



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

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

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
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EFR32MG21B020F768IM32-B
EFR32MG21B020F768IM32-BR
EFR32MG21B020F1024IM32-B
EFR32MG21B020F1024IM32-BR
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EFR32BG22C112F352GM32-CR
EFR32BG22C222F352GM32-C
EFR32BG22C222F352GM32-CR
EFR32BG22C222F352GM40-C
EFR32BG22C222F352GM40-CR
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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
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MGM210LA22JIF2R
MGM210LA22JNF2
MGM210LA22JNF2R
MGM210PA22JIA2
MGM210PA22JIA2R
MGM210PA32JIA2
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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.

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Customer Actions Needed:

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

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