

EFM32 Tiny Gecko Starter Kit

EFM32TG-STK3300

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The EFM32 Tiny Gecko Starter Kit is a platform for rapid prototyping of ultra low power microcontroller applications. It consists of a single board with a EFM32TG840F32 MCU and some peripherals specifically chosen to demonstrate the Tiny Gecko Low Energy Sensor Interface (LESENSE). An ambient light sensor to sense differences in light level and an inductive-capacitive metal sensor that can sense proximity to metal are mounted on the board. In addition to this a 160 segment LCD and a capacitive touch slider is included along with user buttons and a LED and a software development environment. All available I/O is placed on breakout pads for easy access.

The development kit contains a unique Advanced Energy Monitoring (AEM) system that allows designers to have full control over their application's energy consumption.

The on-board J-Link debugger enables extremely simple setup. The onboard peripherals, breakout pads and the software development environment makes the starter kit a complete basis for getting started with low energy application design and prototyping.



Advanced Energy Monitor (AEM)

- · Precise measurement of current and voltage
- 0.1 µA to 50 mA measurement range
- The AEM measures both the voltage and current of the VMCU rail
- Always available when the kit is connected to USB

Software

- · Comprehensive set of board support functions
- 32 KB evaluation versions of:
 - IAR Embedded Workbench®

User Interface

- 160 segment LCD
- 1 User LED
- 2 pushbutton switches
- 1 system reset pushbutton switch
- Touch slider
- · Inductive-Capacitive metal sensor
- Ambient light sensor
- EFM32 Op-amp module evaluation footprint

Debugging

- On-board SEGGER J-Link USB debugger
- ARM 20 pin JTAG/SWD Debug in/out connector
- Debugging when MCU is powered from battery (debugger still needs USB-power)

Power

- Two separate power domains allowing for accurate current and voltage measurements of the application energy consumption.
- 5V USB supply
- 3V 20mm Coin cell battery supply.

Available I/O

- Expansion header for plug-in modules.
- Breakout pads:
- All EFM32 GPIO not used by LCD
- 3V3, 5V unregulated, VMCU, and GND

MCU support

- 32.768 kHz crystal
- 32 MHz crystal

Selectable Supply

• Switch to select between regulated 3.3V supply from USB or unregulated supply from battery.





1 Ordering Information

Table 1.1. Available Products

Ordering Code	Description
EFM32TG-STK3300 EFM32 Tiny Gecko Starter Kit with EFM32TG840F32 MCU	

1.1 Energy Micro Corporate Headquarters

Postal Address	Visitor Address	Technical Support
Energy Micro AS P.O. Box 4633 Nydalen N-0405 Oslo NORWAY	Energy Micro AS Sandakerveien 118 N-0484 Oslo NORWAY	support.energymicro.com Phone: +47 40 10 03 01

www.energymicro.com

Phone: +47 23 00 98 00 Fax: + 47 23 00 98 01

1.2 Global Contacts

Visit **www.energymicro.com** for information on global distributors and representatives or contact **sales@energymicro.com** for additional information.

	Americas	Europe, Middle East and Africa	Asia and Pacific
	www.energymicro.com/americas	www.energymicro.com/emea	www.energymicro.com/asia