

PCN-PLP-001166

Product Change Notice

Issue Date: December 4, 2018

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

Parts Affected:

BCM54956CIFSBLG, BCM54956CKFSBLG, BCM84756BKFSBG, BCM84756CIFSBLG, BCM84756CKFSBG, BCM84756CKFSBLG, BCM84756LCKFSBG, BCM84757C1KFSBG, BCM84757CKFSBG, BCM84757CKFSBLG

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-A104 | | -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-A103 | 1d- 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.