



# 17052469 EFM8 BB3 and EFM8 LB1 datasheet update bulletin

**Bulletin Issue Date:** 5/24/2017

**Effective Date:** 5/24/2017

## Description of Change

Silicon Labs is pleased to announce the release of version 1.1 of the EFM8 Busy Bee 3 or BB3 and EFM8 Laser Bee 1 or LB1 datasheets.

The changes to the EFM8 BB3 datasheet are as follows:

- Added table 4.12 for the 1.8V LDO Internal Regulator specifying the min, max, and typical values.
- Added a note to table 4.9 ADC indicating that product test uses a 2.4 V external reference and external ground.
- Added Output Voltage and Output Current specifications to DAC table 4.13.
- Updated the wording in the feature list paragraph on page 1 to clarify which packages are offered in commercial grade, industrial grade, and automotive grade.
- Added a note in the introduction pointing to the reference manual where specific block level information can be found.
- The typo which incorrectly stated the application note number on page 34, section 5.2 has been corrected.
- Adjusted the Data Hold Time in table 4.17 for the SMBus peripheral in standard master mode from 0  $\mu$ s to 275 ns.
- Adjusted the Data Hold Time in table 4.17 for the SMBus peripheral in fast master mode from 0  $\mu$ s to 275 ns.
- Adjusted the Data Setup Time in table 4.17 for the SMBus peripheral in standard master mode from 4.7  $\mu$ s to 300 ns.
- Adjusted the Data Setup Time in table 4.17 for the SMBus peripheral in fast master mode from 1.3  $\mu$ s to 300 ns.
- Added a note outlining the use of the DLYEXT bit which can be used to adjust the SMBus Data Setup and Data Hold times.
- Updated the minimum Vio labeled in Figure 5.2 to match the recommended operating conditions.

The changes to the EFM8 LB1 datasheet are as follows

- Removed a note that AEC-Q100 qualification was pending for these devices.
- Added table 4.12 for the 1.8V LDO Internal Regulator specifying the min, max, and typical values.
- Added a note to table 4.9 ADC indicating that product test uses a 2.4 V external reference and external ground.
- Added Output Voltage and Output Current specifications to DAC table 4.13.
- Adjusted the Data Hold Time in table 4.17 for the SMBus peripheral in standard master mode from 0  $\mu$ s to 275 ns.
- Adjusted the Data Hold Time in table 4.17 for the SMBus peripheral in fast master mode from 0  $\mu$ s to 275 ns.
- Adjusted the Data Setup Time in table 4.17 for the SMBus peripheral in standard master mode from 4.7  $\mu$ s to 300 ns.
- Adjusted the Data Setup Time in table 4.17 for the SMBus peripheral in fast master mode from 1.3  $\mu$ s to 300 ns.
- Added a note outlining the use of the DLYEXT bit which can be used to adjust the SMBus Data Setup and Data Hold times.
- Updated the minimum Vio labeled in Figure 5.2 to match the recommended operating conditions.
- Added a note in the introduction pointing to the reference manual where specific block level information can be found.
- The typo which incorrectly stated the application note number on page 33, section 5.2 has been corrected.

## Reason for Change

Release of version 1.1 of the EFM8 BB3 and EFM8 LB1 datasheets.

## Product Identification

Existing Part #  
EFM8LB10F16E-B-QFN24  
EFM8LB10F16E-B-QFN24R  
EFM8LB10F16E-B-QFN32  
EFM8LB10F16E-B-QFN32R  
EFM8LB10F16E-B-QFP32  
EFM8LB10F16E-B-QFP32R  
EFM8LB10F16ES0-B-QFN24  
EFM8LB10F16ES0-B-QFN24R  
EFM8LB10F16ES0-B-QFN32  
EFM8LB10F16ES0-B-QFN32R  
EFM8LB10F16E-B-QSOP24

EFM8LB10F16E-B-QSOP24R  
EFM8LB11F16E-B-QFN24  
EFM8LB11F16E-B-QFN24R  
EFM8LB11F16E-B-QFN32  
EFM8LB11F16E-B-QFN32R  
EFM8LB11F16E-B-QFP32  
EFM8LB11F16E-B-QFP32R  
EFM8LB11F16ES0-B-QFN24  
EFM8LB11F16ES0-B-QFN24R  
EFM8LB11F16ES0-B-QFN32  
EFM8LB11F16ES0-B-QFN32R  
EFM8LB11F16E-B-QSOP24  
EFM8LB11F16E-B-QSOP24R  
EFM8LB11F32E-B-QFN24  
EFM8LB11F32E-B-QFN24R  
EFM8LB11F32E-B-QFN32  
EFM8LB11F32E-B-QFN32R  
EFM8LB11F32E-B-QFP32  
EFM8LB11F32E-B-QFP32R  
EFM8LB11F32ES0-B-QFN24  
EFM8LB11F32ES0-B-QFN24R  
EFM8LB11F32ES0-B-QFN32  
EFM8LB11F32ES0-B-QFN32R  
EFM8LB11F32E-B-QSOP24  
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EFM8LB12F32E-B-QFN24  
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EFM8LB12F32E-B-QFN32R  
EFM8LB12F32E-B-QFP32  
EFM8LB12F32E-B-QFP32R  
EFM8LB12F32ES0-B-QFN24  
EFM8LB12F32ES0-B-QFN24R  
EFM8LB12F32ES0-B-QFN32  
EFM8LB12F32ES0-B-QFN32R  
EFM8LB12F32E-B-QSOP24  
EFM8LB12F32E-B-QSOP24R  
EFM8LB12F64E-B-QFN24  
EFM8LB12F64E-B-QFN24R  
EFM8LB12F64E-B-QFN32  
EFM8LB12F64E-B-QFN32R  
EFM8LB12F64E-B-QFP32  
EFM8LB12F64E-B-QFP32R  
EFM8LB12F64ES0-B-QFN24  
EFM8LB12F64ES0-B-QFN24R  
EFM8LB12F64ES0-B-QFN32  
EFM8LB12F64ES0-B-QFN32R  
EFM8LB12F64E-B-QSOP24  
EFM8LB12F64E-B-QSOP24R  
EFM8BB31F16G-B-QFN24  
EFM8BB31F16G-B-QFN24R  
EFM8BB31F16G-B-QFN32  
EFM8BB31F16G-B-QFN32R  
EFM8BB31F16G-B-QFP32  
EFM8BB31F16G-B-QFP32R  
EFM8BB31F16G-B-QSOP24  
EFM8BB31F16G-B-QSOP24R  
EFM8BB31F16I-B-QFN24  
EFM8BB31F16I-B-QFN24R  
EFM8BB31F16I-B-QFN32  
EFM8BB31F16I-B-QFN32R  
EFM8BB31F16I-B-QFP32  
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EFM8BB31F64I-B-QFN24R  
EFM8BB31F64I-B-QFN32  
EFM8BB31F64I-B-QFN32R  
EFM8BB31F64I-B-QFP32  
EFM8BB31F64I-B-QFP32R  
EFM8BB31F64I-B-QSOP24  
EFM8BB31F64I-B-QSOP24R

