



2406261555 EFR32BG22/MG22 v1.2, EFR32FG22 and EFM32PG22 v1.3 Datasheet Update

PCN Issue Date: Jun 26, 2024

Effective Date: Oct 02, 2024

PCN Type: Datasheet

Description of Change

Silicon Labs is pleased to announce the release of the following datasheet revisions:

EFR32FG22 v1.3: <https://www.silabs.com/documents/public/data-sheets/efr32fg22-datasheet.pdf>

EFM32PG22 v1.3: <https://www.silabs.com/documents/public/data-sheets/efm32pg22-datasheet.pdf>

EFR32BG22 v1.2: <https://www.silabs.com/documents/public/data-sheets/efr32bg22-datasheet.pdf>

EFR32MG22 v1.2: <https://www.silabs.com/documents/public/data-sheets/efr32mg22-datasheet.pdf>

EFR32BG22C112 v1.2: <https://www.silabs.com/documents/public/data-sheets/efr32bg22c112-datasheet.pdf>

Reason for Change

EFR32FG22 v1.3 have below changes:

- Added Ordering Code Key
- Added Boot Timing
- Added Secure Vault Features table
- Removed internal setting from test condition description for gain error in Analog to Digital Converter (IADC)

EFM32PG22 v1.3 have below changes:

- Updated QFN32 Package Drawing to include decoding of flash size
- Added Boot Timing
- Added Secure Vault Features table
- For Analog to Digital Converter (IADC)
- Added input sampling capacitance for 3X gain
- Added input sampling frequency, and updated footnote
- Removed internal setting from test condition descriptions for PSSR and gain error

EFR32BG22 v1.2 have below changes:

- Updated Feature List to remove AEC qualification information.
- Added note to Ordering Information regarding Bluetooth 5.x support.
- Added Ordering Code Key
- Added Secure Vault Features table
- Updated max voltage on HFXO pins in 'Absolute Maximum Ratings' table
- Added CLKIN & DLLREFCLK max to 'General Operating Conditions'
- Removed test conditions for flash erase cycles and data retention information to 'Flash Characteristics' table
- Corrected unit for wake-up time from EM1 from AHB Clock to HCLKs in 'Wake Up, Entry, and Exit times' table
- Added Boot Timing
- Updated RF tuning frequency range
- Added startup time footnote regarding programmable TIMEOUTSTEADY delay
- Updated typical clock out current for HFRCODPLL in 'High Frequency RC Oscillator (HFRCO)' table
- For Analog to Digital Converter (IADC)
- Added input sampling capacitance for 3X gain
- Added ADC clock limitations for 2X, 3X and 4X gain
- Added input sampling frequency
- Removed internal setting from test condition descriptions for PSSR and gain error
- Consolidated 'GPIO Alternate Function' Table for displaying support for dedicated functions across the different package options
- Updated QFN40 package marking (modified marking image to better reflect actual markings)

EFR32MG22 v1.2 have below changes:

- Added note to Ordering Information regarding Bluetooth 5.x support.
- Added Ordering Code Key
- Added Secure Vault Features table
- Updated max voltage on HFXO pins in 'Absolute Maximum Ratings' table
- Added CLKIN & DLLREFCLK max to 'General Operating Conditions'
- Added flash erase cycles and data retention information to 'Flash Characteristics' table
- Corrected unit for wake-up time from EM1 from AHB Clock to HCLKs in 'Wake Up, Entry, and Exit times' table
- Added Boot Timing
- Updated RF tuning frequency range
- Added startup time footnote regarding programmable TIMEOUTSTEADY delay
- Updated typical clock out current for HFRCODPLL in 'High Frequency RC Oscillator (HFRCO)' table
- For Analog to Digital Converter (IADC)
 - Added input sampling capacitance for 3X gain
 - Added ADC clock limitations for 2X, 3X and 4X gain
 - Added input sampling frequency
 - Removed internal setting from test condition descriptions for PSSR and gain error
- Consolidated 'GPIO Alternate Function' Table for displaying support for dedicated functions across the different package options
- Updated QFN40 package marking (modified marking image to better reflect actual markings)

