



# 191118665 EFM32LG Revision F PRCN and Datasheet V2.3 Release

**PRCN Issue Date:** 11/18/2019

**Effective Date:** 2/24/2020

**PCN Type:** Product Revision

## Description of Change

Silicon Labs is pleased to announce the release of revision F of the EFM32LG or Leopard Gecko devices. This revision is accompanied by the release of version 2.3 of the EFM32LG datasheet.

After the effective date Silicon Labs reserves the right to ship revision F devices in place of revision E. After the effective date revision E 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 2.3 of datasheet has the following changes:

- Updated Table 2.1. "Ordering Information" to replace the previous revision part numbers with the new -F designated part numbers
- In Table 4.15. ADC, corrected the minimum ADC input ON resistance from 1M $\Omega$  to 300 $\Omega$
- In Table 4.15. ADC, added maximum ADC input ON resistance of 800 $\Omega$
- In Table 4.17. OPAMP, added load resistance for OPA2 with a minimum value of 100 $\Omega$
- In Alternate Functionality Overview tables, restored DAC0\_P0, DAC0\_P1, DAC0\_N0 and DAC0\_N1 alternate functionalities for all the devices
- Removed MSL information (Moisture Sensitivity Level). Instead, MSL information can be found in the Qual report that is available on the Silicon Labs website.
- 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>.

## Reason for Change

Release of revision F devices to address errata items.

## Impact on Form, Fit, Function, Quality, Reliability

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

## Product Identification

Existing Part #	Replacement Part #	DropInCompInd.
EFM32LG230F64G-E-QFN64	EFM32LG230F64G-F-QFN64	Yes
EFM32LG230F64G-E-QFN64R	EFM32LG230F64G-F-QFN64R	Yes
EFM32LG230F128G-E-QFN64	EFM32LG230F128G-F-QFN64	Yes
EFM32LG230F128G-E-QFN64R	EFM32LG230F128G-F-QFN64R	Yes
EFM32LG230F256G-E-QFN64	EFM32LG230F256G-F-QFN64	Yes
EFM32LG230F256G-E-QFN64R	EFM32LG230F256G-F-QFN64R	Yes

