BITalino (r)evolution Freestyle
Kit Data Sheet

SPECIFICATIONS
> Sampling Rate: 1, 10, 100 or 1000Hz
> Analog Ports: 4 in (10-bit) + 2 in (6-bit) + 1 auxiliary in (battery) + 1 out (8-bit)
> Digital Ports: 2 in (1-bit) + 2 out (1-bit)
> Communication: Bluetooth or BLE
> Range: up to ~10m (in line of sight)
> Sensors: EMG; ECG; EDA; EEG; ACC; LUX; BTN
> Actuators: LED; BUZ
> Size: 100x65x6mm
> Battery: 500mA 3.7V LiPo (rechargeable)
> Consumption: ~65mA
> Accessories: 3x Electrode cable with 30cm; 2x Electrode cable with 10cm; 5x Crimp pins; 2x Molex Sherlock plug (3-pin); 4x Molex Sherlock (4-pin) socket; 5x Electrodes; 1x ProtoBIT

FEATURES
> Ideal for hardware prototyping
> Stackable to enable compact form factors
> Raw data acquisition
> Battery charger
> Easy-to-use
> Affordable

APPLICATIONS
> Psychophysiology
> Biomedical projects
> Electrical engineering
> Human-Computer Interaction
> Robotics & Cybernetics
> Physiology studies
> Biofeedback

GENERAL DESCRIPTION
Our unique BITalino (r)evolution Freestyle kit has all blocks as individual components, making it ideal for wearables. Kits include the basic parts to get started. Our cross-platform OpenSignals software enables instant data visualization and recording, while the APIs provide low-level access from third party and custom applications.

REV A
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BEWARE: DIRECT OR INDIRECT COUPLING TO THE MAINS MAY RESULT IN SHOCKING HAZARD
FUNCTIONAL BLOCKS

Digital-to-Analog Converter (DAC)

LED
video camera sync

Light Sensor (LS)
computer screen sync

Prototyping Board (PB)
interface for custom accessories

Pushbutton (PB)
manual event annotation

Buzzer (BUZ)
audio feedback

Accelerometer (ACC)
motion

Microcontroller unit (MCU)

Electroencephalography (EEG)
brain activity

Electrodermal Activity (EDA)
sympathetic nervous system

Electrocardiography (ECG)
heart activity

Electromyography (EMG)
muscle activity

Bluetooth
BLE also available

Power
3.7V LiPo w/ charger

Fig. 4. BITalino (r)evolution Freestyle with Bluetooth connectivity.

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AVR ISP 6-pin header

Fig. 5. BITalino (r)evolution Freestyle with BLE connectivity.
Fig. 6. BITalino (r)evolution Freestyle kits ship in a convenient eco-friendly packaging.

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<tr>
<th>Part #</th>
<th>Description</th>
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<td>KIT-REV-FREESTYLE-BT-UCE6</td>
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