



EFM8 LB1 and BB3 Silicon Revision C

PRCN Issue Date: 1/23/2019

Effective Date: 4/29/2019

PCN Type: Product Revision

Description of Change

Silicon Labs is pleased to announce the release of silicon revision C for the EFM8 LB1 and BB3 products. Silicon Labs is also pleased to announce the release of version 1.3 of the EFM8LB1 and EFM8BB3 datasheets.

The device changes accompanied by this silicon revision are as follows:

- P0.3 will no longer drive low on startup or reset thus solving errata issue POR_E102.
- The device will no longer support the use of an external crystal oscillator but will still support external RC and CMOS oscillators
- Removed bits 6 and 7 from the XOSC0CN: External Oscillator Control Register, SFR Page 0x0, 0x10; SFR Address: 0x86

The changes to the datasheet are as follows:

- Updated ordering part numbers to revision C.
- Updated Section 1. Feature List, Figure 3.1 "Detailed EFM8LB1 Block Diagram" on page 8 to remove external oscillator input.
- Updated Section 3.4 Clocking to remove external crystal oscillator as clock source.
- Updated Section 4.1.8 External Oscillator from presenting specifications for crystal oscillators to present specifications for RC oscillators.

Reason for Change

This silicon change is to correct errata item POR_E102 which was a bug in the startup sequence of P0.3. See form, fit, function, quality, and reliability section below.

Impact on Form, Fit, Function, Quality, Reliability

Systems that rely on an external crystal will need to re-architect their clocking structure to ensure revision C devices will function in the system. Systems that previously experienced an erroneous pull down on start up on P0.3 will no longer experience this on revision C devices.

Product Identification

Existing Part Number Replacement Part Number Drop in Compatible Indicator

EFM8BB31F16A-B-4QFN24	EFM8BB31F16A-C-4QFN24	See Data Sheet
EFM8BB31F16A-B-4QFN24R	EFM8BB31F16A-C-4QFN24R	See Data Sheet
EFM8BB31F16A-B-5QFN32	EFM8BB31F16A-C-5QFN32	See Data Sheet
EFM8BB31F16A-B-5QFN32R	EFM8BB31F16A-C-5QFN32R	See Data Sheet
EFM8BB31F16G-B-QFN24	EFM8BB31F16G-C-QFN24	See Data Sheet
EFM8BB31F16G-B-QFN24R	EFM8BB31F16G-C-QFN24R	See Data Sheet
EFM8BB31F16G-B-QFN32	EFM8BB31F16G-C-QFN32	See Data Sheet
EFM8BB31F16G-B-QFN32R	EFM8BB31F16G-C-QFN32R	See Data Sheet
EFM8BB31F16G-B-QFP32	EFM8BB31F16G-C-QFP32	See Data Sheet
EFM8BB31F16G-B-QFP32R	EFM8BB31F16G-C-QFP32R	See Data Sheet
EFM8BB31F16G-B-QSOP24	EFM8BB31F16G-C-QSOP24	See Data Sheet
EFM8BB31F16G-B-QSOP24R	EFM8BB31F16G-C-QSOP24R	See Data Sheet
EFM8BB31F16I-B-QFN24	EFM8BB31F16I-C-QFN24	See Data Sheet
EFM8BB31F16I-B-QFN24R	EFM8BB31F16I-C-QFN24R	See Data Sheet
EFM8BB31F16I-B-4QFN24	EFM8BB31F16I-C-4QFN24	See Data Sheet
EFM8BB31F16I-B-4QFN24R	EFM8BB31F16I-C-4QFN24R	See Data Sheet
EFM8BB31F16I-B-QFN32	EFM8BB31F16I-C-QFN32	See Data Sheet
EFM8BB31F16I-B-QFN32R	EFM8BB31F16I-C-QFN32R	See Data Sheet
EFM8BB31F16I-B-5QFN32	EFM8BB31F16I-C-5QFN32	See Data Sheet

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Last Date of Unchanged Product: 4/29/2019

Qualification Samples

Available upon request

Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at <http://www.silabs.com>.

