VYX/NOPB	
ADC08D1520CIYB	ADC12040CIVYX/NOPB		

# Qualification Report Amkor K1 closure and QFP transfer to Amkor P1- 7X7 packages Approve 10/02/2014

# **Product Attributes**

Die Attributes	Qual Device: ADC10321CIV T	Qual Device: ADC12081CIW N1C	Qual Device: ADC12L080CZ WDZ	Qual Device: LMV1089VYX NOPB	QBS Package:ADC 08D1000K9F5	QBS Package:SN74 V3680-15PEU
Assembly Site	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1
Package Family	QFP	QFP	QFP	QFP	QFP	QFP
Die Revision	А	В	Α	Α	Α	-
Package Attributes						
Assembly Site	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1
Package Family	QFP	QFP	QFP	QFP	QFP	QFP
Package Designator	NEY	NEY	NEY	NEY	NNB	PEU
Package Size (mils)	275.59 X 275.59	275.59 X 275.59	275.59 X 275.59	275.59 X 275.59	787.4 X 787.4	551.2 x 787.4
Body Thickness (mils)	55.12	55.12	55.12	55.12	55.12	55.12
Pin Count	32	32	32	32	128	128
Lead Frame Material	CU	CU	CU	CU	CU	CU
Lead Finish	SnPb	Sn	Sn	Sn	Matte SN	SnPb
Lead Pitch (mils)	31.5	31.5	31.5	31.5	19.68	19.68
Mount Compound	101309244	101309244	101309244	101309244	101309244	101309244
Mold Compound	101371620	101371620	101371620	101371620	101371620	101371620
Bond Wire Composition	Au	Au	Au	Au	Au	Au
Bond Wire Diameter (mils)	1.2	1.2	1.0	1.0	1.0	1.0

<sup>-</sup> QBS: Qual By Similarity

<sup>-</sup> Qual Devices qualified at LEVEL3-260C: ADC10321CIVT, ADC12081CIWN1C, ADC12L080CZWDZ, LMV1089VYXNOPB

### **Qualification Results**

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

Туре	Test Name / Condition	Duration	Qual Device: ADC10321 CIVT	Qual Device: ADC12081C IWN1C	Qual Device: ADC12L080 CZWDZ	Qual Device: LMV1089VY XNOPB	QBS Package:AD C08D1000K9 F5	QBS Package:SN 74V3680-15 PEU
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-	-	3/181/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	1/77/0
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0	3/231/0	1/77/0
TC	Temperature Cycle-65/150C	500 Cycles	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	1/77/0
HTSL	High Temp Storage Bake, 170C	420 Hours	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	
HTSL	High Temp Storage Bake, 150C	1000 Hours	-	-	-	-	-	1/77/0
HTOL	Life Test, 125C	1000 Hours	-	-	-	1/77/0	-	-
WBS	Ball Bond Shear	Wires	1/30/0	1/30/0	1/30/0	3/90/0	3/90/0	-
WBP	Bond Pull	Wires	1/30/0	1/30/0	1/30/0	3/90/0	3/90/0	-
SD	Solderability	PB	-	-		-	1/22/0	-
SD	Solderability	PB Free	-	-		-	1/22/0	-
MSL	Moisture Sensitivity	Level 3-260C	1/12/0	1/12/0	1/12/0	3/36/0	3/36/0	-

- 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 Tl's external Web site: http://www.ti.com/

### Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

# Qualification Report Amkor K1 closure and L/TQFP transfer to Amkor P1- 20X20 packages Approve 10/02/2014

Die Attributes	Qual Device: ADC08D1000K9F5	QBS Package:SN74V3680-15PEU
Assembly Site	AP1	AP1
Package Family	QFP	QFP
Die Revision	A	-

Package Attributes	Qual Device: ADC08D1000K9F5	QBS Package:SN74V3680-15PEU		
Assembly Site	AP1	AP1		
Package Family	QFP	QFP		
Package Designator	NNB	PEU		
Package Size (mils)	787.4 X 787.4	551.2 x 787.4		
Body Thickness (mils)	55.12	55.12		
Pin Count	128	128		
Lead Frame Material	CU	CU		
Lead Finish	Matte SN	SN-PB		
Lead Pitch (mils)	19.68	19.68		
Mount Compound	101309244	101309244		
Mold Compound	101371620	101371620		
Bond Wire Composition	Au	Au		
Bond Wire Diameter (mils)	1.0	1.0		

<sup>-</sup> QBS: Qual By Similarity

#### **Qualification Results**

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

Туре	Test Name / Condition	Duration	Qual Device: ADC08D1000K9F5	QBS Package:SN74V3680-15PEU
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	3/181/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0
AC	Autoclave 121C	96 Hours	3/231/0	1/77/0
TC	Temperature Cycle -65/150C	500 Cycles	3/231/0	1/77/0
HTSL	High Temp Storage Bake, 170C	420 Hours	3/231/0	-
HTSL	High Temp Storage Bake, 150C	1000 Hours	-	1/77/0
WBS	Ball Bond Shear	Wires	3/90/0	-
WBP	Bond Pull	Wire	3/90/0	-
SD	Solderability	PB	1/22/0	-
SD	Solderability	PB Free	1/22/0	-
MSL	Moisture Sensitivity	Level 3 -260C	3/36/0	-

<sup>-</sup> 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 Tl'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

<sup>-</sup> Qual Device ADC08D1000K9F5 is qualified at LEVEL3-260C