EFM32LG232F64G-E-QFP64	EFM32LG232F64G-F-QFP64	Yes
EFM32LG232F64G-E-QFP64R	EFM32LG232F64G-F-QFP64R	Yes
EFM32LG232F128G-E-QFP64	EFM32LG232F128G-F-QFP64	Yes
EFM32LG232F128G-E-QFP64R	EFM32LG232F128G-F-QFP64R	Yes
EFM32LG232F256G-E-QFP64	EFM32LG232F256G-F-QFP64	Yes
EFM32LG232F256G-E-QFP64R	EFM32LG232F256G-F-QFP64R	Yes
EFM32LG280F64G-E-QFP100	EFM32LG280F64G-F-QFP100	Yes
EFM32LG280F64G-E-QFP100R	EFM32LG280F64G-F-QFP100R	Yes
EFM32LG280F128G-E-QFP100	EFM32LG280F128G-F-QFP100	Yes
EFM32LG280F128G-E-QFP100R	EFM32LG280F128G-F-QFP100R	Yes
EFM32LG280F256G-E-QFP100	EFM32LG280F256G-F-QFP100	Yes
EFM32LG280F256G-E-QFP100R	EFM32LG280F256G-F-QFP100R	Yes
EFM32LG290F64G-E-BGA112	EFM32LG290F64G-F-BGA112	Yes
EFM32LG290F64G-E-BGA112R	EFM32LG290F64G-F-BGA112R	Yes
EFM32LG290F128G-E-BGA112	EFM32LG290F128G-F-BGA112	Yes
EFM32LG290F128G-E-BGA112R	EFM32LG290F128G-F-BGA112R	Yes
EFM32LG290F256G-E-BGA112	EFM32LG290F256G-F-BGA112	Yes
EFM32LG290F256G-E-BGA112R	EFM32LG290F256G-F-BGA112R	Yes
EFM32LG295F64G-E-BGA120	EFM32LG295F64G-F-BGA120	Yes
EFM32LG295F64G-E-BGA120R	EFM32LG295F64G-F-BGA120R	Yes
EFM32LG295F128G-E-BGA120	EFM32LG295F128G-F-BGA120	Yes
EFM32LG295F128G-E-BGA120R	EFM32LG295F128G-F-BGA120R	Yes
EFM32LG295F256G-E-BGA120	EFM32LG295F256G-F-BGA120	Yes
EFM32LG295F256G-E-BGA120R	EFM32LG295F256G-F-BGA120R	Yes
EFM32LG330F64G-E-QFN64	EFM32LG330F64G-F-QFN64	Yes
EFM32LG330F64G-E-QFN64R	EFM32LG330F64G-F-QFN64R	Yes
EFM32LG330F128G-E-QFN64	EFM32LG330F128G-F-QFN64	Yes
EFM32LG330F128G-E-QFN64R	EFM32LG330F128G-F-QFN64R	Yes
EFM32LG330F256G-E-QFN64	EFM32LG330F256G-F-QFN64	Yes
EFM32LG330F256G-E-QFN64R	EFM32LG330F256G-F-QFN64R	Yes
EFM32LG332F64G-E-QFP64	EFM32LG332F64G-F-QFP64	Yes
EFM32LG332F64G-E-QFP64R	EFM32LG332F64G-F-QFP64R	Yes
EFM32LG332F128G-E-QFP64	EFM32LG332F128G-F-QFP64	Yes
EFM32LG332F128G-E-QFP64R	EFM32LG332F128G-F-QFP64R	Yes
EFM32LG332F256G-E-QFP64	EFM32LG332F256G-F-QFP64	Yes
EFM32LG332F256G-E-QFP64R	EFM32LG332F256G-F-QFP64R	Yes
EFM32LG360F64G-E-CSP81	EFM32LG360F64G-F-CSP81	Yes
EFM32LG360F64G-E-CSP81R	EFM32LG360F64G-F-CSP81R	Yes
EFM32LG360F128G-E-CSP81	EFM32LG360F128G-F-CSP81	Yes
EFM32LG360F128G-E-CSP81R	EFM32LG360F128G-F-CSP81R	Yes
EFM32LG360F256G-E-CSP81	EFM32LG360F256G-F-CSP81	Yes
EFM32LG360F256G-E-CSP81R	EFM32LG360F256G-F-CSP81R	Yes
EFM32LG380F64G-E-QFP100	EFM32LG380F64G-F-QFP100	Yes
EFM32LG380F64G-E-QFP100R	EFM32LG380F64G-F-QFP100R	Yes
EFM32LG380F128G-E-QFP100	EFM32LG380F128G-F-QFP100	Yes
EFM32LG380F128G-E-QFP100R	EFM32LG380F128G-F-QFP100R	Yes
EFM32LG380F256G-E-QFP100	EFM32LG380F256G-F-QFP100	Yes
EFM32LG380F256G-E-QFP100R	EFM32LG380F256G-F-QFP100R	Yes
EFM32LG390F64G-E-BGA112	EFM32LG390F64G-F-BGA112	Yes
EFM32LG390F64G-E-BGA112R	EFM32LG390F64G-F-BGA112R	Yes
EFM32LG390F128G-E-BGA112	EFM32LG390F128G-F-BGA112	Yes
EFM32LG390F128G-E-BGA112R	EFM32LG390F128G-F-BGA112R	Yes
EFM32LG390F256G-E-BGA112	EFM32LG390F256G-F-BGA112	Yes
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EFM32LG395F64G-E-BGA120	EFM32LG395F64G-F-BGA120	Yes
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EFM32LG395F128G-E-BGA120	EFM32LG395F128G-F-BGA120	Yes
EFM32LG395F128G-E-BGA120R	EFM32LG395F128G-F-BGA120R	Yes
EFM32LG395F256G-E-BGA120	EFM32LG395F256G-F-BGA120	Yes
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EFM32LG840F64G-E-QFN64R	EFM32LG840F64G-F-QFN64R	Yes
EFM32LG840F128G-E-QFN64	EFM32LG840F128G-F-QFN64	Yes
EFM32LG840F128G-E-QFN64R	EFM32LG840F128G-F-QFN64R	Yes
EFM32LG840F256G-E-QFN64	EFM32LG840F256G-F-QFN64	Yes
EFM32LG840F256G-E-QFN64R	EFM32LG840F256G-F-QFN64R	Yes
EFM32LG842F64G-E-QFP64	EFM32LG842F64G-F-QFP64	Yes