EFR32BG22C112 v1.2 have below changes:

- Added note to Ordering Information regarding Bluetooth 5.x support.
- Added Ordering Code Key
- Added Secure Vault Features table
- Updated max voltage on HFXO pins in 'Absolute Maximum Ratings' table
- Added CLKIN & DLLREFCLK max to 'General Operating Conditions'
- Added flash erase cycles and data retention information to 'Flash Characteristics' table
- Corrected unit for wake-up time from EM1 from AHB Clock to HCLKs in 'Wake Up, Entry, and Exit times' table
- Added Boot Timing
- Updated RF tuning frequency range
- Added startup time footnote regarding programmable TIMEOUTSTEADY delay
- Updated typical clock out current for HFRCODPLL in 'High Frequency RC Oscillator (HFRCO)' table
- For Analog to Digital Converter (IADC)
 - Added input sampling capacitance for 3X gain
 - Added ADC clock limitations for 2X, 3X and 4X gain
 - Added input sampling frequency
 - Removed internal setting from test condition descriptions for PSSR and gain error
- Consolidated 'GPIO Alternate Function' Table for displaying support for dedicated functions across the different package options

Impact on Form, Fit, Function, Quality, Reliability

No impact on Form, Fit, Function, Quality, or Reliability.

Product Identification

Existing Part #

EFM32PG22C200F128IM32-C
EFM32PG22C200F128IM32-CR
EFM32PG22C200F128IM40-C
EFM32PG22C200F128IM40-CR
EFM32PG22C200F256IM32-C
EFM32PG22C200F256IM32-CR
EFM32PG22C200F256IM40-C
EFM32PG22C200F256IM40-CR
EFM32PG22C200F512IM32-C
EFM32PG22C200F512IM32-CR
EFM32PG22C200F512IM40-C
EFM32PG22C200F512IM40-CR
EFM32PG22C200F64IM32-C
EFM32PG22C200F64IM32-CR
EFM32PG22C200F64IM40-C
EFM32PG22C200F64IM40-CR
EFR32BG22C112F352GM32-C
EFR32BG22C112F352GM32-CR
EFR32BG22C112PZ028GM32-C
EFR32BG22C112PZ028GM32-CR
EFR32BG22C112PZ049GM32-C
EFR32BG22C112PZ049GM32-CR

EFR32BG22C222F352GM32-C
EFR32BG22C222F352GM32-CR
EFR32BG22C222F352GM40-C
EFR32BG22C222F352GM40-CR
EFR32BG22C222F352GN32-C
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EFR32BG22C222PZ044GM32-C
EFR32BG22C222PZ044GM32-CR
EFR32BG22C222PZ046GM40-C
EFR32BG22C222PZ046GM40-CR
EFR32BG22C224F512GM32-C
EFR32BG22C224F512GM32-CR
EFR32BG22C224F512GM40-C
EFR32BG22C224F512GM40-CR
EFR32BG22C224F512GN32-C
EFR32BG22C224F512GN32-CR
EFR32BG22C224F512IM32-C
EFR32BG22C224F512IM32-CR
EFR32BG22C224F512IM40-C
EFR32BG22C224F512IM40-CR
EFR32BG22C224MZ072GM32-C
EFR32BG22C224MZ072GM32-CR
EFR32BG22C224P1643GM32-C
EFR32BG22C224P1643GM32-CR
EFR32BG22C224X1730IM40-C
EFR32BG22C224X1730IM40-CR
EFR32BG22C224X1750IM40-C
EFR32BG22C224X1750IM40-CR
EFR32FG22C121F512GM32-C
EFR32FG22C121F512GM32-CR
EFR32FG22C121F512GM40-C
EFR32FG22C121F512GM40-CR
EFR32MG22C224F512GN32-C
EFR32MG22C224F512GN32-CR
EFR32MG22C224F512IM32-C
EFR32MG22C224F512IM32-CR
EFR32MG22C224F512IM40-C
EFR32MG22C224F512IM40-CR

Last Date of Unchanged Product: Oct 02, 2024

Qualification Samples

N/A

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>.

