BITalino (r)evolution Plugged 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 (rech.)
> **Consumption:** ~65mA
> **Accessories:** 1x 3-lead cable; 1x 2-lead cable; 1x UC-E6 to UC-E6 sensor cable; 5x Electrodes; 1x ProtoBIT

FEATURES

> Perfect for exploratory research
> Plug & play blocks
> Raw data acquisition
> On-board battery charger
> Easy-to-use
> Affordable

APPLICATIONS

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

GENERAL DESCRIPTION

The all-terrain BITalino (r)evolution Plugged kits provide the blocks as a main board (the BITalino Core) with sensors / actuators being separate components. UC-E6 sockets on the Core and sensor boards provide plug & play connection (by cable) of BITalino or third party blocks to the analog and digital ports. Our cross-platform OpenSignals software enables instant data visualization and recording.
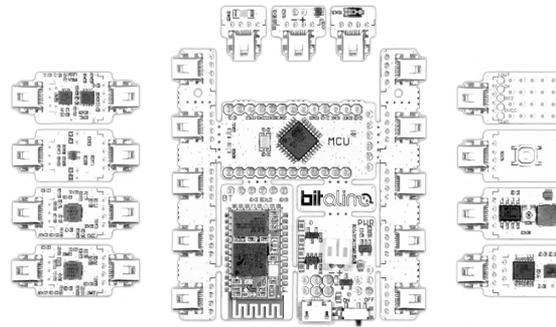

Fig. 1. Plug & play sensors separated from the main board (BITalino Core) and connected by cable provide maximum versatility; available with Bluetooth (Fig. 4) or BLE (Fig. 5).

Fig. 2. BITalino or third party sensors can be connected by cable to the main board in any user-defined configuration (all the enclosures shown in the image are optional accessories).
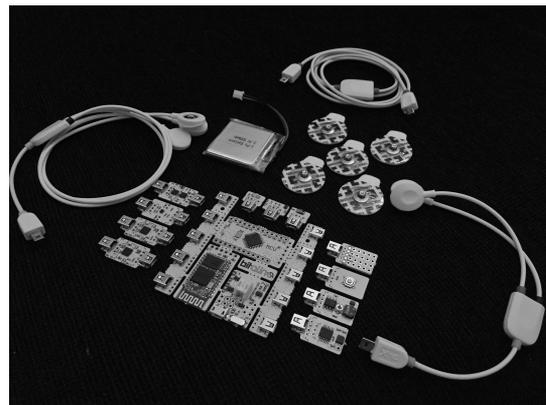

Fig. 3. Parts and accessories included in the kit.

BEWARE: DIRECT OR INDIRECT COUPLING TO THE MAINS MAY RESULT IN SHOCKING HAZARD

BITalino (r)evolution Plugged
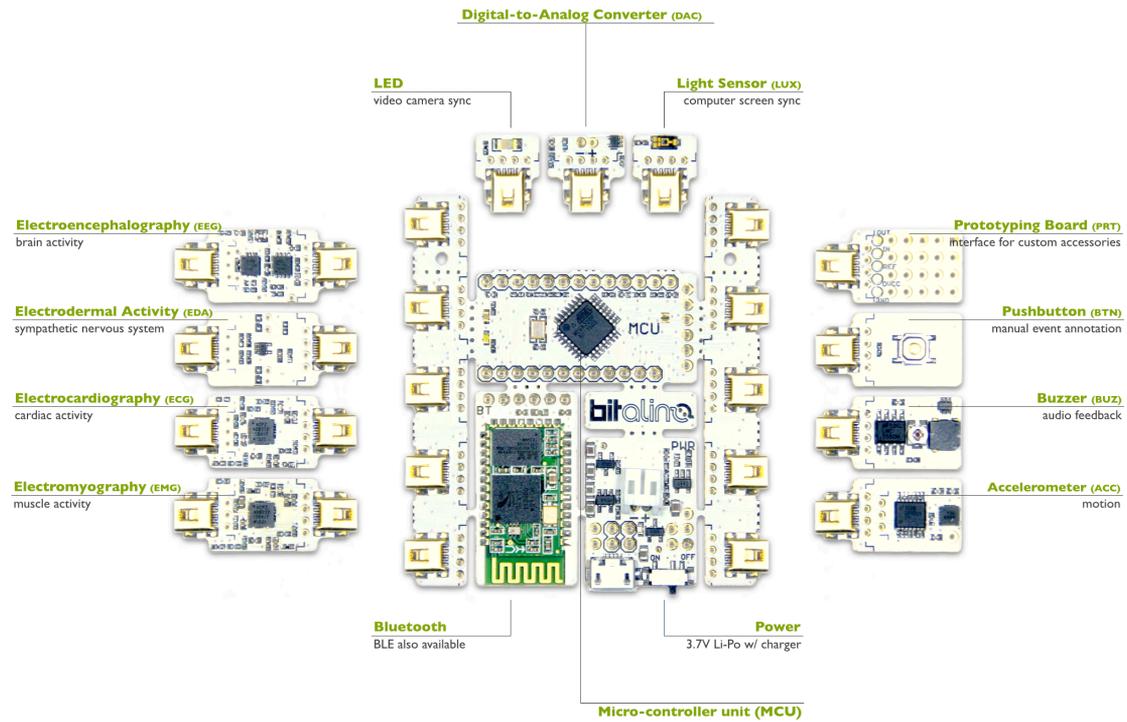# Kit Data Sheet

