



191211679 EFM32TG Series 0 Revision D and Datasheet v2.1 Release for PORBOD

PRCN Issue Date: 12/11/2019

Effective Date: 3/17/2020

PCN Type: Product Revision

Description of Change

Silicon Labs is pleased to announce the release of silicon revision D devices for the EFM32TG series 0 devices as well as datasheet version 2.1.

After the effective date, Silicon Labs reserves the right not to accept orders on the old revision and 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 2.1 of the datasheet has the following changes:

- Added SysTick System Timer under the core feature list
- Updated Table 2.1. Ordering Information with new revision D designated devices
- In Table 4.1. Absolute Maximum Ratings removed footnote on storage temperature
- In Table 4.1. Absolute Maximum Ratings Added maximum current sunk into any I/O with a value of 100 mA
- In Table 4.1. Absolute Maximum Ratings Added maximum current sourced into any I/O with a value of -100 mA
- In Table 4.6. Flash added maximum value for Flash word write cycles between erase with a value of 2 cycles
- In Table 4.14 ADC updated minimum ADC ON resistance from 1 MOhm to 300 Ohm
- In Table 4.14 ADC added maximum ADC ON resistance specification with a value of 800 Ohm
- In Table 4.15 DAC added maximum load current specification with a value of 11 mA
- Corrected typos in pin numbers for QFN24, QFN32 and QFN64

Reason for Change

Release of silicon revision D devices to address the 2 errata items listed in the change description. All datasheet changes were made with the most recent characterization data.

Impact on Form, Fit, Function, Quality, Reliability

Revision D corrects the 2 errata items listed in the Change Description section; revision D devices will now behave as expected on power on reset and brown out events. There is no change to form, fit, quality and reliability. All other datasheets changes are formatting, typos, or changing specs due to more recent characterization data.

Product Identification

Existing Part #	Replacement Part #	DropInCompInd.
EFM32TG108F16-QFN24T	EFM32TG108F16-D-QFN24	Yes
EFM32TG108F16-QFN24	EFM32TG108F16-D-QFN24R	Yes
EFM32TG108F32-QFN24T	EFM32TG108F32-D-QFN24	Yes
EFM32TG108F32-QFN24	EFM32TG108F32-D-QFN24R	Yes
EFM32TG108F4-QFN24T	EFM32TG108F4-D-QFN24	Yes
EFM32TG108F4-QFN24	EFM32TG108F4-D-QFN24R	Yes
EFM32TG108F8-QFN24T	EFM32TG108F8-D-QFN24	Yes
EFM32TG108F8-QFN24	EFM32TG108F8-D-QFN24R	Yes

