



200218726 Addendum to 200204711 EFM32WG Revision B PRCN and Datasheet V2.2 Release

PRCN Issue Date: 2/18/2020

Effective Date: 2/24/2020

PCN Type: Product Revision

Description of Change

This addendum to 200204711 is to correct the replacement part numbers as replacement part numbers were incorrectly mapped. Existing parts ending in "T", for tray, were incorrectly mapped to replacement parts ending in "R", for reelbox.

Silicon Labs is pleased to announce the release of revision B of the EFM32WG or Wonder Gecko devices. This revision is accompanied by the release of version 2.2 of the EFM32WG datasheet.

After the effective date Silicon Labs reserves the right to ship revision B devices in place of the previous revision. After the effective date the previous revision devices will be End of Life. Please see the Product Identification section for information on the new drop in replacement part number.

This revision solves 2 errata items, RMU_E103 and RMU_E102.

RMU_E102:

Output of the on-chip regulator (DECOUPLE pin) may be approximately 0V, and the device will not respond to a pin reset.

RMU_E103:

Reset may fail to trigger when the device supplies (AVDD_0, AVDD_2, VDD_DREG) fall to a voltage in the 1.25V - 1.45V range.

Version 2.2 of datasheet has the following changes:

- Updated Table 2.1. "Ordering Information" to replace the previous revision part numbers with the new -B designated part numbers
- In Table 4.15. ADC, corrected the minimum ADC input ON resistance from 1M Ω to 300 Ω
- In Table 4.15. ADC, added maximum ADC input ON resistance of 800 Ω
- In Table 4.17. OPAMP, added load resistance for OPA2 with a minimum value of 1000 Ω
- Restored DAC0_P0, DAC0_P1, DAC0_N0 and DAC0_N1 alternate functionalities for all the devices
- Reordered the OPAMP functionality and respective pinout in alphabetical order
- Removed PB11 as the 1st alternate location of I2C1_SDA in Alternate Functionality Overview tables for, EFM32WG232, EFM32WG332, EFM32WG842, and EFM32WG942
- In Device Pinout/Device Padout tables, restored Alternate Functionality/Description of pin names USB_VREGI and USB_VREGO.
- Corrected typo by changing Pad #117 from PD15 to PB15 in Device Padout table for the EFM32WG900.
- Statements regarding packaging materials have been removed. The most current device quality and environmental information can be found at <http://www.silabs.com/support/quality/pages/default.aspx>.

Note: After the effective date of the PRCN, Silicon Labs reserves the right not to accept orders for the old revision.

Reason for Change

Correct errors in the replacement part numbers.

Original PRCN Change Reason:

Release of revision B devices to address errata items

Impact on Form, Fit, Function, Quality, Reliability

Revision B corrects the 2 errata items listed in the Change Description section; revision B devices will now behave as expected on power on reset and brown out events. There is no impact to form, fit, quality or reliability.

