



# 2207131287 SE Firmware Update EFM32PG22, EFR32xG21 and EFR32xG22 SoCs and Modules

**Bulletin Issue Date:** Jul 13, 2022

**Effective Date:** Jul 13, 2022

## Description of Change

An upgrade to the Secure Engine firmware version v1.2.12 for EFR32xG22/xGM220/BGX220 and firmware version 1.2.13 for EFR32xG21/xGM210. The updates include:

- Fix to address vulnerability covered in Security Advisory - A-00000393 (Calls for a minimum of Firmware v1.2.11)
- Support for TrustZone Root Key which can be used by TrustZone secure applications for secure storage. The key is renewed on OTP configuration, debug lock and device erase.
- Additional security and stability fixes (1.2.13 only)

For version 1.2.13 for EFR32xG21/xGM210 the update information can be found here:

[https://github.com/SiliconLabs/gecko\\_sdk/blob/gsdk\\_4.1/util/se\\_release/public/s2c1\\_se\\_fw\\_release\\_notes.pdf](https://github.com/SiliconLabs/gecko_sdk/blob/gsdk_4.1/util/se_release/public/s2c1_se_fw_release_notes.pdf)

For version v1.2.12 for EFR32xG22/xGM220/BGX220 the update information can be found here:

[https://github.com/SiliconLabs/gecko\\_sdk/blob/gsdk\\_4.1/util/se\\_release/public/s2c2\\_se\\_fw\\_release\\_notes.pdf](https://github.com/SiliconLabs/gecko_sdk/blob/gsdk_4.1/util/se_release/public/s2c2_se_fw_release_notes.pdf)

## Reason for Change

A precisely timed fault injection attack during an SE firmware upgrade operation can potentially allow the SE firmware to be downgraded to an earlier version.

## Product Identification

### Existing Part #

EFR32BG21A010F512IM32-B  
 EFR32BG21A010F512IM32-BR  
 EFR32BG21A010F768IM32-B  
 EFR32BG21A010F768IM32-BR  
 EFR32BG21A010F1024IM32-B  
 EFR32BG21A010F1024IM32-BR  
 EFR32BG21A020F512IM32-B  
 EFR32BG21A020F512IM32-BR  
 EFR32BG21A020F768IM32-B  
 EFR32BG21A020F768IM32-BR  
 EFR32BG21A020F1024IM32-B  
 EFR32BG21A020F1024IM32-BR  
 EFR32BG21B010F512IM32-B  
 EFR32BG21B010F512IM32-BR  
 EFR32BG21B010F768IM32-B  
 EFR32BG21B010F768IM32-BR  
 EFR32BG21B010F1024IM32-B  
 EFR32BG21B010F1024IM32-BR  
 EFR32BG21B020F512IM32-B  
 EFR32BG21B020F512IM32-BR  
 EFR32BG21B020F768IM32-B  
 EFR32BG21B020F768IM32-BR  
 EFR32BG21B020F1024IM32-B  
 EFR32BG21B020F1024IM32-BR  
 EFR32MG21A010F512IM32-B  
 EFR32MG21A010F512IM32-BR  
 EFR32MG21A010F768IM32-B

EFR32MG21A010F768IM32-BR  
EFR32MG21A010F1024IM32-B  
EFR32MG21A010F1024IM32-BR  
EFR32MG21A020F512IM32-B  
EFR32MG21A020F512IM32-BR  
EFR32MG21A020F768IM32-B  
EFR32MG21A020F768IM32-BR  
EFR32MG21A020F1024IM32-B  
EFR32MG21A020F1024IM32-BR  
EFR32MG21B010F512IM32-B  
EFR32MG21B010F512IM32-BR  
EFR32MG21B010F768IM32-B  
EFR32MG21B010F768IM32-BR  
EFR32MG21B010F1024IM32-B  
EFR32MG21B010F1024IM32-BR  
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EFR32MG21B020F768IM32-B  
EFR32MG21B020F768IM32-BR  
EFR32MG21B020F1024IM32-B  
EFR32MG21B020F1024IM32-BR  
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EFR32BG22C112F352GM32-CR  
EFR32BG22C222F352GM32-C  
EFR32BG22C222F352GM32-CR  
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EFR32BG22C224F512IM32-C  
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EFR32FG22C121F256GM32-CR  
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EFR32MG22C224F512IM32-CR  
EFR32MG22C224F512IM40-C  
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EFM32PG22C200F64IM40-C  
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EFM32PG22C200F128IM32-C  
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EFM32PG22C200F256IM32-CR  
EFM32PG22C200F256IM40-C  
EFM32PG22C200F256IM40-CR  
EFM32PG22C200F512IM32-C  
EFM32PG22C200F512IM32-CR

EFM32PG22C200F512IM40-C  
EFM32PG22C200F512IM40-CR  
BGM220PC22HNA2  
BGM220PC22HNA2R  
BGM220PC22WGA2  
BGM220PC22WGA2R  
BGM220SC12WGA2  
BGM220SC12WGA2R  
BGM220SC22HNA2  
BGM220SC22HNA2R  
BGM220SC22WGA2  
BGM220SC22WGA2R  
BGX220P22HNA21  
BGX220P22HNA21R  
BGX220S22HNA21  
BGX220S22HNA21R  
MGM220PC22HNA2  
MGM220PC22HNA2R  
BGM210LA22JIF2  
BGM210LA22JIF2R  
BGM210LA22JNF2  
BGM210LA22JNF2R  
BGM210PA22JIA2  
BGM210PA22JIA2R  
BGM210PA32JIA2  
BGM210PA32JIA2R  
BGM210PB22JIA2  
BGM210PB22JIA2R  
BGM210PB32JIA2  
BGM210PB32JIA2R  
MGM210LA22JIF2  
MGM210LA22JIF2R  
MGM210LA22JNF2  
MGM210LA22JNF2R  
MGM210PA22JIA2  
MGM210PA22JIA2R  
MGM210PA32JIA2  
MGM210PA32JIA2R  
MGM210PB22JIA2  
MGM210PB22JIA2R  
MGM210PB32JIA2  
MGM210PB32JIA2R

## Kit Identification

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.

Please contact your local Silicon Labs sales representative with any questions about this notification. A list of Silicon Labs sales representatives may be found at <http://www.silabs.com>.

## Customer Actions Needed:

Upgrade the SE firmware to greater than or equal to v1.2.11.

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