

## Product Change Notice

Issue Date: May 2, 2017

**Change Type:**

- Assembly site addition (Amkor China).

**Parts Affected:**

Device	Package Size	Package	Pin Count
BCM5221A4IMLG	7X7	QFN	48
BCM5221A4KMLG	7X7	QFN	48

**Description and Extent of Change:**

- Add Amkor China as an additional assembly supplier for the above devices.
- The extent of the change is minimal. Amkor China is in mass production for the above package technology

**Reasons for Change:**

- Manufacturing flexibility

**Effect of Change on Fit, Form, Function, Quality, or Reliability:**

- No impact on form, fit and function
- The device specification will remain the same, which will ensure product electrical performance remains the same.

**Effective Date of Change:**

- Product shipments using this change will begin on or around June 24 2017, but initiation of the change may be spread over approximately 6 months. Timing of shipment of the changed part will vary by part number depending on qualification completion, customer demand, and inventory levels.

**Qualification Data:**

Amkor Internal Qual Report #QU376837

 Package Type : QFN  
 Package Size : 7mm x 7mm  
 Lead Count : 48  
 Leadframe Type : Matte Tin

Stress Test	Condition	Read points Cycles/ Hrs.	Lot #	Sample Size	Requirements	Results
Precondition	MSL2AA		1	231	0 failures	0/231
			2	231		0/231
	JESD22-A113E		3	231		0/231
Temp Cycle	-65°C / 150°C	500 cycles	1	77	0 failures	0/77
	JEDEC Std. 22-A104-D Cond. C		2	77		0/77
	(Precon parts)		3	77		0/77
HAST	130°C/85%RH/	96 hrs	1	77	0 failures	0/77
	JEDEC Std 22-A102-C		2	77		0/77
	(Precon parts)		3	77		0/77
HTSL	TA=150°C	1000 hrs.	1	77	0 failures	0/77
	JEDEC Std. 22-A103-C		2	77		0/77
	(Precon parts)		3	77		0/77

Amkor Internal Qual Report #QU376816

 Package Type : QFN  
 Package Size : 7mm x 7mm  
 Lead Count : 48  
 Leadframe Type : PPF

Stress Test	Condition	Read points Cycles/ Hrs.	Lot #	Sample Size	Requirements	Results
Precondition	MSL2AA		1	231	0 failures	0/231
			2	231		0/231
	JESD22-A113E		3	231		0/231
Temp Cycle	-65°C / 150°C	500 cycles	1	77	0 failures	0/77
	JEDEC Std. 22-A104-D Cond. C		2	77		0/77
	(Precon parts)		3	77		0/77
HAST	130°C/85%RH/	96 hrs	1	77	0 failures	0/77
	JEDEC Std 22-A102-C		2	77		0/77
	(Precon parts)		3	77		0/77
HTSL	TA=150°C	1000 hrs.	1	77	0 failures	0/77
	JEDEC Std. 22-A103-C		2	77		0/77
	(Precon parts)		3	77		0/77

Amkor Internal Qual Report # QU396389

Package Type : QFN  
 Package Size : 6mm x 6mm  
 Lead Count : 48  
 Leadframe Type : PPF

Stress Test	Condition	Read points Cycles / Hrs.	Lot #	Sample Size	Requirements	Results
Precondition	<b>MSL3</b>		1	120	0 failures	0/120
	JESD22-A113E		2	120		0/120
			3	135		0/135
Temp Cycle	-55°C / 125°C	500 cycles	1	40	0 failures	0/40
	JEDEC Std. 22-A104-D Cond.B		2	40		0/40
	(Precon parts)		3	45		0/45
UBPC	121C/100%/2atm	96 hrs	1	40	0 failures	0/40
	JEDEC Std 22-A102-C		2	40		0/40
	(Precon parts)		3	45		0/45
HTSL	TA=150°C	1000hrs	1	40	0 failures	0/40
	JEDEC Std. 22-A103-C		2	40		0/40
	(without Precon)		3	45		0/45
HAST	130°C/85%RH	96 hrs	1	40	0 failures	0/40
	JEDEC Std 22-A102-C		2	40		0/40
	(Precon parts)		3	45		0/45

Amkor Internal Qual Report # QU399933

Package Type : QFN  
 Package Size : 10mm x 10mm  
 Lead Count : 68  
 Leadframe Type : Matte Tin

Stress Test	Condition	Read points Cycles / Hrs.	Lot #	Sample Size	Requirements	Results
Precondition	<b>MSL3</b>		1	247	0 failures	0/247
	<b>JESD22-A113E</b>		2	247		0/247
Temp Cycle	-55°C / 120°C	1000 cycles	1	77	0 failures	0/77
	JEDEC Std. 22-A104-C Cond. B		2	77		0/77
UBPC	121°C/100%RH/29.7Psia	168 hrs	1	77	0 failures	0/77
	JEDEC Std 22-A102-C		2	77		0/77
HTSL	TA=150°C	1000hrs	1	77	0 failures	0/77
	JEDEC Std. 22-A103-C		2	77		0/77

Please contact your Broadcom Limited field sales engineer or Contact Center for any questions or support requirements.  
 Please return any response as soon as possible, but not to exceed 30 days.