## Silicon Labs' EFM32 Giant Gecko Starter Kit

## The EFM32GG-STK3700 provides

- Evaluation of the world's most energy friendly microcontroller EFM32 Gecko family
- On board: EFM32GG990F1024 with ARM Cortex M3, 48 MHz, 1024 kB Flash. 128 kB RAM, LCD Controller, USB, Low Energy Sense, Backup Power Domain, etc.
- 200 µA/MHz in active mode and Deep Sleep Mode with 1.1 µA with various functions running in this mode on 1 µA level
- Debugging with a SEGGER J-Link debugger
- Energy Debugging with an integrated Advanced Energy Monitoring (AEM) and Voltage Monitoring



## Würth Elektronik more than you expect

### More of our smallest inductors:

- WE-TPC SMD Shielded Tiny Power Inductors (Size 2811, 2813, 2828 and 3510)
- WE-EHPI Energy Harvesting Power Inductor
- WE-PMI Power Multilayer Inductor

## More components designed for sensor network:

WE-KI SMD Wire Wound Ceramic Inductor WE-MK Multilayer Ceramic SMD Inductor



# **Energy Harvesting** Solution To Go

## More LTCC components:

- WE-LPF Multilayer Chip Low-Pass Filter
- WE-BPF Multilayer Chip Band-Pass Filter
- WE-BAL Multilayer Chip Balun
- WE-MCA Multilayer Chip Antenna

## More chip bead ferrites:

WE-CBF Chip Bead Ferrites

More connectors: WERI Connectors

www.we-online.com

Würth Elektronik offers more complete solutions, such as sample kits with continuous free re-fills, EMC lab support, seminars, technical design books and much more!

Want more info about your kit? Please visit www.we-online.com/harvest



Silicon Labs' EFM32 **Giant Gecko Starter Kit** 

Linear Technology Multi-Source Energy Harvester

Most efficient passive components



more than you expect

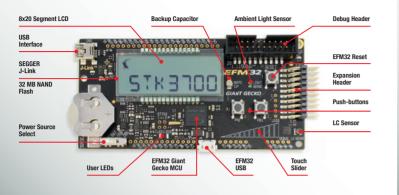
WÜRTH ELEKTRONĪK







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## To start your energy harvesting evaluation, please

- Download and install Simplicity Studio (www.silabs.com/simplicity-studio)
- Download and install the ARM Cortex-M development tools of your choice
- Simplicity Studio includes all tools, drivers, code and documents you need: - energyAware Commander – MCU, kit and prototype programmer and updater - energyAware Profiler - real-time energy debugger and current monitor - all the free application notes and software examples in one place - EFM32 datasheets, kit manuals, presentations and brochures

#### On-board solar cell and thermo electric

generator

Features:

- Connector for optional inductive or piezoelectric generator
- Four harvesters for different energy source types

## **Getting Started:**

Decide for your energy harvesting source

Linear Technology Multi-Source

Thermo Electric

Generator

Buffer Cap Selector

Power

111111

Supply Supervisor

**Energy Harvester** 

Set the appropriate jumper JP1 to JP4 to feed the harvested source to the power connector

More information on www.we-online.com/harvest

 Optionally set jumper JP9 to ON for an extended buffer capacitance for all harvesters OR

Source Selector

set jumper JP10 to ON for an extended buffer capacitance for the TEG harvester

Connector

Inductive Generator

Solar Cell

Piezoelectric

TEG Harvester

Diode Drop / Solar Harvester

Solar Harvester

Harvester

Piezoelectric

 Connect your application to the power connector

## **Caution:**

- Only one source selector MUST be set at a time
- Only one buffer cap selector MUST be set to ON at a time







More information on www.we-online.com/harvest

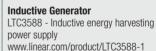




LTC3588 - Piezoelectric energy harvesting power supply www.linear.com/product/LTC3588-1

Piezo

Magnetic





www.we-online.com