Product Identification

| Existing Part # | Replacement Part # | DropInCompInd. |
|--------------------------|--------------------------|----------------|
| EFM32WG230F128-QFN64 | EFM32WG230F128-B-QFN64R | Yes |
| EFM32WG230F128-QFN64T | EFM32WG230F128-B-QFN64 | Yes |
| EFM32WG230F256-QFN64 | EFM32WG230F256-B-QFN64R | Yes |
| EFM32WG230F256-QFN64T | EFM32WG230F256-B-QFN64 | Yes |
| EFM32WG230F64-QFN64 | EFM32WG230F64-B-QFN64R | Yes |
| EFM32WG230F64-QFN64T | EFM32WG230F64-B-QFN64 | Yes |
| EFM32WG232F128-QFP64 | EFM32WG232F128-B-QFP64R | Yes |
| EFM32WG232F128-QFP64T | EFM32WG232F128-B-QFP64 | Yes |
| EFM32WG232F256-QFP64 | EFM32WG232F256-B-QFP64R | Yes |
| EFM32WG232F256-QFP64T | EFM32WG232F256-B-QFP64 | Yes |
| EFM32WG232F64-QFP64 | EFM32WG232F64-B-QFP64R | Yes |
| EFM32WG232F64-QFP64T | EFM32WG232F64-B-QFP64 | Yes |
| EFM32WG280F128-QFP100 | EFM32WG280F128-B-QFP100R | Yes |
| EFM32WG280F128-QFP100T | EFM32WG280F128-B-QFP100 | Yes |
| EFM32WG280F256-QFP100 | EFM32WG280F256-B-QFP100R | Yes |
| EFM32WG280F256-QFP100T | EFM32WG280F256-B-QFP100 | Yes |
| EFM32WG280F64-QFP100 | EFM32WG280F64-B-QFP100R | Yes |
| EFM32WG280F64-QFP100T | EFM32WG280F64-B-QFP100 | Yes |
| EFM32WG290F128-BGA112 | EFM32WG290F128-B-BGA112R | Yes |
| EFM32WG290F128-BGA112T | EFM32WG290F128-B-BGA112 | Yes |
| EFM32WG290F256-BGA112 | EFM32WG290F256-B-BGA112R | Yes |
| EFM32WG290F256-BGA112T | EFM32WG290F256-B-BGA112 | Yes |
| EFM32WG290F64-BGA112 | EFM32WG290F64-B-BGA112R | Yes |
| EFM32WG290F64-BGA112T | EFM32WG290F64-B-BGA112 | Yes |
| EFM32WG295F128-BGA120 | EFM32WG295F128-B-BGA120R | Yes |
| EFM32WG295F128-BGA120T | EFM32WG295F128-B-BGA120 | Yes |
| EFM32WG295F256-BGA120 | EFM32WG295F256-B-BGA120R | Yes |
| EFM32WG295F256-BGA120T | EFM32WG295F256-B-BGA120 | Yes |
| EFM32WG295F64-BGA120 | EFM32WG295F64-B-BGA120R | Yes |
| EFM32WG295F64-BGA120T | EFM32WG295F64-B-BGA120 | Yes |
| EFM32WG330F128-QFN64 | EFM32WG330F128-B-QFN64R | Yes |
| EFM32WG330F128-QFN64T | EFM32WG330F128-B-QFN64 | Yes |
| EFM32WG330F256-QFN64 | EFM32WG330F256-B-QFN64R | Yes |
| EFM32WG330F256-QFN64T | EFM32WG330F256-B-QFN64 | Yes |
| EFM32WG330F64-QFN64 | EFM32WG330F64-B-QFN64R | Yes |
| EFM32WG330F64-QFN64T | EFM32WG330F64-B-QFN64 | Yes |
| EFM32WG332F128-QFP64 | EFM32WG332F128-B-QFP64R | Yes |
| EFM32WG332F128-QFP64T | EFM32WG332F128-B-QFP64 | Yes |
| EFM32WG332F256-QFP64 | EFM32WG332F256-B-QFP64R | Yes |
| EFM32WG332F256-QFP64T | EFM32WG332F256-B-QFP64 | Yes |
| EFM32WG332F64-QFP64 | EFM32WG332F64-B-QFP64R | Yes |
| EFM32WG332F64-QFP64T | EFM32WG332F64-B-QFP64 | Yes |
| EFM32WG360F128G-A-CSP81 | EFM32WG360F128G-B-CSP81 | Yes |
| EFM32WG360F128G-A-CSP81R | EFM32WG360F128G-B-CSP81R | Yes |
| EFM32WG360F256G-A-CSP81 | EFM32WG360F256G-B-CSP81 | Yes |
| EFM32WG360F256G-A-CSP81R | EFM32WG360F256G-B-CSP81R | Yes |
| EFM32WG360F64G-A-CSP81 | EFM32WG360F64G-B-CSP81 | Yes |
| EFM32WG360F64G-A-CSP81R | EFM32WG360F64G-B-CSP81R | Yes |
| EFM32WG380F128-QFP100 | EFM32WG380F128-B-QFP100R | Yes |
| EFM32WG380F128-QFP100T | EFM32WG380F128-B-QFP100 | Yes |
| EFM32WG380F256-QFP100 | EFM32WG380F256-B-QFP100R | Yes |
| EFM32WG380F256-QFP100T | EFM32WG380F256-B-QFP100 | Yes |
| EFM32WG380F64-QFP100 | EFM32WG380F64-B-QFP100R | Yes |
| EFM32WG380F64-QFP100T | EFM32WG380F64-B-QFP100 | Yes |
| EFM32WG390F128-BGA112 | EFM32WG390F128-B-BGA112R | Yes |
| EFM32WG390F128-BGA112T | EFM32WG390F128-B-BGA112 | Yes |
| EFM32WG390F256-BGA112 | EFM32WG390F256-B-BGA112R | Yes |
| EFM32WG390F256-BGA112T | EFM32WG390F256-B-BGA112 | Yes |
| EFM32WG390F64-BGA112 | EFM32WG390F64-B-BGA112R | Yes |
| EFM32WG390F64-BGA112T | EFM32WG390F64-B-BGA112 | Yes |
| EFM32WG395F128-BGA120 | EFM32WG395F128-B-BGA120R | Yes |

