



AS_DEVBLES02.KIT FleX-BLE Dev Kit Quick Start Guide

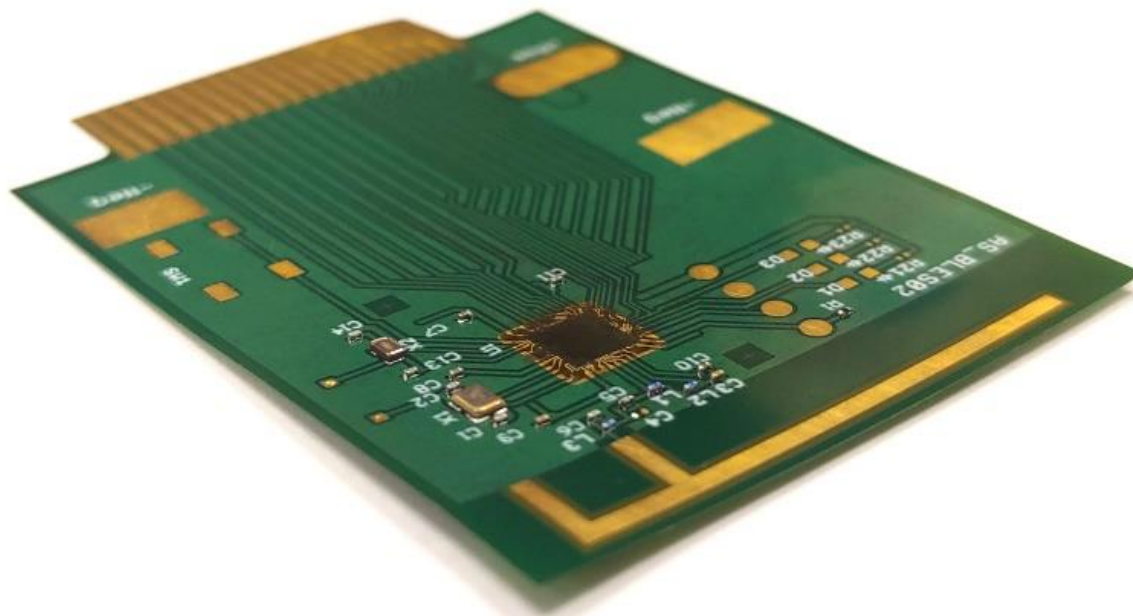
April 2021

Additional information is available for download at:

www.americansemi.com/flex-ble-dev-kit.html

The FleX-BLE Dev Kit comes pre-programmed for immediate operation in as a Bluetooth[®] Low-Energy (BLE) beacon. This guide will allow you to begin using your new FleX-BLE Development Kit to communicate data to an Android smartphone in 2 easy steps:

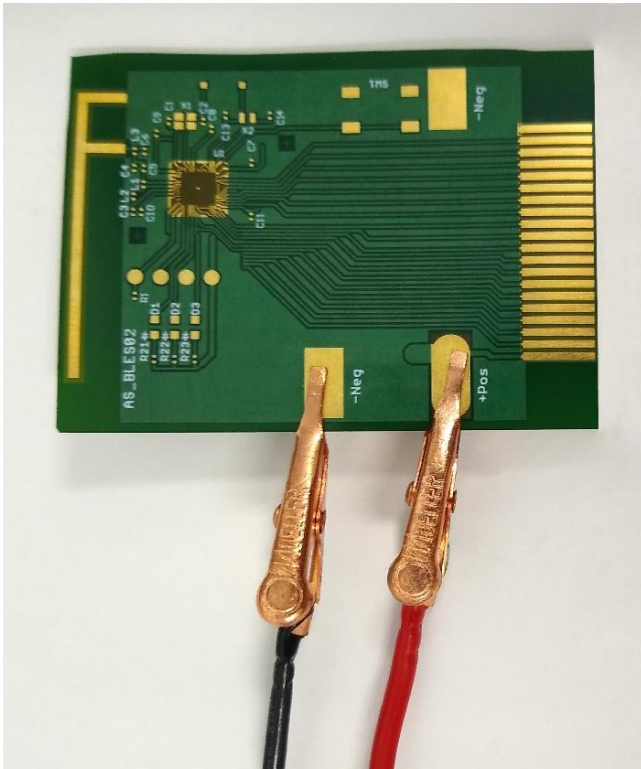
1. Apply power to the FleX-BLE Dev Kit
2. Android Users: Install and run the *FleX-BLE Beacon* smartphone app
3. iPhone Users: No compatible app is currently available, but could be developed by interested users



