**Supplementary Materials**

**Wireless Batteryless Soft Sensors for Ambulatory Cardiovascular Health Monitoring**

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**Supplementary Note 1:** The equation relating inductance and capacitance to resonant frequency is as follows:

$$F_R = \frac{1}{\sqrt{LC}}$$

where $F_R$ is resonant frequency, L is inductance, and C is capacitance.

**Supplementary Note 2**: The equation used to calculate the quality factor is as follows:

$$Q = \frac{F_R}{B}$$

where Q is quality factor, $F_R$ is resonance frequency, and B is the -3dB bandwidth, described as the range of frequencies for which the amplitude is at least half its peak value.
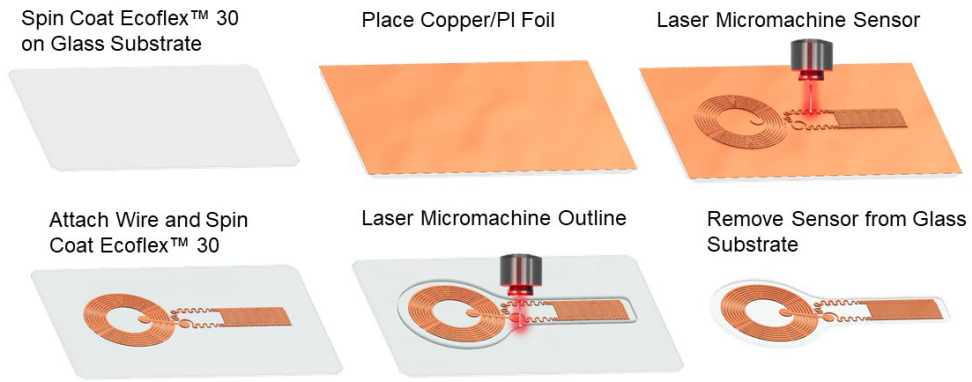
**Supplementary Figure 1.** Sensor fabrication methodology. Fabrication is described in detail in the Experimental section.
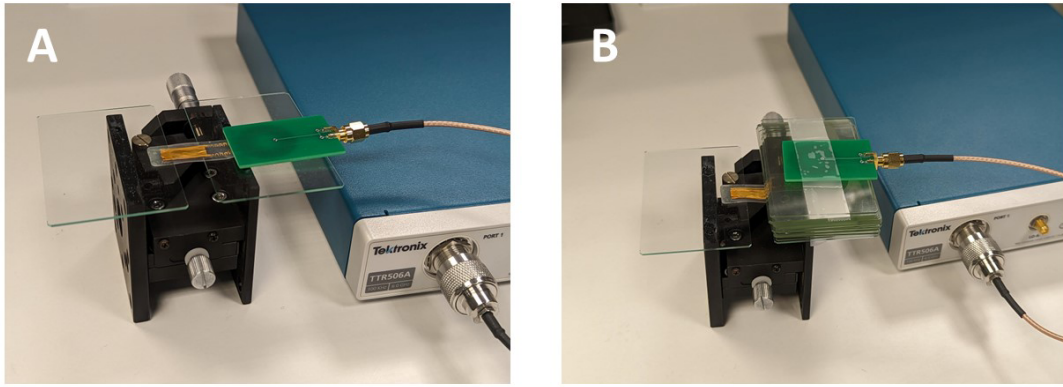
**Supplementary Figure 2.** (A) Photograph of the testing setup for the strain testing. The stage can stretch the sensor in 10 μm increments. (B) Photograph of the testing setup for different distances between the coils. One-mm glass slides are placed in between the coils to control the distance.
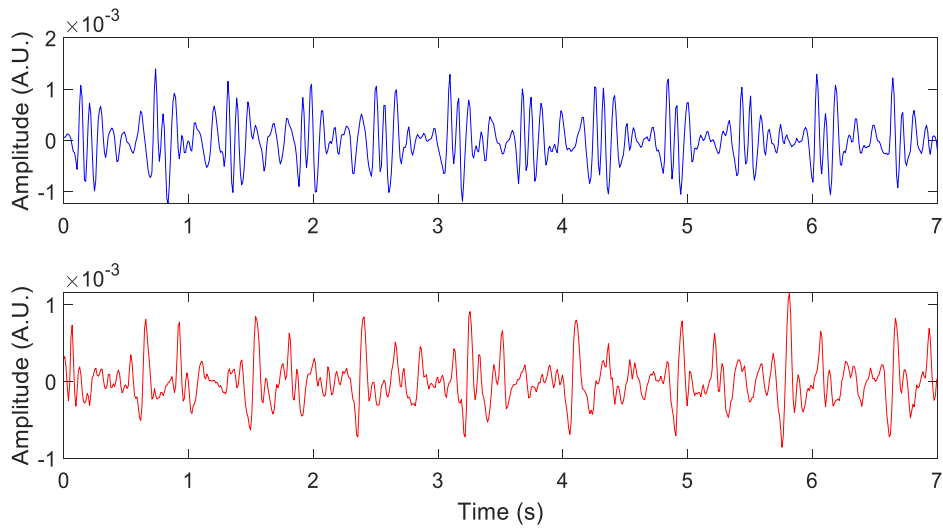
**Supplementary Figure 3.** SCG signals recorded while (a) standing and (b) lying in supine position.
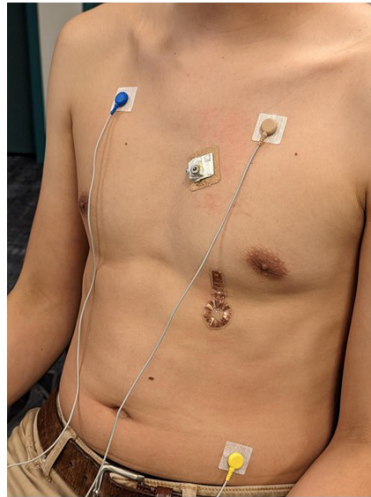
**Supplementary Figure 4.** Photograph of simultaneous recording of the reported device, lead 1 ECG, and reference accelerometer.