



EFM8 Sleepy Bee Family

EFM8SB1 Errata



This document contains information on the errata of revision A of EFM8SB1.

For errata on older revisions, please refer to the errata history for the device. The device data sheet explains how to identify chip revision, either from package marking or electronically.

Errata effective date: November 20, 2015.

1. Errata Summary

Table 1.1. Errata Status Summary

Errata #	Designator	Title/Problem	Workaround Exists	Affected Revision	Fixed Revision
1	BL_E101	UART Bootloader Not Available	No	A	A, date code 1544

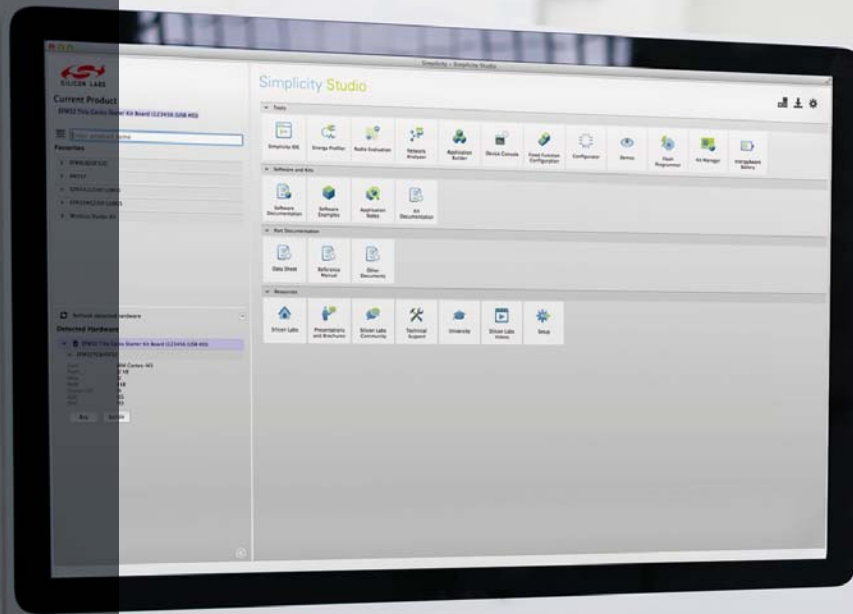
2. Detailed Errata Descriptions

2.1 BL_E101 – UART Bootloader Not Available

Description of Errata	
The revision 1.1 data sheet mentions a UART bootloader in device flash. This bootloader is not yet available.	
Affected Conditions / Impacts	
Systems intending to use the the pre-programmed UART bootloader will need to implement and download a bootloader to the devices received from the factory.	
The device will use the byte immediately before the Lock Byte as a Bootloader Signature Byte to determine if the bootloader is present in flash. For example, in a device with 8 KB of flash:	
0xFFFF 0x2000 0x1FFF 0x1FFE 0x1FFD 0x1E00 0x0000	<p>The diagram illustrates the memory layout of the 8 KB flash. It is divided into several sections: a grey 'Reserved' area at the top, a 'Lock Byte' at address 0x1FFF, a 'Bootloader Signature Byte' at address 0x1FFE, a 'Security Page' of 512 bytes spanning from 0x1FFD to 0x1E00, and the remaining '8 KB Flash' (16 x 512 Byte pages) from 0x1E00 to 0x0000.</p>
For applications that do not use the bootloader, this byte can be any value other than 0xA5 to enable normal operation.	
Note that the devices placed on a Starter Kit board may not have the Bootloader Signature Byte support included, so these parts may behave differently than loose parts ordered separately.	
Workaround	
A bootloader is not required for normal operation. However, if a bootloader is required by the application, a custom-written bootloader can be downloaded to devices received from the factory. The factory bootloader will not work on devices with a date code prior to 1544.	
Systems using the device should not write the Bootloader Signature Byte to 0xA5 when the intent is to not use the bootloader.	
Resolution	

This issue will be resolved in devices that display a 1544 or later date code.

More information on the bootloader can be found in the device data sheet and in *AN945: "EFM8 Factory Bootloader User Guide"*. Application notes can be found on the Silicon Labs website (www.silabs.com/8bit-appnotes) and in Simplicity Studio using the [Application Notes] tile.



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