EFM32LG842F64G-E-QFP64R	EFM32LG842F64G-F-QFP64R	Yes
EFM32LG842F128G-E-QFP64	EFM32LG842F128G-F-QFP64	Yes
EFM32LG842F128G-E-QFP64R	EFM32LG842F128G-F-QFP64R	Yes
EFM32LG842F256G-E-QFP64	EFM32LG842F256G-F-QFP64	Yes
EFM32LG842F256G-E-QFP64R	EFM32LG842F256G-F-QFP64R	Yes
EFM32LG880F64G-E-QFP100	EFM32LG880F64G-F-QFP100	Yes
EFM32LG880F64G-E-QFP100R	EFM32LG880F64G-F-QFP100R	Yes
EFM32LG880F128G-E-QFP100	EFM32LG880F128G-F-QFP100	Yes
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EFM32LG880F256G-E-QFP100R	EFM32LG880F256G-F-QFP100R	Yes
EFM32LG890F64G-E-BGA112	EFM32LG890F64G-F-BGA112	Yes
EFM32LG890F64G-E-BGA112R	EFM32LG890F64G-F-BGA112R	Yes
EFM32LG890F128G-E-BGA112	EFM32LG890F128G-F-BGA112	Yes
EFM32LG890F128G-E-BGA112R	EFM32LG890F128G-F-BGA112R	Yes
EFM32LG890F256G-E-BGA112	EFM32LG890F256G-F-BGA112	Yes
EFM32LG890F256G-E-BGA112R	EFM32LG890F256G-F-BGA112R	Yes
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EFM32LG895F64G-E-BGA120R	EFM32LG895F64G-F-BGA120R	Yes
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EFM32LG895F128G-E-BGA120R	EFM32LG895F128G-F-BGA120R	Yes
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EFM32LG940F128G-E-QFN64R	EFM32LG940F128G-F-QFN64R	Yes
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EFM32LG942F128G-E-QFP64	EFM32LG942F128G-F-QFP64	Yes
EFM32LG942F128G-E-QFP64R	EFM32LG942F128G-F-QFP64R	Yes
EFM32LG942F256G-E-QFP64	EFM32LG942F256G-F-QFP64	Yes
EFM32LG942F256G-E-QFP64R	EFM32LG942F256G-F-QFP64R	Yes
EFM32LG980F64G-E-QFP100	EFM32LG980F64G-F-QFP100	Yes
EFM32LG980F64G-E-QFP100R	EFM32LG980F64G-F-QFP100R	Yes
EFM32LG980F128G-E-QFP100	EFM32LG980F128G-F-QFP100	Yes
EFM32LG980F128G-E-QFP100R	EFM32LG980F128G-F-QFP100R	Yes
EFM32LG980F256G-E-QFP100	EFM32LG980F256G-F-QFP100	Yes
EFM32LG980F256G-E-QFP100R	EFM32LG980F256G-F-QFP100R	Yes
EFM32LG990F64G-E-BGA112	EFM32LG990F64G-F-BGA112	Yes
EFM32LG990F64G-E-BGA112R	EFM32LG990F64G-F-BGA112R	Yes
EFM32LG990F128G-E-BGA112	EFM32LG990F128G-F-BGA112	Yes
EFM32LG990F128G-E-BGA112R	EFM32LG990F128G-F-BGA112R	Yes
EFM32LG990F256G-E-BGA112	EFM32LG990F256G-F-BGA112	Yes
EFM32LG990F256G-E-BGA112R	EFM32LG990F256G-F-BGA112R	Yes
EFM32LG995F64G-E-BGA120	EFM32LG995F64G-F-BGA120	Yes
EFM32LG995F64G-E-BGA120R	EFM32LG995F64G-F-BGA120R	Yes
EFM32LG995F128G-E-BGA120	EFM32LG995F128G-F-BGA120	Yes
EFM32LG995F128G-E-BGA120R	EFM32LG995F128G-F-BGA120R	Yes
EFM32LG995F256G-E-BGA120	EFM32LG995F256G-F-BGA120	Yes
EFM32LG995F256G-E-BGA120R	EFM32LG995F256G-F-BGA120R	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>.