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|------------------------|--------------------------|-----|
| EFM32WG395F128-BGA120T | EFM32WG395F128-B-BGA120 | Yes |
| EFM32WG395F256-BGA120 | EFM32WG395F256-B-BGA120R | Yes |
| EFM32WG395F256-BGA120T | EFM32WG395F256-B-BGA120 | Yes |
| EFM32WG395F64-BGA120 | EFM32WG395F64-B-BGA120R | Yes |
| EFM32WG395F64-BGA120T | EFM32WG395F64-B-BGA120 | Yes |
| EFM32WG840F128-QFN64 | EFM32WG840F128-B-QFN64R | Yes |
| EFM32WG840F128-QFN64T | EFM32WG840F128-B-QFN64 | Yes |
| EFM32WG840F256-QFN64 | EFM32WG840F256-B-QFN64R | Yes |
| EFM32WG840F256-QFN64T | EFM32WG840F256-B-QFN64 | Yes |
| EFM32WG840F64-QFN64 | EFM32WG840F64-B-QFN64R | Yes |
| EFM32WG840F64-QFN64T | EFM32WG840F64-B-QFN64 | Yes |
| EFM32WG842F128-QFP64 | EFM32WG842F128-B-QFP64R | Yes |
| EFM32WG842F128-QFP64T | EFM32WG842F128-B-QFP64 | Yes |
| EFM32WG842F256-QFP64 | EFM32WG842F256-B-QFP64R | Yes |
| EFM32WG842F256-QFP64T | EFM32WG842F256-B-QFP64 | Yes |
| EFM32WG842F64-QFP64 | EFM32WG842F64-B-QFP64R | Yes |
| EFM32WG842F64-QFP64T | EFM32WG842F64-B-QFP64 | Yes |
| EFM32WG880F128-QFP100 | EFM32WG880F128-B-QFP100R | Yes |
| EFM32WG880F128-QFP100T | EFM32WG880F128-B-QFP100 | Yes |
| EFM32WG880F256-QFP100 | EFM32WG880F256-B-QFP100R | Yes |
| EFM32WG880F256-QFP100T | EFM32WG880F256-B-QFP100 | Yes |
| EFM32WG880F64-QFP100 | EFM32WG880F64-B-QFP100R | Yes |
| EFM32WG880F64-QFP100T | EFM32WG880F64-B-QFP100 | Yes |
| EFM32WG890F128-BGA112 | EFM32WG890F128-B-BGA112R | Yes |
| EFM32WG890F128-BGA112T | EFM32WG890F128-B-BGA112 | Yes |
| EFM32WG890F256-BGA112 | EFM32WG890F256-B-BGA112R | Yes |
| EFM32WG890F256-BGA112T | EFM32WG890F256-B-BGA112 | Yes |
| EFM32WG890F64-BGA112 | EFM32WG890F64-B-BGA112R | Yes |
| EFM32WG890F64-BGA112T | EFM32WG890F64-B-BGA112 | Yes |
| EFM32WG895F128-BGA120 | EFM32WG895F128-B-BGA120R | Yes |
| EFM32WG895F128-BGA120T | EFM32WG895F128-B-BGA120 | Yes |
| EFM32WG895F256-BGA120 | EFM32WG895F256-B-BGA120R | Yes |
