PCN Number:	20150929003B	PCN Date:	01/18/2016
Title:	Assembly site move from Amkor K1 to Amkor P1 for Select Devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	04/18/2016	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:

Revision B is to announce the addition of new devices that were not included on the original PCN notification. These new devices are bolded and highlighted in the device list below under Product Affected Group 2. The expected first shipment date for these new devices will be 90 days from this notice for these newly added devices only.

Assembly site move from Amkor K1 to Amkor P1 for Select Devices listed in the "Product Affected" Section. Material differences are as follows:

Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City
Amkor K1	AMN	KR	Seoul
Amkor P1	**AKR**	**PH**	**Cupang, Muntinlupa City**

Material Differences:
Group 1 Devices:

	Amkor K1	Amkor P1
Mount Compound	101339127	101380679
Mold Compound	101360571	101385017

Group 2 Devices:

No material differences between sites.

Reason for Change:

Closure of the Amkor K1 assembly facility. 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)

Group 1: Assembly Site

Amkor K1	Assembly Site Origin (22L)	ASO: AMN
Amkor P1	Assembly Site Origin (22L)	ASO: AKR

ASSEMBLY SITE CODES: AMN =7, AKR = 4

Product Affected Group 1:

AFE9006RFD

Product Affected Group 2:

74SSTVF16859G4RG4	ADS1258IRTCT	DDC118IRTCR	MM9635-LQ3/NOPB
ADS1158IRTCR	BQ29312ARTHR	DDC118IRTCT	SN74SSTV16859RGQ8
ADS1158IRTCT	DDC114IRTCR	HPA00025S8	SN74SSTV16859RGQR
ADS1258IRTCR	DDC114IRTCT	MM9603-LQ4/NOPB	**74SSTV16859RGQ8G3**
ADS1158IRTCTG4	**BQ29312ARTHRG4**	**HPA00022RGQ8**	**SN74SSTVF16859S8**
ADS1258IRTCRG4	**DDC114IRTCTG3**	**HPA00022RGQR**	**SN74SSTVF16859S8G3**
ADS1258IRTCTG4	**DDC118IRTCTG4**	**SN74SSTVF16859G4R**	

Group 1: Qualification Report

Amkor K1 to P1 transfer of AFE9006RFD

Product Attributes

Attributes	Qual Device: AFE9006RFD
Assembly Site	AP1
Package Family	HTFQP
Wafer Fab Supplier	DMOS5
Wafer Process	1833 CO5

- QBS: Qual By Similarity
- Qual Device AFE9006RFD 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: AFE9006RFD
AC	Autoclave 121C	96 Hours	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0

LI	Lead Fatigue	Leads	3/66/0
LI	Lead Pull to Destruction	Leads	3/66/0
PD	Physical Dimensions	--	3/30/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
WBP	Bond Pull	Wires	3/90/0
WBS	Ball Bond Shear	Wires	3/90/0

- 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

Group 2: Qualification Report
QFN transfer from Amkor K1 to Amkor P1

Product Attributes

Attributes	Qual Device: ADS1158IRTC	Qual Device: DDC118IRTCR	Qual Device: MM9603-LQ4/NOPB	Qual Device: ADC12J4000NKER / LM15851
Assembly Site	AP1	AP1	AP1	AP1
Package Family	QFN	QFN	QFN	QFN
Wafer Fab Supplier	DMOS 5	TSMC-WF2	MAINEFAB	UMC12A
Wafer Process	50HPA07	0.50UM-TSMC	C80L18M2	UMC65NM

- QBS: Qual By Similarity
- Qual Device ADC12J4000NKER / LM15851 is qualified at LEVEL3-260C
- Qual Device ADS1158IRTC is qualified at LEVEL2-260C
- Qual Device DDC118IRTCR is qualified at LEVEL3-260C
- Qual Device MM9603-LQ4/NOPB is qualified at LEVEL4-260C
- Device DDC118IRTCR contains multiple dies.

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ADS1158IRTC	Qual Device: DDC118IRTCR	Qual Device: MM9603-LQ4/NOPB	Qual Device: ADC12J4000 NKER / LM15851
AC	Autoclave 121C	96 Hours	1/77/0	3/231/0	1/77/0	-
DS	Die Shear	-	1/10/0	3/90/0	1/10/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/231/0	-	3/231/0
PD	Physical Dimensions	(per mechanical drawing)	1/5/0	3/15/0	1/5/0	3/15/0

Type	Test Name / Condition	Duration	Qual Device: ADS1158IRTC	Qual Device: DDC118IRTCR	Qual Device: MM9603-LQ4/NOPB	Qual Device: ADC12J4000 NKER / LM15851
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/228/0	1/77/0	3/231/0
WBP	Bond Pull	Wires	1/30/0	3/90/0	1/30/0	3/90/0
WBS	Ball Bond Shear	Bonds	1/30/0	3/90/0	1/30/0	3/90/0
XRAY	X-ray	(top side only)	1/5/0	3/15/0	1/5/0	3/15/0

- 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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USA	PCNAmericasContact@list.ti.com
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