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## PRODUCT CHANGE NOTIFICATION

**PCN:**PCN193301

**Date:** August 15, 2019

**Subject:** Update of Silicon Version for PSoC® 6 MCU (CY8C63XXXXX) from \*C to \*D

**Change Type:** Major

### Description of Change:

Cypress is pleased to announce the release of the latest silicon version for the CY8C63XXXXX family of devices. The CY8C63XXXXX devices will update from the current version \*C to version \*D. This revision mitigates the issues identified on silicon version \*C datasheet, <https://www.cypress.com/file/385921>) and is drop-in compatible in form, fit, and function.

### Benefit of Change:

The changes listed below in Table – A will result in improved performance and robustness for the CY8C63XXXXX family of devices.

Table-A: Changes Between CY8C63XXXXX \*C and \*D Silicon Versions

Defect/Enhancement Description	Change	Customer Impact
Scan Control Chain timing fixes	Control chain hold fixes, Internal logic of Scan, yield related	No impact.
Glitch on bsr_trst_n is clearing BAD_BIT	SROM change: Repair registers are reset in virgin mode due to glitch on TRSTn, optioned out in SROM	None. Only applicable to virgin silicon. Final product never shipped in virgin state.
IMO/VREF sensitivity to GPIO noise > 2.7V VDDD	Change#1 added filter on VDDQ Change#2 shorted vssd and vssa at IMO input	Improves performance at levels greater than 2.7V
Silicon Revision ID change	0x23 to 0x24	None
BGA116 Package Top Mark Update to differentiate material	Add BE rev letter and fab letter to physical top mark	None

**Part Numbers Affected: 41**

See the attached 'Affected Parts List' file for a list of all part numbers affected by this change. Note that any new parts that are introduced after the publication of this PCN will include all changes outlined in this PCN.

**Qualification Status:**

This silicon version has been qualified through a series of tests documented in the Qualification Test Plan QTP#174005. This qualification report can be found as an attachment to this PCN or by visiting [www.cypress.com](http://www.cypress.com) and typing the QTP number in the keyword search window.

**Sample Status:**

Qualification samples may not be built ahead of time for all part numbers affected by this change. Please review the attached 'Affected Parts List' file for a list of affected part numbers with their associated \*D sample ordering part numbers. Samples are available now unless there is an indication that the sample ordering part numbers are subject to lead times. If you require qualification samples, please contact your local Cypress sales representative as soon as possible, preferably within 30 days of the date of this PCN, to place any sample orders

**Approximate Implementation Date:**

Effective 90 days from the date of this notification or upon customer approval, whichever comes first, all shipments of part numbers in the attached file will be shipped using silicon revision \*D

**Anticipated Impact :**

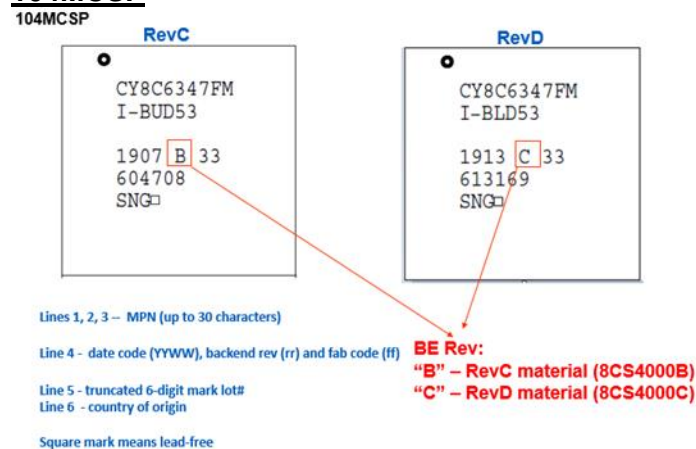
Silicon version \*D is completely compatible with existing \*C version from form, fit, functional, parametric, and quality performance perspectives.

Cypress also recommends that customers take this opportunity to review these changes against current application notes, system design considerations and customer environment conditions to assess impact (if any) to their application.

**Method of Identification:**

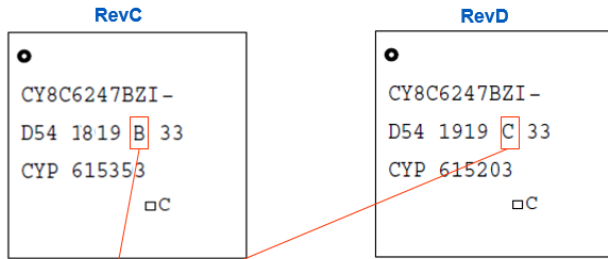
Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package. The drawings below illustrate how to identify various packages for difference between silicon versions.