| EFM32WG895F256-BGA120T | EFM32WG895F256-B-BGA120 | Yes |
| EFM32WG895F64-BGA120 | EFM32WG895F64-B-BGA120R | Yes |
| EFM32WG895F64-BGA120T | EFM32WG895F64-B-BGA120 | Yes |
| EFM32WG900F256G-A-D1I | EFM32WG900F256G-B-D1I | Yes |
| EFM32WG940F128-QFN64 | EFM32WG940F128-B-QFN64R | Yes |
| EFM32WG940F128-QFN64T | EFM32WG940F128-B-QFN64 | Yes |
| EFM32WG940F256-QFN64 | EFM32WG940F256-B-QFN64R | Yes |
| EFM32WG940F256-QFN64T | EFM32WG940F256-B-QFN64 | Yes |
| EFM32WG940F64-QFN64 | EFM32WG940F64-B-QFN64R | Yes |
| EFM32WG940F64-QFN64T | EFM32WG940F64-B-QFN64 | Yes |
| EFM32WG942F128-QFP64 | EFM32WG942F128-B-QFP64R | Yes |
| EFM32WG942F128-QFP64T | EFM32WG942F128-B-QFP64 | Yes |
| EFM32WG942F256-QFP64 | EFM32WG942F256-B-QFP64R | Yes |
| EFM32WG942F256-QFP64T | EFM32WG942F256-B-QFP64 | Yes |
| EFM32WG942F64-QFP64 | EFM32WG942F64-B-QFP64R | Yes |
| EFM32WG942F64-QFP64T | EFM32WG942F64-B-QFP64 | Yes |
| EFM32WG980F128-QFP100 | EFM32WG980F128-B-QFP100R | Yes |
| EFM32WG980F128-QFP100T | EFM32WG980F128-B-QFP100 | Yes |
| EFM32WG980F256-QFP100 | EFM32WG980F256-B-QFP100R | Yes |
| EFM32WG980F256-QFP100T | EFM32WG980F256-B-QFP100 | Yes |
| EFM32WG980F64-QFP100 | EFM32WG980F64-B-QFP100R | Yes |
| EFM32WG980F64-QFP100T | EFM32WG980F64-B-QFP100 | Yes |
| EFM32WG990F128-BGA112 | EFM32WG990F128-B-BGA112R | Yes |
| EFM32WG990F128-BGA112T | EFM32WG990F128-B-BGA112 | Yes |
| EFM32WG990F256-BGA112 | EFM32WG990F256-B-BGA112R | Yes |
| EFM32WG990F256-BGA112T | EFM32WG990F256-B-BGA112 | Yes |
| EFM32WG990F64-BGA112 | EFM32WG990F64-B-BGA112R | Yes |
| EFM32WG990F64-BGA112T | EFM32WG990F64-B-BGA112 | Yes |
| EFM32WG995F128-BGA120 | EFM32WG995F128-B-BGA120R | Yes |
| EFM32WG995F128-BGA120T | EFM32WG995F128-B-BGA120 | Yes |
| EFM32WG995F256-BGA120 | EFM32WG995F256-B-BGA120R | Yes |
| EFM32WG995F256-BGA120T | EFM32WG995F256-B-BGA120 | Yes |
| EFM32WG995F64-BGA120 | EFM32WG995F64-B-BGA120R | Yes |
| EFM32WG995F64-BGA120T | EFM32WG995F64-B-BGA120 | Yes |

