PROGRAMMABLE LED BADGE
ORDER CODE: VMW100

The programmable LED badge is an ATmega32U4 based, Arduino® compatible development board that you can use as a wearable or e-textile. Be creative and use the multicoloured RGB LEDs to brighten up your wardrobe, decorations, backpack or even make Christmas ornaments!

The alligator friendly pads/holes enable you to quickly prototype your creation. The pads were also made bigger to ease the use of conductive wire and they are gold plated to ensure durability. The integrated single cell LiPo charger makes the LED badge more versatile, even though it has an existing open system.

The 24 BrightDot LEDs (WS2812) enable you to display bright and colourful animations with just a single pin!

This module comes preloaded with a watch program and an onboard hardware real time clock. The real time clock enables you to keep the time, even when the ATMega32u4 is powered off (but the power supply must stay connected). With the onboard single colour LED and button, you can quickly debug and test programs without any wires. To top things off, a dedicated ON/OFF switch is included to keep the power consumption as low as possible when you're not using the device.

FEATURES

- Atmega32u4 @ 8MHz
- native USB support
- 24 BrightDot addressable RGB LEDs (WS2812)
- ON/OFF switch
- reset button
- 1 user button
- 1 user LED
- PCF8523 RTC clock
- 10 GPIO sewable contacts and alligator clip friendly
- charging indicator LED
- RX/TX LED indication
- LEDs are mounted in a clock form
- free Arduino library
- included:
  - an easy to use battery holder for 3 AA batteries (batteries not incl.)
  - USB 2.0 A to micro USB cable

SPECIFICATIONS

- dimensions:
  - diameter: 8 cm
  - height: 9 mm
- power supply: USB or battery powered
- max. battery supply voltage: 6 V
- current consumption: min. 20 mA, max. 1 A (when all RGB LEDs are on, software limited)
- battery or USB pass through output: max. 1 A (depends on battery and USB capacity)
- CPU speed: 8 MHz
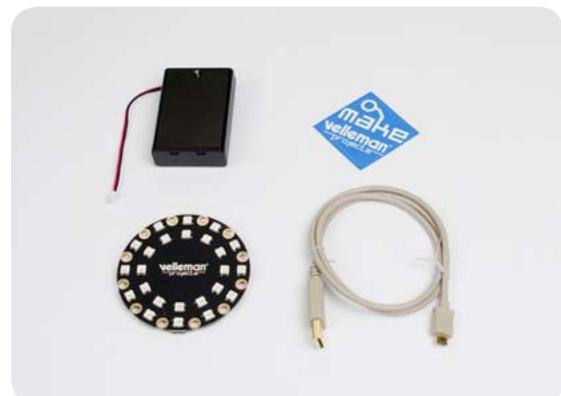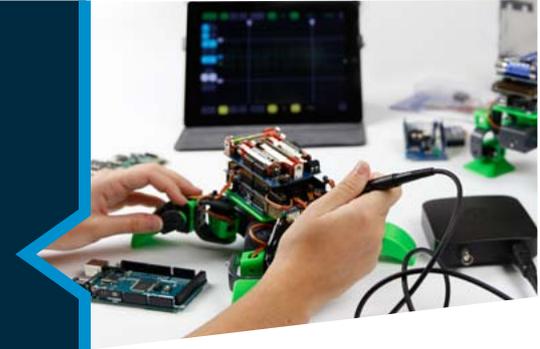
BE YOUR OWN SUPERHERO!

BIRGHTEN UP YOUR BACKPACK!

PINOUT

- battery input
- JST connector
- MAX 6V input
- integrated 500mA LiPo charger

- user button (pin 18)
- on-board RTC communicates via I2C (pin SCL/D3, pin SDA/D2)
- reset button

- dedicated ON/OFF switch
- user LED (pin 13)
- native USB support