FUNCTIONAL BLOCKS

Digital-to-Analog Converter (DAC)

LED
video camera sync

Light Sensor (LUX)
computer screen sync

Electroencephalography (EEG)
brain activity

Prototyping Board (PRT)
interface for custom accessories

Electrodermal Activity (EDA)
sympathetic nervous system

Pushbutton (BTN)
manual event annotation

Electrocardiography (ECG)
cardiac activity

Buzzer (BUZ)
audio feedback

Electromyography (EMG)
muscle activity

Accelerometer (ACC)
motion

Bluetooth
BLE also available

Power
3.7V Li-Po w/ charger

Micro-controller unit (MCU)

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

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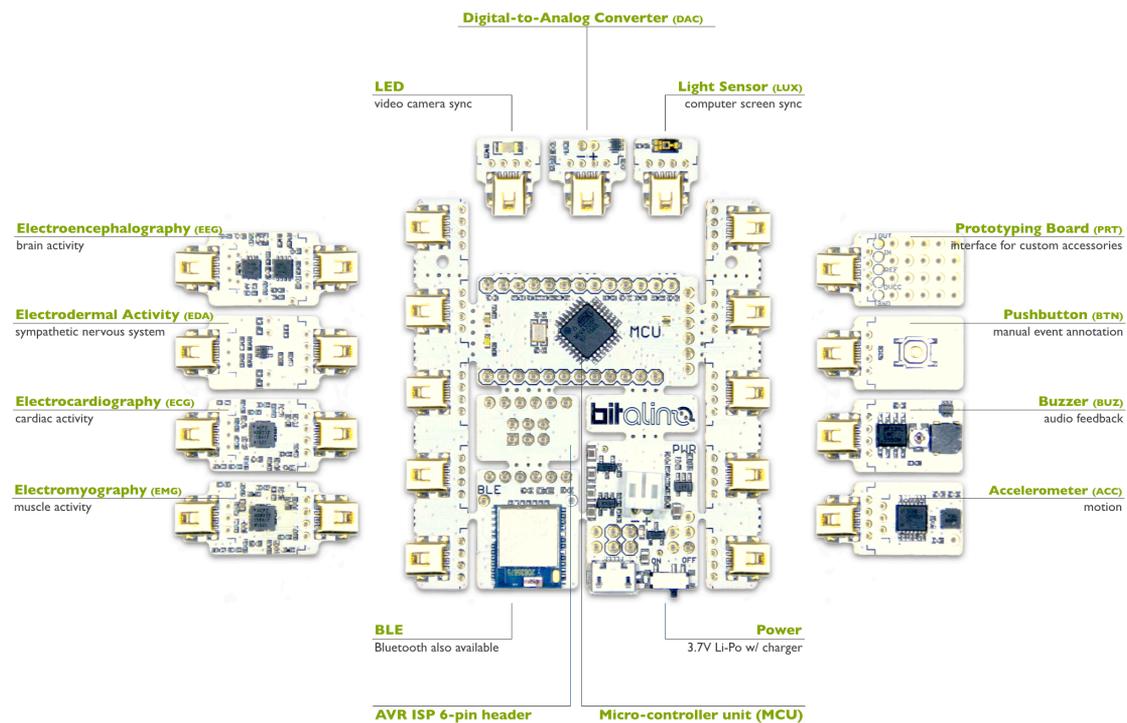
AVR ISP 6-pin header

Micro-controller unit (MCU)

Fig. 5. BITalino (r)evolution Plugged with BLE connectivity.

BITalino (r)evolution Plugged
Kit Data Sheet

Fig. 6. BITalino (r)evolution Plugged kits ship in a convenient eco-friendly packaging that can double as an enclosure.

ORDERING GUIDE

Part #	Description
KIT-REV-PLUGGED-BT-UCE6	BITalino (r)evolution Plugged kit with Bluetooth connectivity and UC-E6 connectors
KIT-REV-PLUGGED-BLE-UCE6	BITalino (r)evolution Plugged kit with BLE connectivity and UC-E6 connectors