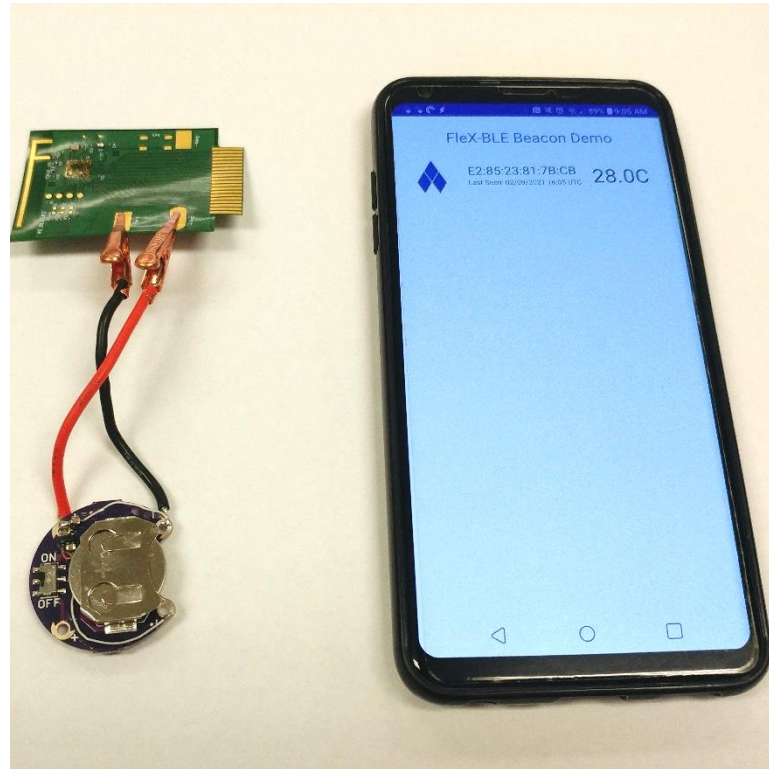
Step 1: Powering the FleX-BLE Dev Kit

- The FleX-BLE requires a 2.5V to 3.6V power supply for operation
- Connect power and ground to the Dev Kit using flat spade clips to the +Pos and -Neg tabs (below left)
- With power supplied, the FleX-BLE immediately begins transmitting wireless data via Bluetooth
- Do not bend the FleX-BLE Dev Kit to a radius smaller than 20mm

