




<b>PCN Number:</b>	20141003001			<b>PCN Date:</b>	10/07/2014
<b>Title:</b>	Assembly site move from Amkor K1 to Amkor P1 for Select Devices				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	01/07/2015	<b>Estimated Sample Availability:</b>		Date provided at sample request	
<b>Change Type:</b>					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process
<b>PCN Details</b>					
<b>Description of Change:</b>					
Assembly site move from Amkor K1 to Amkor P1 for Select Devices. No Material differences between sites.					
<b>Reason for Change:</b>					
Closure of the Amkor K1 as an assembly site. Continuity of supply.					
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Changes to product identification resulting from this PCN:</b>					
<b>Sample Product Shipping Label (not actual product label)</b>					
Assembly Site					
Amkor K1		Assembly Site Origin (22L)		ASO: AMN	
Amkor P1		Assembly Site Origin (22L)		ASO: AKR	
  					
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)T0:1750					
		(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CCO:USA (22L) AS0: MLA (23L) ACO: MYS			
ASSEMBLY SITE CODES: AMN =7, AKR =4					

<b>Product Affected: Group 1 Devices</b>		
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
<b>Assembly Site</b>	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1
<b>Package Family</b>	QFP	QFP	QFP	QFP	QFP	QFP
<b>Die Revision</b>	A	B	A	A	A	-
<b>Package Attributes</b>						
<b>Assembly Site</b>	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1	AMKOR P1
<b>Package Family</b>	QFP	QFP	QFP	QFP	QFP	QFP
<b>Package Designator</b>	NEY	NEY	NEY	NEY	NNB	PEU
<b>Package Size (mils)</b>	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
<b>Body Thickness (mils)</b>	55.12	55.12	55.12	55.12	55.12	55.12
<b>Pin Count</b>	32	32	32	32	128	128
<b>Lead Frame Material</b>	CU	CU	CU	CU	CU	CU
<b>Lead Finish</b>	SnPb	Sn	Sn	Sn	Matte SN	SnPb
<b>Lead Pitch (mils)</b>	31.5	31.5	31.5	31.5	19.68	19.68
<b>Mount Compound</b>	101309244	101309244	101309244	101309244	101309244	101309244
<b>Mold Compound</b>	101371620	101371620	101371620	101371620	101371620	101371620
<b>Bond Wire Composition</b>	Au	Au	Au	Au	Au	Au
<b>Bond Wire Diameter (mils)</b>	1.2	1.2	1.0	1.0	1.0	1.0

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL3-260C: ADC10321CIVT, ADC12081CIWN1C, ADC12L080CZWDZ, LMV1089VYXNOPB

## Qualification Results

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

Type	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 TI'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

- QBS: Qual By Similarity

- Qual Device ADC08D1000K9F5 is qualified at LEVEL3-260C

### Qualification Results

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

Type	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	-

- 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.

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