This change is considered a minor change which does not affect form, fit, function, quality, or reliability. The information is being provided as a customer courtesy.

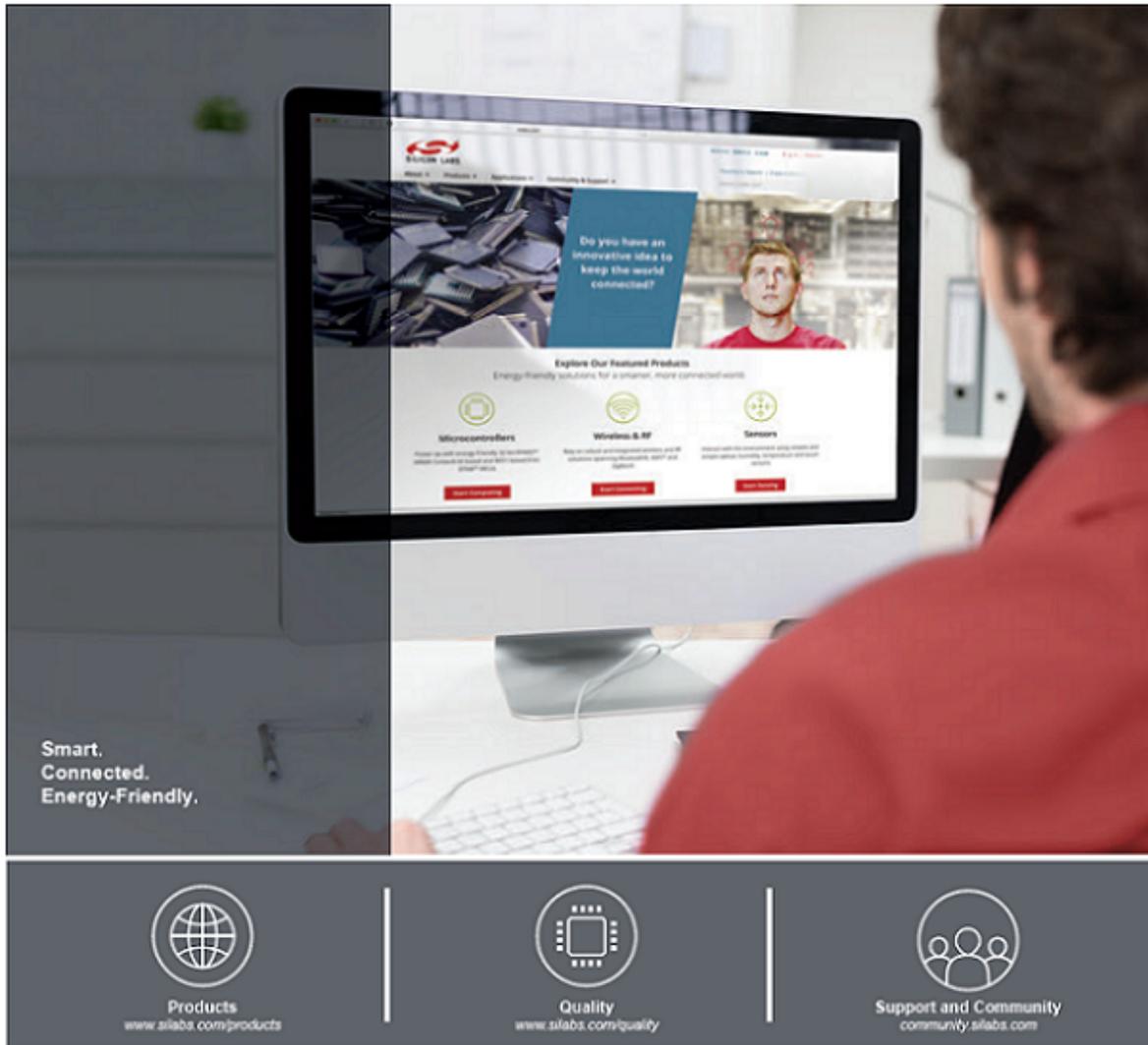
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