EFM®32

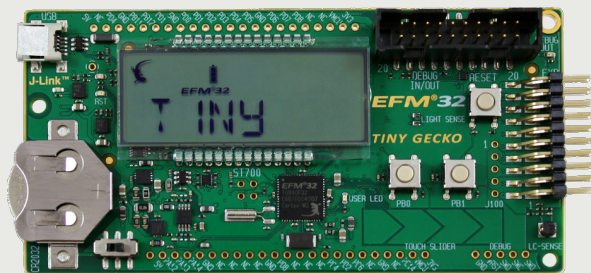## ... the world's most energy friendly microcontrollers

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.

ENERGY micro®

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

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Phone: +47 23 00 98 00
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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