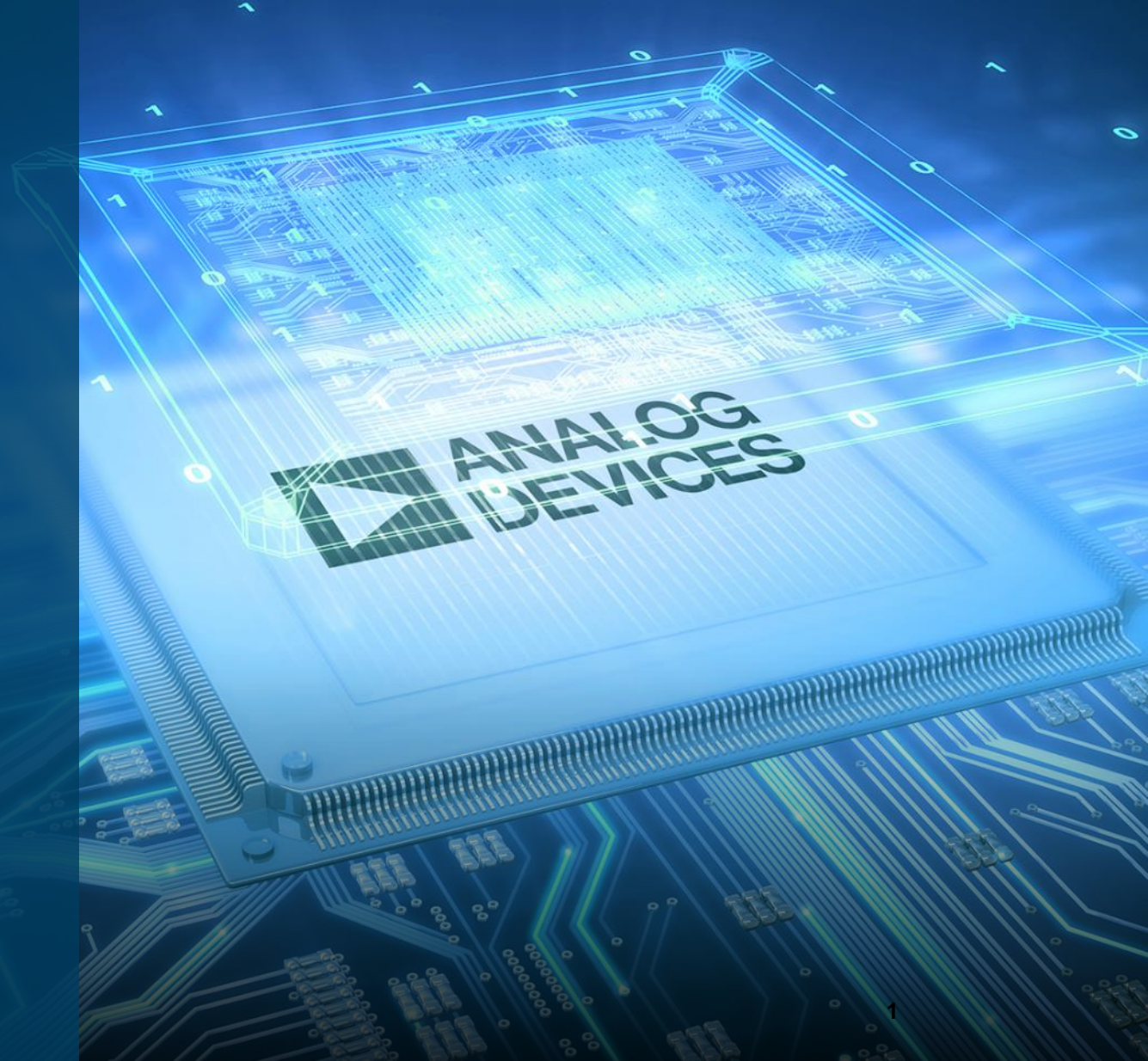




AHEAD OF WHAT'S POSSIBLE™

SensorPal GUI With AD5940 Evaluation Kit



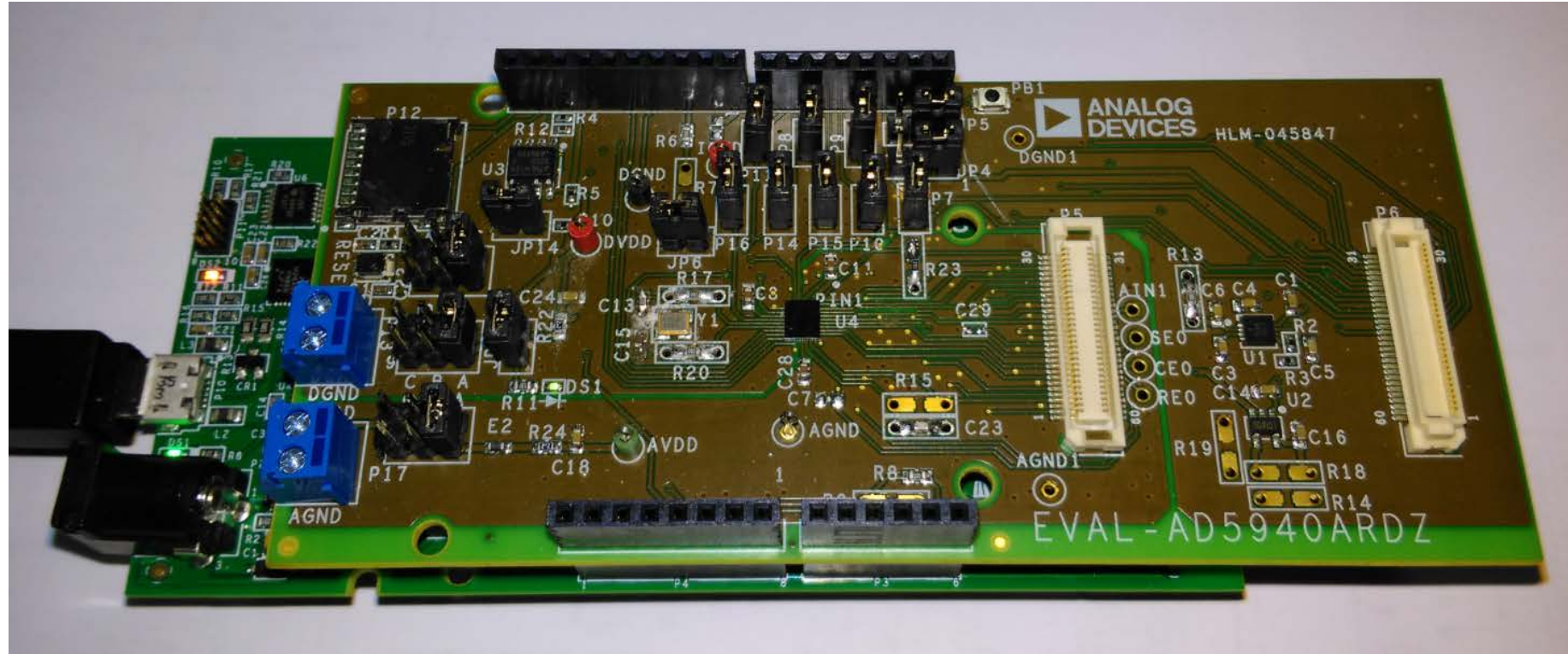
Eval-ADICUP3029

- Jumpers set as shown – default.



Connect Eval-AD5940ARDZ to Eval-ADICUP3029

- Jumpers set as shown – default.



Connect AD5940 Bio-Elec Board to Eval-AD5940ARDZ

- Jumpers set as shown – default.