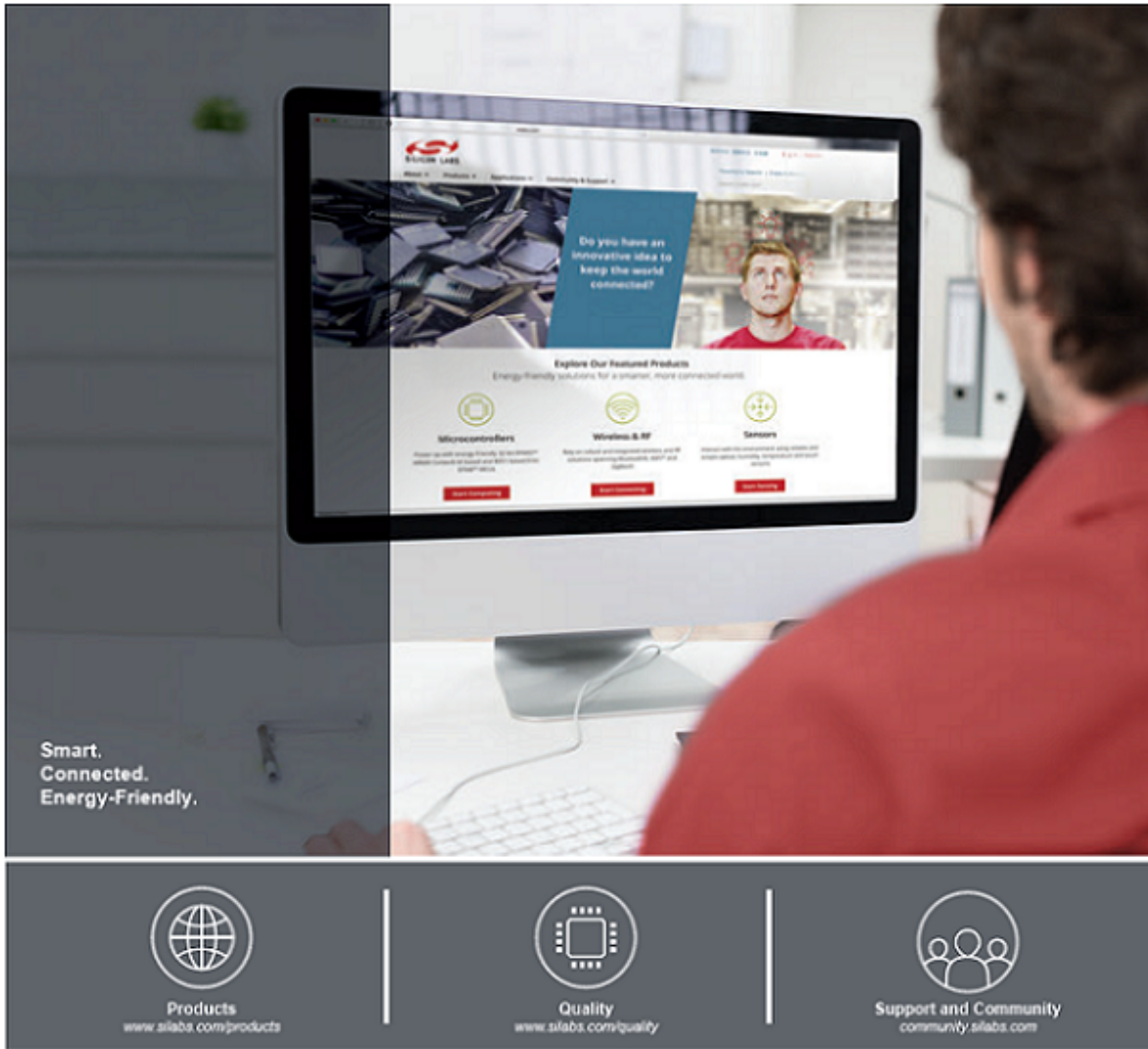
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## Qualification Data

Available upon request.



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