Thunderboard™ BG22 Kit

SLTB010A

Thunderboard BG22 is a small form-factor, optimized development platform for adding Bluetooth connectivity to battery-powered IoT products.

Buy Now

Get Started with Thunderboard BG22

Learn More

Step by step on how to order the Thunderboard IoT development Kit and install the app.

Thunderboard BG22 Features

Small Form Factor Thunderboard

- EXP compatible breakouts

Target device

- EFR32BG22
    - Secure Bluetooth 5.2 SoCs for high-volume products
    - 76.8 MHz, ARM Cortex-M33 with 512 kB of flash and 32 kB RAM
    - Bluetooth 5.2 Radio with supported for direction finding and LE coded PHY
- 38.4 MHz HFXO crystal
- 32.768 kHz LFXO crystal
- 2.4 GHz matching network and chip antenna

On-board Board controller

- J-Link debugger
    - SWD physical layer
- Packet trace over UART/async protocol
- Virtual COM with hardware flow control

USB Micro-B connector for debug connection

User interface features:

- 1x button (with EM2 wake-up)
- 1x LED

Data storage / OTA support

- 8 Mbit SPI flash

Power save features

- Controllable and separate power domain(s) for sensors

Mobile app for Android and iOS

- View sensor data, control LEDs and detect button pushes
- iOS app implemented in swift
- Android app implemented in native code
- Source code available at GitHub

Sensors

- Relative humidity & temperature sensor: Si7021
- UV and ambient light sensor: Si1133
- Hall effect sensor: Si7210
- 6-axis IMU: Invensense ICM-20648

Mini Simplicity Debug Connector (SLSDA001A compatible) with access to:

- AEM
- PTI
- VCOM
- SWD

Thunderboard BG22 Resources

Thunderboard BG22 Kit User's Guide

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Android App Source Code

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