EDA Setup Validation

SensorPal – EDA Default Setup

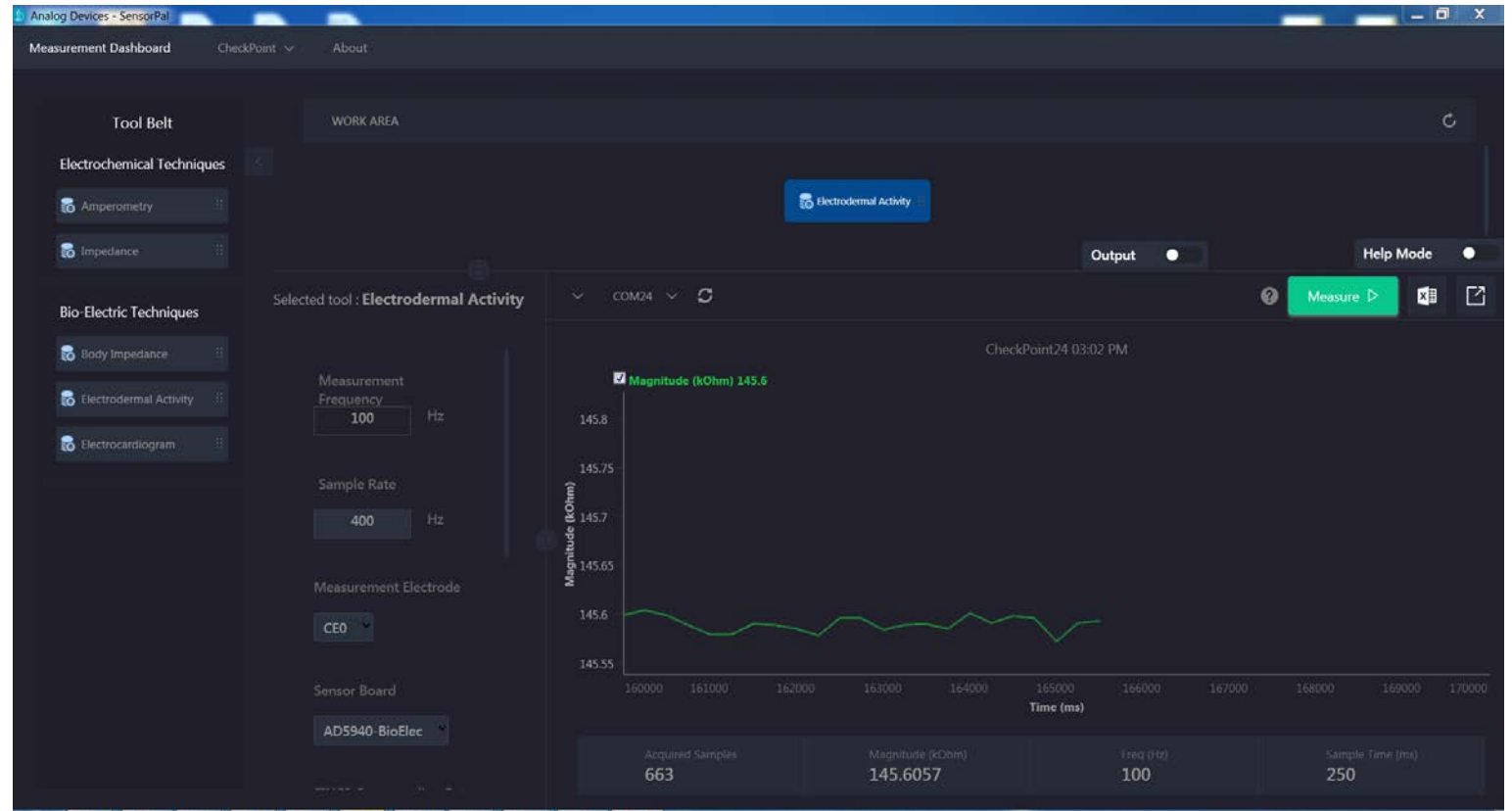
► With 100kOhm on BioElectric Board

► Output Magnitude = ~ 145kOhms

- Need to include 2*Ciso + Rlimit
- See below based on BioElectric board.
- Note capacitors are 5% accurate so will see error.