EFM32TG110F16-QFN24T	EFM32TG110F16-D-QFN24	Yes
EFM32TG110F16-QFN24	EFM32TG110F16-D-QFN24R	Yes
EFM32TG110F32-QFN24T	EFM32TG110F32-D-QFN24	Yes
EFM32TG110F32-QFN24	EFM32TG110F32-D-QFN24R	Yes
EFM32TG110F4-QFN24T	EFM32TG110F4-D-QFN24	Yes
EFM32TG110F4-QFN24	EFM32TG110F4-D-QFN24R	Yes
EFM32TG110F8-QFN24T	EFM32TG110F8-D-QFN24	Yes
EFM32TG110F8-QFN24	EFM32TG110F8-D-QFN24R	Yes
EFM32TG210F16-QFN32T	EFM32TG210F16-D-QFN32	Yes
EFM32TG210F16-QFN32	EFM32TG210F16-D-QFN32R	Yes
EFM32TG210F32-QFN32T	EFM32TG210F32-D-QFN32	Yes
EFM32TG210F32-QFN32	EFM32TG210F32-D-QFN32R	Yes
EFM32TG210F8-QFN32T	EFM32TG210F8-D-QFN32	Yes
EFM32TG210F8-QFN32	EFM32TG210F8-D-QFN32R	Yes
EFM32TG222F16-QFP48T	EFM32TG222F16-D-QFP48	Yes
EFM32TG222F16-QFP48	EFM32TG222F16-D-QFP48R	Yes
EFM32TG222F32-QFP48T	EFM32TG222F32-D-QFP48	Yes
EFM32TG222F32-QFP48	EFM32TG222F32-D-QFP48R	Yes
EFM32TG222F8-QFP48T	EFM32TG222F8-D-QFP48	Yes
EFM32TG222F8-QFP48	EFM32TG222F8-D-QFP48R	Yes
EFM32TG225F16-BGA48T	EFM32TG225F16-D-BGA48	Yes
EFM32TG225F16-BGA48	EFM32TG225F16-D-BGA48R	Yes
EFM32TG225F32-BGA48T	EFM32TG225F32-D-BGA48	Yes
EFM32TG225F32-BGA48	EFM32TG225F32-D-BGA48R	Yes
EFM32TG225F8-BGA48T	EFM32TG225F8-D-BGA48	Yes
EFM32TG225F8-BGA48	EFM32TG225F8-D-BGA48R	Yes
EFM32TG225P1237F32G-C	EFM32TG225P1237F32G-D	Yes
EFM32TG225P1237F32G-CR	EFM32TG225P1237F32G-DR	Yes
EFM32TG230F16-QFN64T	EFM32TG230F16-D-QFN64	Yes
EFM32TG230F16-QFN64	EFM32TG230F16-D-QFN64R	Yes
EFM32TG230F32-QFN64T	EFM32TG230F32-D-QFN64	Yes
EFM32TG230F32-QFN64	EFM32TG230F32-D-QFN64R	Yes
EFM32TG230F8-QFN64T	EFM32TG230F8-D-QFN64	Yes
EFM32TG230F8-QFN64	EFM32TG230F8-D-QFN64R	Yes
EFM32TG232F16-QFP64T	EFM32TG232F16-D-QFP64	Yes
EFM32TG232F16-QFP64	EFM32TG232F16-D-QFP64R	Yes
EFM32TG232F32-QFP64T	EFM32TG232F32-D-QFP64	Yes
EFM32TG232F32-QFP64	EFM32TG232F32-D-QFP64R	Yes
EFM32TG232F8-QFP64T	EFM32TG232F8-D-QFP64	Yes
EFM32TG232F8-QFP64	EFM32TG232F8-D-QFP64R	Yes
EFM32TG822F16-QFP48T	EFM32TG822F16-D-QFP48	Yes
EFM32TG822F16-QFP48	EFM32TG822F16-D-QFP48R	Yes
EFM32TG822F32-QFP48T	EFM32TG822F32-D-QFP48	Yes
EFM32TG822F32-QFP48	EFM32TG822F32-D-QFP48R	Yes
EFM32TG822F8-QFP48T	EFM32TG822F8-D-QFP48	Yes
EFM32TG822F8-QFP48	EFM32TG822F8-D-QFP48R	Yes
EFM32TG825F16-BGA48T	EFM32TG825F16-D-BGA48	Yes
EFM32TG825F16-BGA48	EFM32TG825F16-D-BGA48R	Yes
EFM32TG825F32-BGA48T	EFM32TG825F32-D-BGA48	Yes
EFM32TG825F32-BGA48	EFM32TG825F32-D-BGA48R	Yes
EFM32TG825F8-BGA48T	EFM32TG825F8-D-BGA48	Yes
EFM32TG825F8-BGA48	EFM32TG825F8-D-BGA48R	Yes
EFM32TG840F16-QFN64T	EFM32TG840F16-D-QFN64	Yes
EFM32TG840F16-QFN64	EFM32TG840F16-D-QFN64R	Yes
EFM32TG840F32-QFN64T	EFM32TG840F32-D-QFN64	Yes
EFM32TG840F32-QFN64	EFM32TG840F32-D-QFN64R	Yes
EFM32TG840F8-QFN64T	EFM32TG840F8-D-QFN64	Yes
EFM32TG840F8-QFN64	EFM32TG840F8-D-QFN64R	Yes
EFM32TG842F16-QFP64T	EFM32TG842F16-D-QFP64	Yes
EFM32TG842F16-QFP64	EFM32TG842F16-D-QFP64R	Yes
EFM32TG842F32-QFP64T	EFM32TG842F32-D-QFP64	Yes
EFM32TG842F32-QFP64	EFM32TG842F32-D-QFP64R	Yes
EFM32TG842F8-QFP64T	EFM32TG842F8-D-QFP64	Yes
EFM32TG842F8-QFP64	EFM32TG842F8-D-QFP64R	Yes

Last Date of Unchanged Product: 3/17/2020

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>.