**104MCSP**



## BGA124

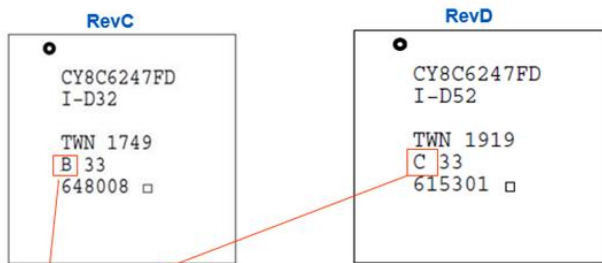
BGA124



**BE Rev:**  
 "B" – RevC material (8CS4000B)  
 "C" – RevD material (8CS4000C)

## 80WLCSP and Thin 80WLCSP

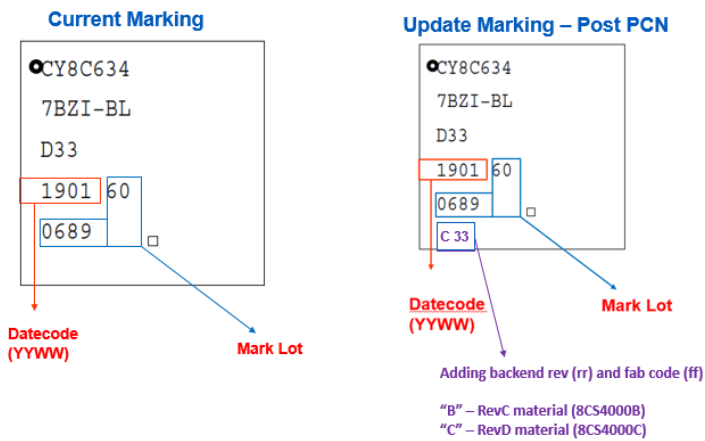
80WLCSP and Thin 80WLCSP



**BE Rev:**  
 "B" – RevC material (8CS4000B)  
 "C" – RevD material (8CS4000C)

## BGA116

BGA116 – Marking update is required after PCN (to include BE Rev)



**Response Required:**

No response is required.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at [pcn\\_adm@cypress.com](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration

**Item Marketing Part Number**

- 1 CY8C6016BZI-F04
- 2 CY8C6036BZI-F04
- 3 CY8C6116BZI-F54
- 4 CY8C6117BZI-F34
- 5 CY8C6117BZI-F34T
- 6 CY8C6117FDI-F02T
- 7 CY8C6136BZI-F14
- 8 CY8C6136BZI-F34
- 9 CY8C6136FDI-F42T
- 10 CY8C6136FTI-F42T
- 11 CY8C6137BZI-F14
- 12 CY8C6137BZI-F34
- 13 CY8C6137BZI-F54
- 14 CY8C6137FDI-F02T
- 15 CY8C6246BZI-D04
- 16 CY8C6247BZI-AUD54
- 17 CY8C6247BZI-D34
- 18 CY8C6247BZI-D44
- 19 CY8C6247BZI-D44T
- 20 CY8C6247BZI-D54
- 21 CY8C6247BZI-D54T
- 22 CY8C6247FDI-D02T
- 23 CY8C6247FDI-D32T
- 24 CY8C6247FDI-D52T
- 25 CY8C6247FTI-D52T
- 26 CY8C6316BZI-BLF03
- 27 CY8C6316BZI-BLF53
- 28 CY8C6336BZI-BLD13
- 29 CY8C6336BZI-BLF03
- 30 CY8C6337BZI-BLF13
- 31 CY8C6347BZI-BLD33
- 32 CY8C6347BZI-BLD43
- 33 CY8C6347BZI-BLD43T
- 34 CY8C6347BZI-BLD53
- 35 CY8C6347BZI-BLD53T
- 36 CY8C6347BZI-BLD54
- 37 CY8C6347BZI-BLD54T
- 38 CY8C6347FMI-BLD13T
- 39 CY8C6347FMI-BLD33T
- 40 CY8C6347FMI-BLD43T
- 41 CY8C6347FMI-BLD53T