



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20150929003B
Assembly site move from Amkor K1 to Amkor P1
for Select Devices
Change Notification / Sample Request**

Date: 1/18/2016
To: Newark/Farnell PCN

Dear Customer:

Revision B is to announce the addition of new devices that were not included on the original PCN notification.

Amkor K1 (Korea) is closing its facility by 2015. This product change announcement is to support transfer of products in the QFN package to alternate sites. 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 to ensure you can complete your evaluation and product transfer to the new site can be completed prior to the Amkor K1 site closure.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20150929003B
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	CUSTOMER PART NUMBER
ADS1258IRTCTG4	null

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

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:																
<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 checked="" 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"/>	Wafer Fab Process											
PCN Details																
Description of Change:																
<p>Revision B is to announce the <u>addition</u> 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.</p> <p>Assembly site move from Amkor K1 to Amkor P1 for Select Devices listed in the "Product Affected" Section. Material differences are as follows:</p>																
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>Amkor K1</td> <td>AMN</td> <td>KR</td> <td>Seoul</td> </tr> <tr> <td>Amkor P1</td> <td>AKR</td> <td>PH</td> <td>Cupang, Muntinlupa City</td> </tr> </tbody> </table>					Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	Amkor K1	AMN	KR	Seoul	Amkor P1	AKR	PH	Cupang, Muntinlupa City
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

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC: 20:



(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

MSL 2 / 260C / 1 YEAR	SEAL DT
MSL 1 / 235C / UNLIM	03/29/04

OPT:
ITEM: 39
LBL: 5A (L) TO: 1750

ASSEMBLY SITE CODES: AMN =7, AKR = 4

Product Affected Group 1:

AFE9006RFD

Product Affected Group 2:

74SSTVF16859G4RG4	ADS1258IRTCT	DDC118IRTCT	MM9635-LQ3/NOPB
ADS1158IRTCT	BQ29312ARTHR	DDC118IRTCT	SN74SSTVF16859RGQ8
ADS1158IRTCT	DDC114IRTCT	HPA00025S8	SN74SSTVF16859RGQR
ADS1258IRTCT	DDC114IRTCT	MM9603-LQ4/NOPB	74SSTVF16859RGQ8G3
ADS1158IRTCTG4	BQ29312ARTHRG4	HPA00022RGQ8	SN74SSTVF16859S8
ADS1258IRTCTG4	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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com