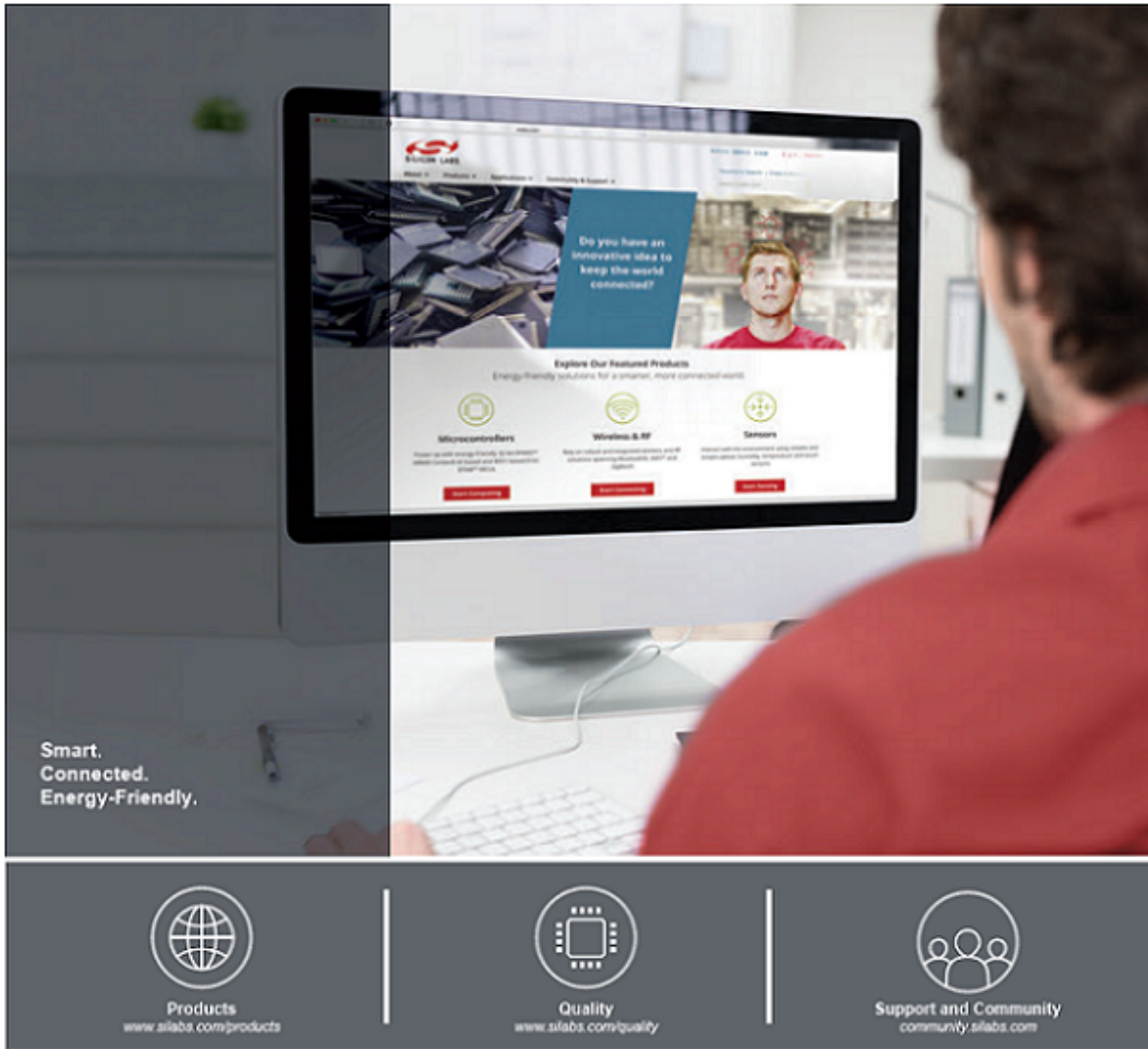
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Qualification Data

Available upon request



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