The diagram shows a circuit with a 100k resistor (Z=100k) in series with a 0.15F capacitor (C62) and a 1k resistor (R82) connected to CEO. Another branch has a 0.47F capacitor (C2) connected to Ain2. Below the diagram is a handwritten calculation for Total R:

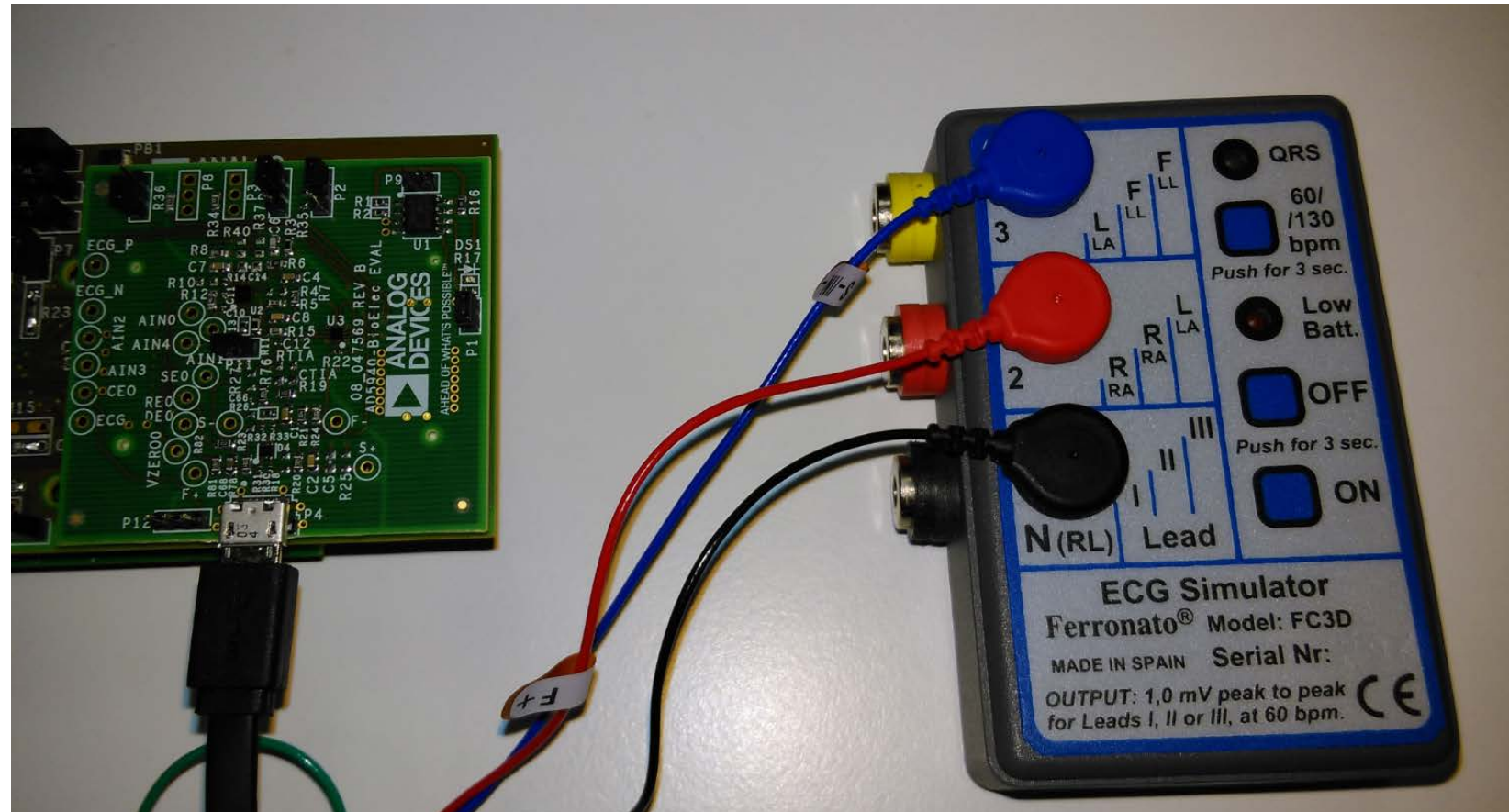
$$\begin{aligned} \text{Total } R &= 1K - \frac{1}{2\pi f (0.15F)} + 100K - \frac{1}{2\pi f (0.47F)} \\ &= 1K + 100K - 106103.3j - 3386.3j \\ &= \sqrt{(101K)^2 + (-109.489)^2} \\ &= 148.9 K\Omega \end{aligned}$$