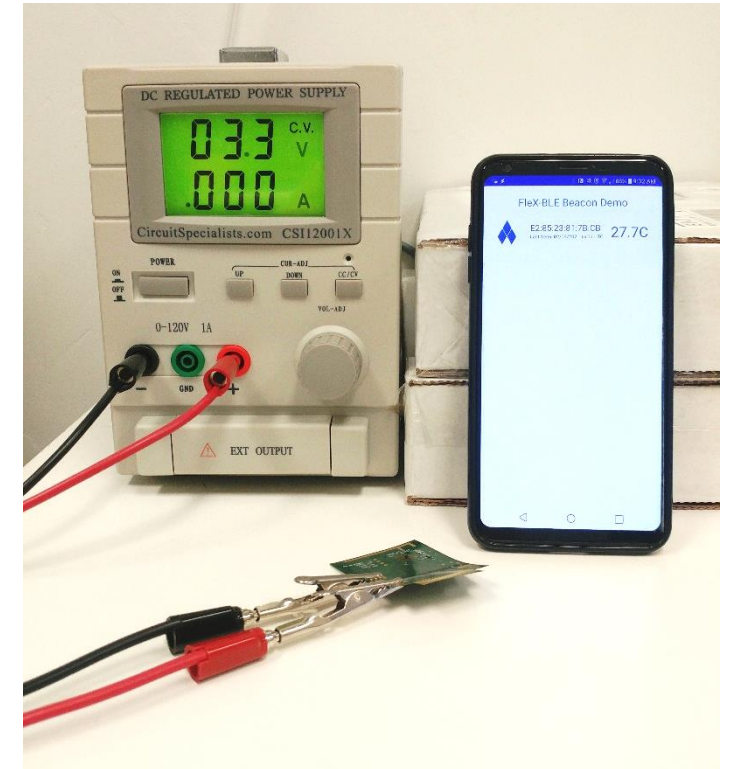
Power Connection Locations



3.0V Coin Cell Battery



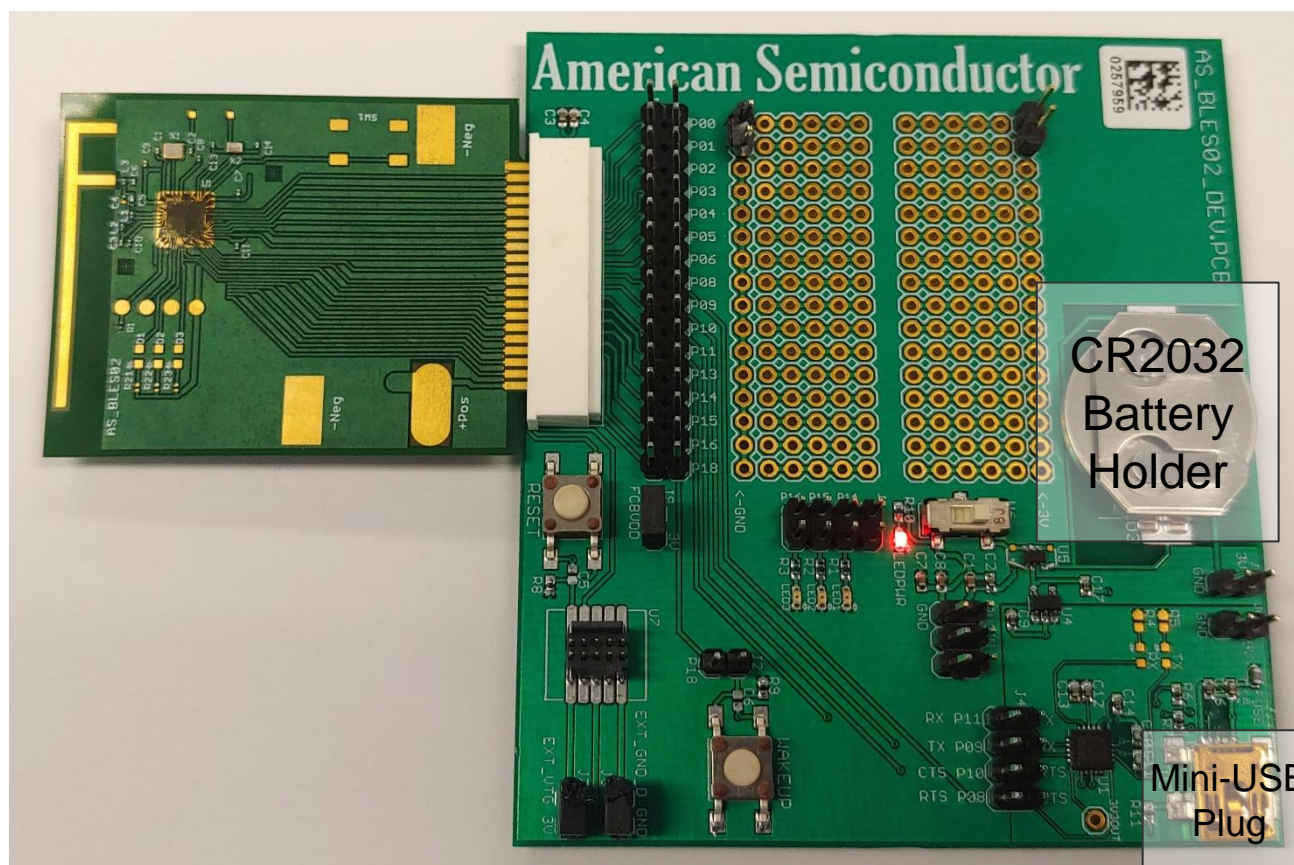
3.3V Desktop Power Supply



Step 1 (Alternate): Powering the Flex-BLE Dev Kit using the Programming Transition PCB

- The Flex-BLE Dev Kit Programming Transition PCB can also be used to provide power to the Flex-BLE Dev Kit through the Zero-Insertion Force (ZIF) connector
- The Programming Transition PCB can be powered through either the CR2032 battery holder or the mini-USB plug connected to a USB power source

