

# EFM<sup>®</sup>32

... the world's most energy friendly microcontrollers

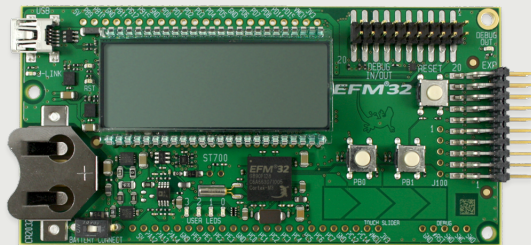
## EFM32 Gecko Starter Kit

EFM32-G8xx-STK

The EFM32 Gecko Starter Kit is a platform for rapid prototyping of ultra low power microcontroller applications. It consists of a single board with a EFM32G890 MCU and some peripherals like a 160 segment LCD, along with a comprehensive 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. Combined with the possibility to isolate the motherboard's components not relevant for the end application, designers can optimize all variables that will make their application as energy efficient as possible.

The on-board emulator enables extremely simple setup, and combined with the peripherals, the breakout pads and the software development environment, the development kit gives a complete basis for application design and prototyping.



- **Advanced Energy Monitor (AEM)**
  - Precise measurement of current and voltage
  - 0.1  $\mu$ A to 50 mA measurement range
  - Always available when running under USB power
- **Software**
  - Comprehensive set of board support functions
  - 32 KB evaluation versions of:
    - KEIL<sup>™</sup> MDK-ARM Microcontroller Development Kit
    - IAR Embedded Workbench<sup>®</sup>
- **User Interface**
  - 160 segment LCD
  - 4 User LEDs
  - 2 pushbutton switches
  - 1 system reset pushbutton switch
  - Touch slider
  - Touch Gecko
- **Debugging**
  - On-board SEGGER J-Link USB emulator
  - ARM 20 pin JTAG/SWD standard Debug in/out connector
- **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 measured, and GND
- **MCU support**
  - 32.768 kHz crystal
  - 32 MHz crystal
- **Setup Control**
  - Switch to disconnect the battery.

# 1 Ordering Information

**Table 1.1. Available Products**

Ordering Code	Description
EFM32-G8xx-STK	EFM32 Gecko Starter Kit with EFM32G290F128 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-0405 Oslo NORWAY	support@energymicro.com Phone: +47 40 10 03 01

**www.energymicro.com**

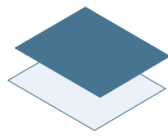
Phone: +47 23 00 98 00

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	EMEA	APAC
Energy Micro AS P.O. Box 4633 Nydalen N-0405 Oslo NORWAY Phone: +47 23 00 98 00 Fax: + 47 23 00 98 01	Energy Micro AS P.O. Box 4633 Nydalen N-0405 Oslo NORWAY Phone: +44 (0) 7789861338 Fax: + 47 23 00 98 01	Energy Micro AS P.O. Box 4633 Nydalen N-0405 Oslo NORWAY Mob (China): +86 13602611177 Mob (Hong Kong): +852 90167782 Fax: + 47 23 00 98 01



**ENERGY**<sup>®</sup>  
*micro*

*Energy Micro AS  
Sandakerveien 118  
P.O. Box 4633 Nydalen  
N-0405 Oslo  
Norway*

*[www.energymicro.com](http://www.energymicro.com)*