ECG Setup Validation

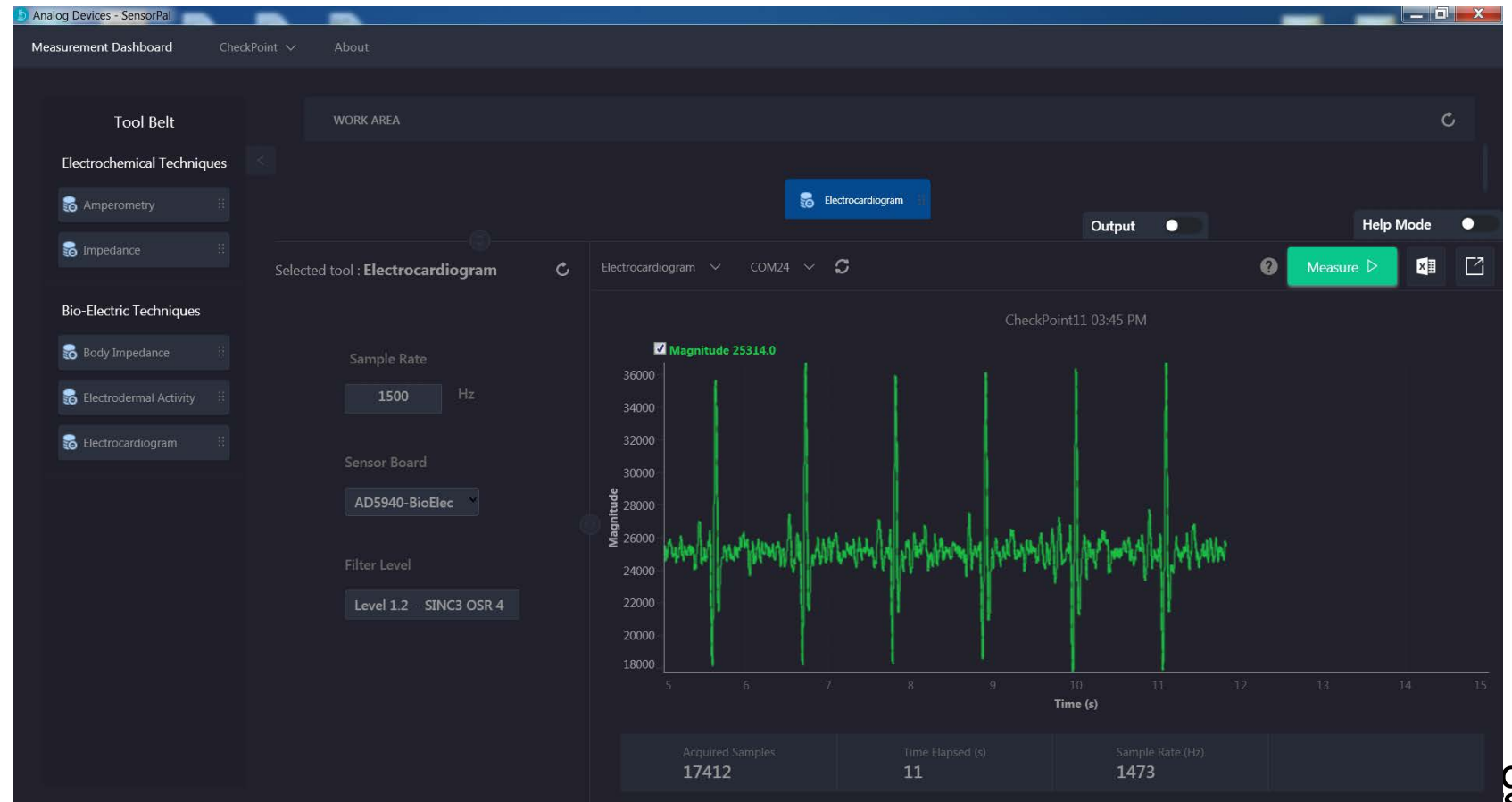
ECG Default Check

- Plug a ECG Simulator Into Bio-Electric board as shown.



SensorPal – Default ECG Setup

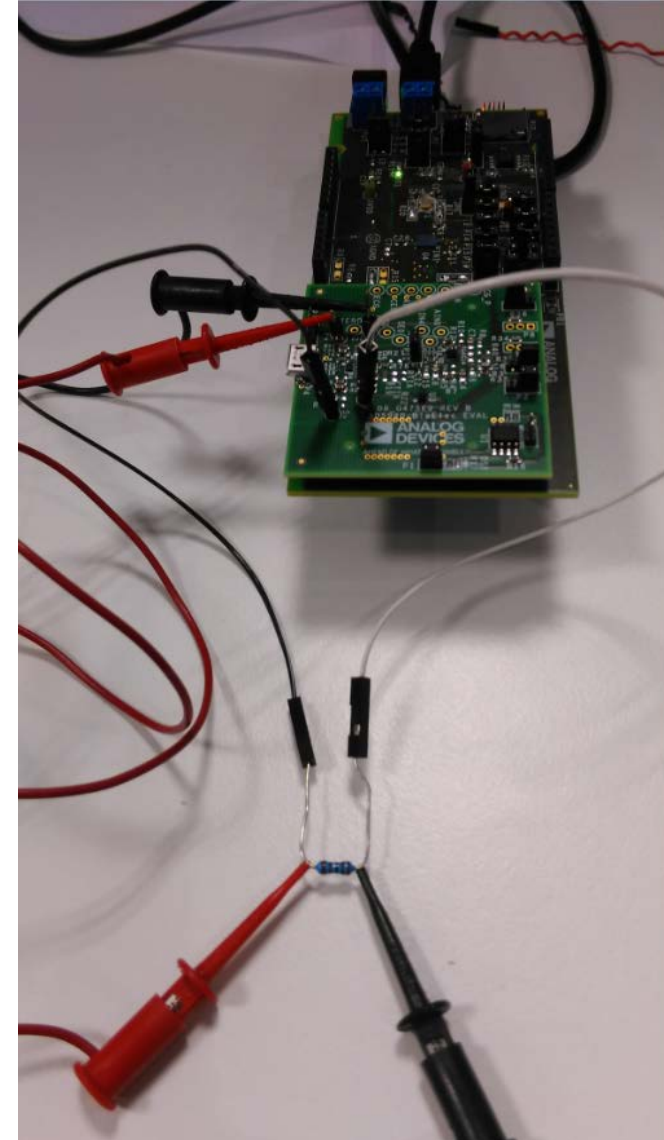
- ▶ Select ECG from Tool Belt.
- ▶ Hit Measure Command with default config.



BIA Setup Validation

BIA Default Check

- ▶ Connect a 1K resistor between F+/S+ and S-/F-.
 - Sorry – we don't have cables on board – looking into an adaptor board but not ready yet!
- ▶ Resistor in Picture was measured using Keithley Multimeter and measured 1.0935kOhm.



SensorPal – Default BIA Setup

- ▶ Select BIA from Tool Belt.
- ▶ Hit Measure Command with default config.