Last Date of Unchanged Product: 2/24/2020

Qualification Samples

Available upon request

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>.

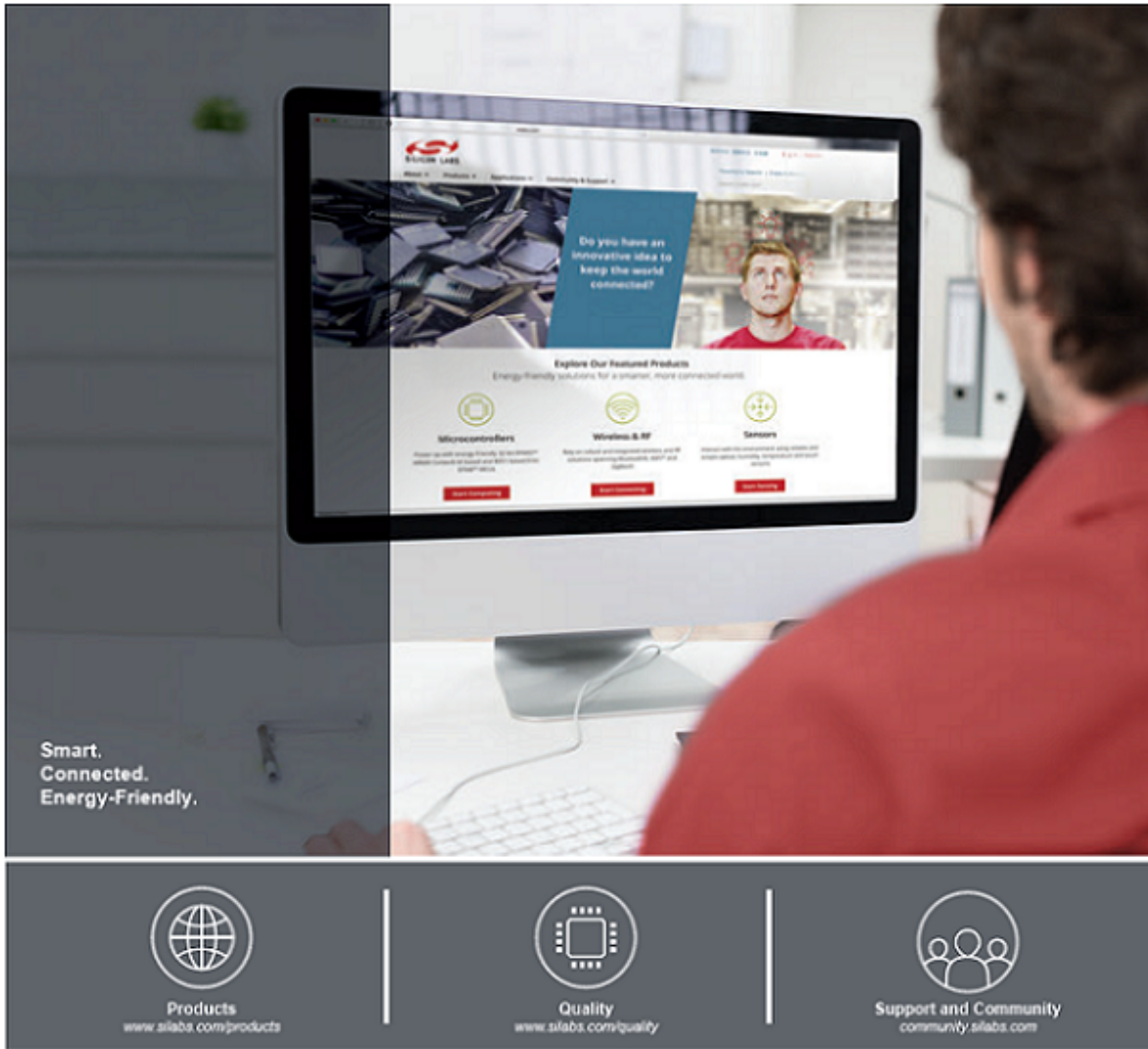
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Qualification Data

Available upon request



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