

PCN-PLP-001167

Product Change Notice

Issue Date: December 4, 2018

<u>Change Type:</u> Adding Production Assembly Site

Parts Affected:

BCM84168AKFSBG, BCM84318AKFSBG, BCM84758AKFSBG, BCM84780AKFSBG, BCM84780AKFSBLG, BCM84784AKFSBG

Description and Extent of Change:

Adding Production Assembly Site - Amkor Taiwan

Reasons for Change:

The current site JSCC, preemptively guides that they will be capacity limited from 2019 onwards. The additional site is necessary for supply.

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

The device specification will remain the same, which will ensure product electrical performance remains the same. Appropriate electrical characterization and reliability qualification will be performed on representative products to ensure normal parametric distribution, consistent electrical performance, and reliability.

Effective Date of Change:

Product shipments using this change will begin after March 4, 2019. Timing of shipment of the changed part will vary by part number depending on qualification completion, customer demand, and inventory levels.

Qualification Data:

Qualification data has been generated and approved under FCBGA+HS 29x29mm package as shown in table below:

Device	BCM84512
PROCESS TECHNOLOGY	40nm
PACKAGE TYPE	FCBGA+HS, 29x29 mm
FOUNDRY SOURCE	TSMC
ASSEMBLY SOURCE	Amkor Taiwan
SUBSTRATE SOURCE	Nanya

TEST	SPEC	Conditions	Sample Size	Read point (hrs/cycles ~)	Results
Preconditioning	JESD22-A113 J- STD-020	MSL Level 4 (30°C, 60%RH)	154	96 Hrs	Pass
uHAST	JESD22-A118	130°C, 85% RH, No bias (pre-con parts)	77	96 Hrs	Pass
TC JESD22-,		-55°C to 125°C air to air (pre-con parts)	77	500 cycles	Pass
	JESD22-A104			700 cycles	Pass
				1000 cycles	Pass
HTSL JE	JESD22-A103	Ta= 150°C.	77	500 Hrs	Pass
	JE3D22-A105	1a- 150 C.		1000 Hrs	Pass



Software / Firmware Update:

No firmware or software change is needed.

Please contact your Broadcom Inc. 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.