Flex-BLE Dev Kit
Flexible Hybrid Electronics System
AS_DEVBLES02.kit



Flex-BLE Programming Transition
Printed Circuit Board
AS_DEVBLES02.asb

Step 2: Install and Run the FleX-BLE Beacon App

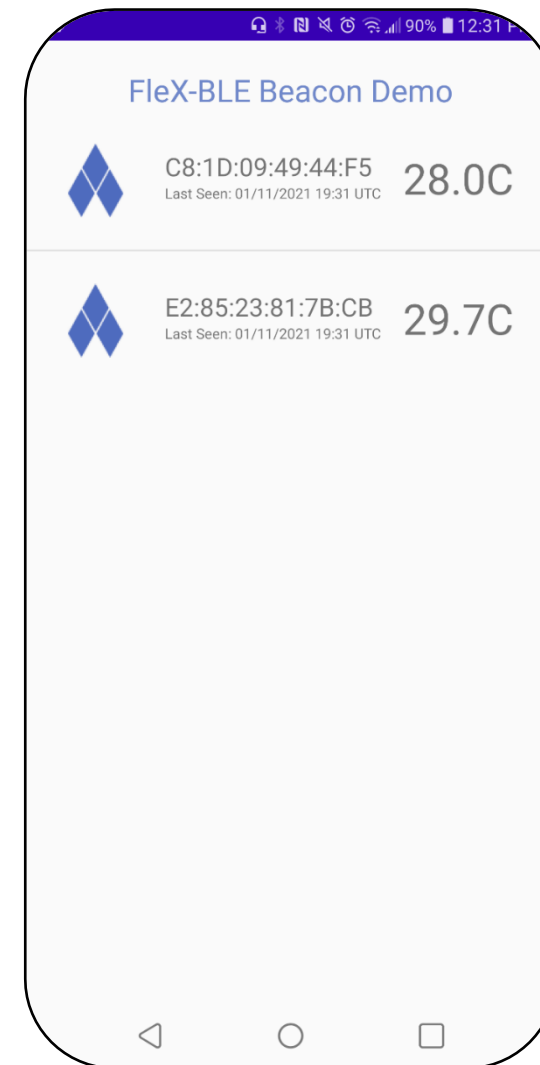
On an Android smartphone enabled with Bluetooth®

1. Go to the Google Play Store
2. Download the free *FleX-BLE Beacon App*
3. Install the App and Run: It opens with the Scan Screen
4. *That's it!* You should now be able to see any nearby FleX-BLE Dev Kits transmitting their unique IDs and temperature data.