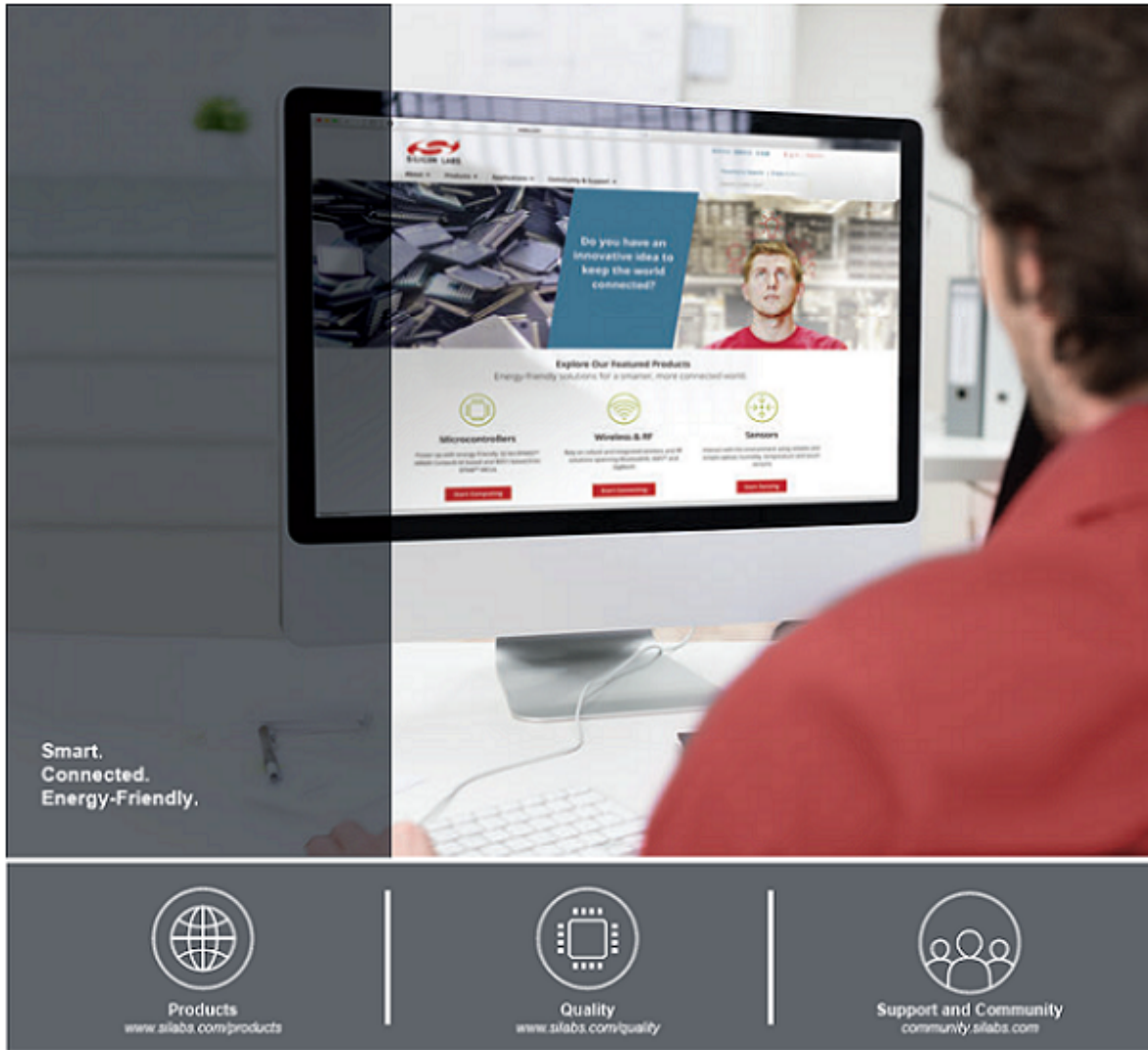
Customers may approve early PCN acceptance by emailing approval, along with PCN # to PCN@silabs.com

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Qualification Data

N/A



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