

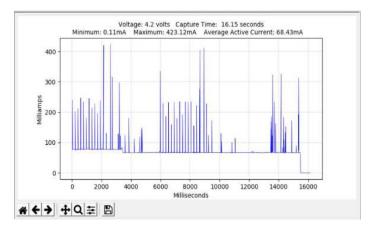


BattLab-One

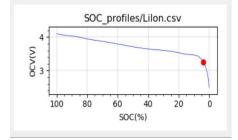
The BattLab-One simulates standard battery voltages and captures the current consumption profile of your device. Then use the BattLab-One software to optimize battery life using "what-if" analysis.

Current Profiler

- Captures both active event and sleep current from 10uA to 500mA
- Trigger input to capture firmware states and their impact on overall battery life
- 1kHz Sample rate, 16-bit delta sigma ADC
- Long active event capture duration from seconds to hours
- Low/no burden voltage across all ranges (BattLab-One provides PSU output)
- Interactive/detailed active current plot



Battery Simulation



- MSP430 microcontroller-based device that simulates standard batteries for Li-Ion, LiFePO4, Alkaline, NiMh, NiCd
- Provides voltages of 1.2V, 1.5V, 2.4V, 3.0V, 3.2, 3.6V, 3.7V, 4.5V at up to 450 mA, perfect for measuring your ESP8266 devices power demands.
- State of charge (SOC) curves and Cutoff voltage display

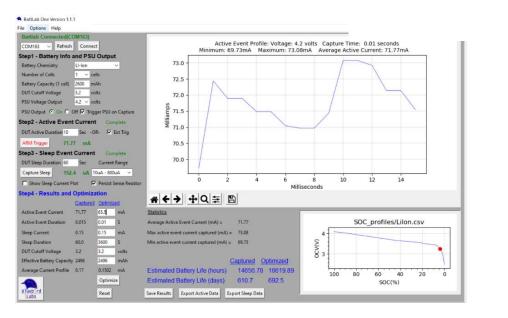
Battery Life Optimization

	Captured	Optimiz	ed	※ ← → 中 Q 幸 		
Active Event Current	71.77	65.5	mA	Statistics		
Active Event Duration	0.015	0.01	S	Average Active Event Current (mA) =	71.77	
Sleep Current	0.15	0.15	mA	Max active event current captured (mA) =	73.08	
Sleep Duration	60.0	3600	5	Min active event current captured (mA) =	69.73	
DUT Cutoff Voltage	3.2	3.2	volts			
Effective Battery Capacity	2496	2496	mAh	Ci	aptured	Optimized
Average Current Profile	0.17	0.1502	mA	Estimated Battery Life (hours)	14656.78	16619.8
-		Optimi	ze	Estimated Battery Life (days)	610.7	692.5
Blueb rd Labs		Reset		Save Results Export Active Data Expo	ort Sleep Data	

- "What-if "analysis to optimize the battery life of your product
- Save profiles so you can compare your device under test (DUT) current profiles
- Export captured data to CSV file

- USB 2.0 Type B connection to PC
- BNC Trigger Input to capture firmware events
- USB power and data isolated from PSU output to avoid ground loops
- Support for Windows 7,8,10
- Open-source hardware and software







Visit <u>www.bluebird-labs.com</u> for more information