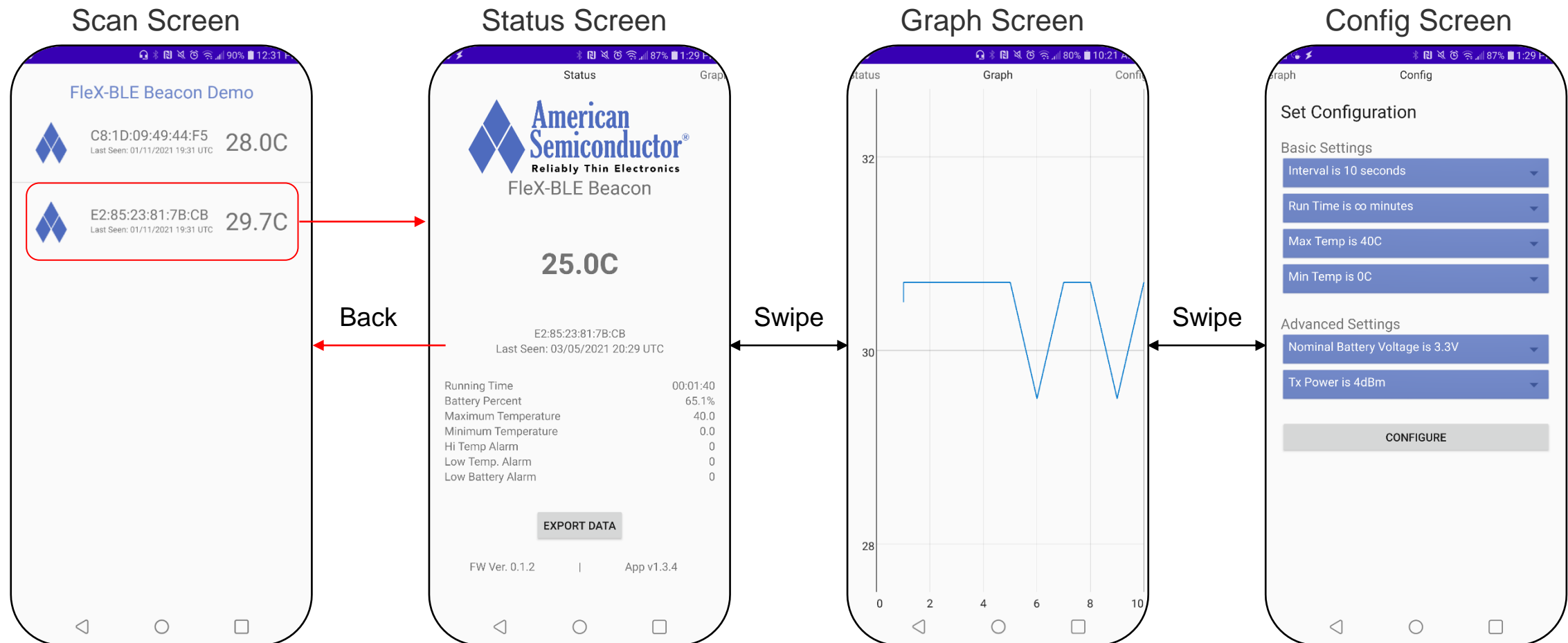
ID Label on Back of
FleX-BLE Dev Kit

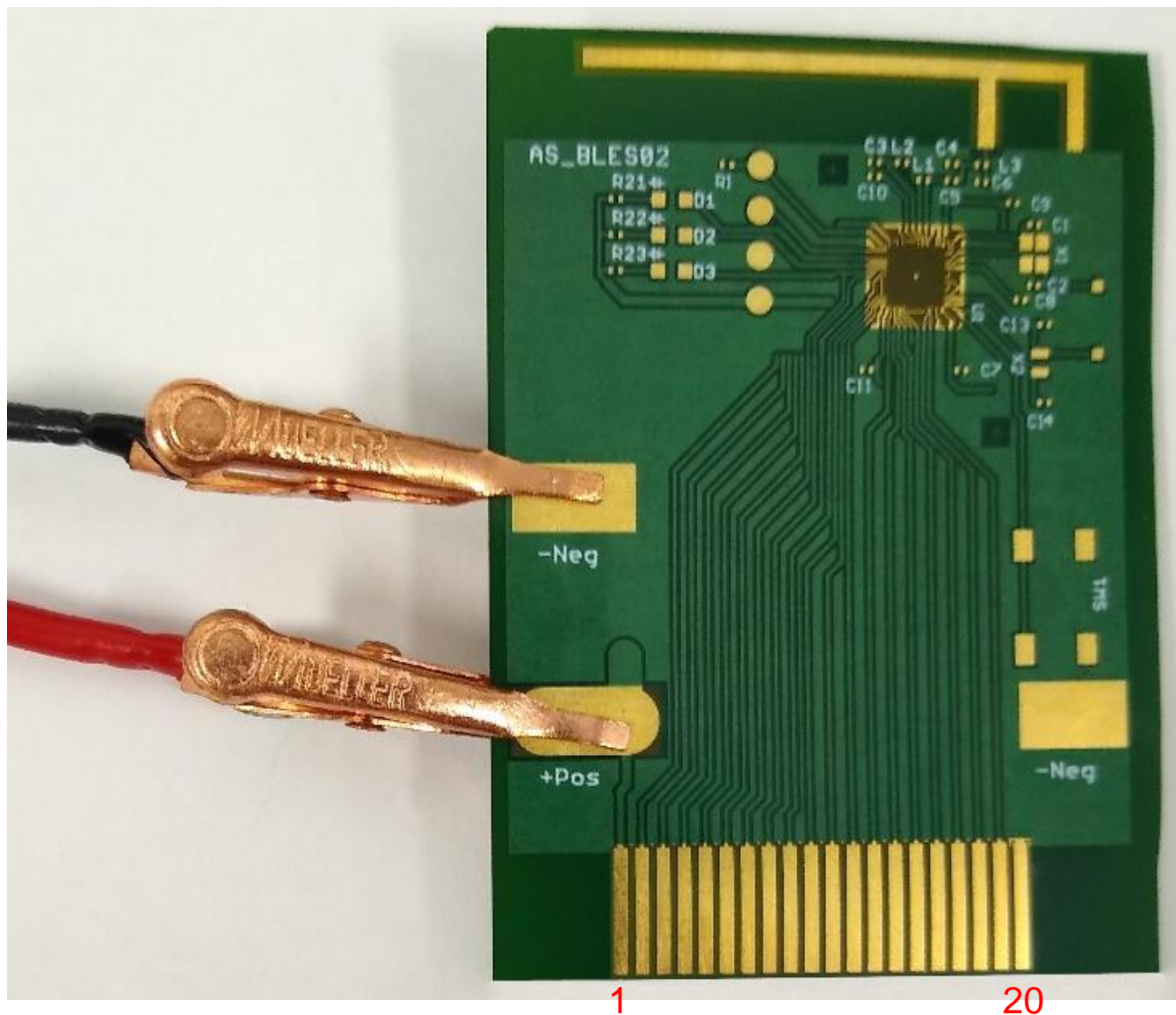


Scan Screen



- Selecting a device from the Scan Screen will bring up the Status Screen
- Swipe left or right to switch between the Status, Graph, and Config Screens
- Use the smartphone's Back button to return to the Scan Screen





Pin #	Name
1	VDD
2	P0.18
3	SWDCLK
4	SDWIO / nRESET
5	P0.16
6	P0.15
7	P0.14
8	P0.13
9	P0.11
10	P0.10
11	P0.09
12	P0.08
13	P0.06 / AIN7 / AREF1
14	P0.05 / AIN6
15	P0.04 / AIN5
16	P0.03 / AIN4
17	P0.02 / AIN3
18	P0.01 / AIN2
19	P0.00 / AFEF0
20	VSS



Disclaimers:

- All FleX-BLE Dev Kits are conformed 5 times in both the X and Y directions to a 20mm radius mandrel with components out before shipment.
- More extensive radius of curvature testing (both static and dynamic) is in progress and results will become available as this testing is completed.
- The FleX-BLE Beacon Firmware and Smartphone App are provided for demonstration of basic functionality.
- No guarantees of performance or continued support are implied.
- For qualified purchasers of the FleX-BLE Dev Kit, American Semiconductor may be willing to provide the firmware and app codes for users to develop and customize their own applications.

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