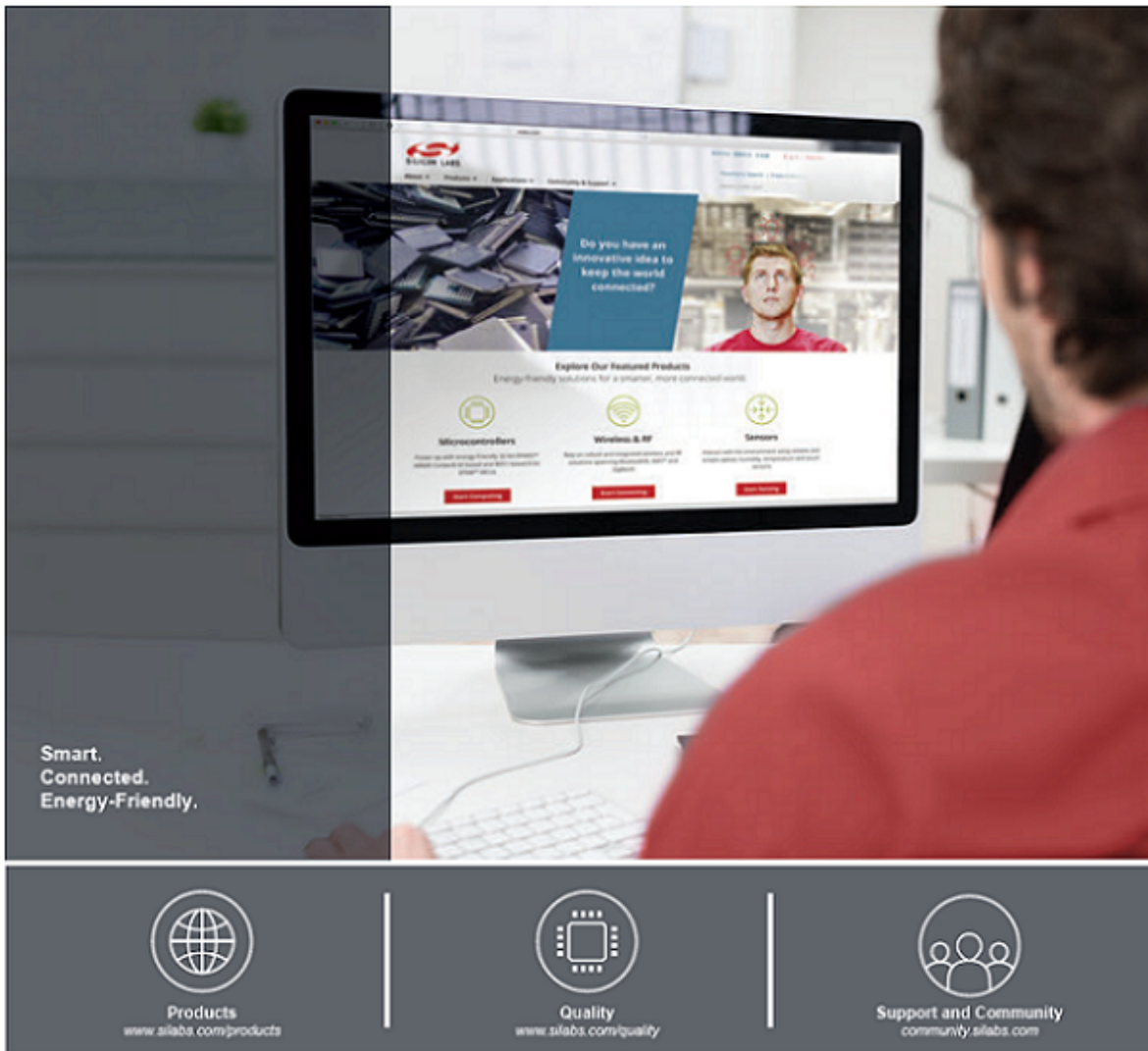
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Qualification Data

Available upon request



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