JOULESCOPE

Joulescope® JS220 Evaluation Kit 1

Features

- Regulates USB power
- Generates dynamic current waveforms by programmatic load switching
- Programmable in Micropython

Contents

- JS220 EVK1 board
- USB A to C cable
- Joulescope sticker
- Quick Start Guide

Specifications

Regulated Output	Voltage V	Tolerance %	Current max A
3.3V buck	3.3	3	1
1.8V buck	1.8	3	1
1.0V buck	1.0	3	1
0.6V buck	0.6	3	1
3.3V LDO	3.3	3	0.15
1.8V LDO	1.8	3	0.15
1.0V LDO	1.0	3	0.15

| Selectable Load	Value	Tolerance %	Wattage W	Units
R 1	1	1	2	Ω
R 10	10	1	2	Ω
R 100	100	1	0.5	Ω
R 1k	1,000	0.1	0.062	Ω
R 10k	10,000	0.1	0.062	Ω
R 100k	100,000	0.1	0.062	Ω
R 1M	1,000,000	1	0.062	Ω
R 10M	10,000,000	1*	0.062	Ω
C 10 µF	10	20		µF
C PWM	1	20		µF

* The 10 MΩ resistor is effectively much lower due to leakage currents through the selection transistors.

Description

The Joulescope JS220 Evaluation Kit 1 (EVK) provides a quick and easy way to measure real waveforms with the Joulescope JS220. Connect your JS220 to your host computer and run the Joulescope UI software. Connect the EVK to your JS220, like this:

The Joulescope UI should display the default waveform:
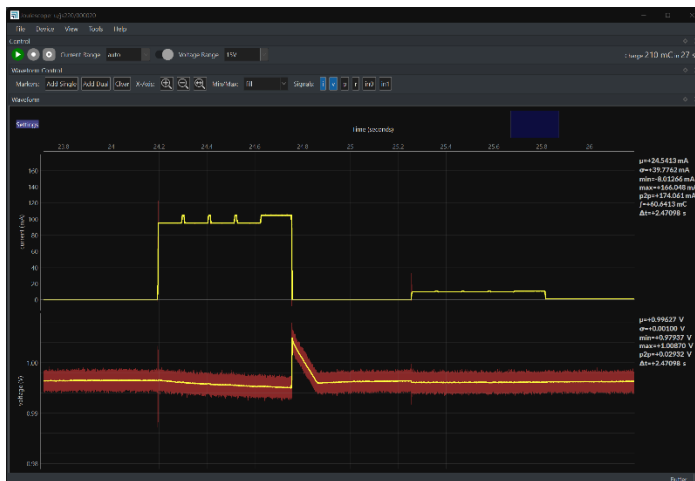
The EVK selects loads using software written in Micropython. The EVK comes with preconfigured patterns. You can create your own patterns and instruct the EVK to play them at various frequencies to generate a wide variety of dynamic current waveforms. With the EVK, you can reliably and repeatedly generate the same waveform for comparison and analysis.

For details including programming examples and open-source design files, visit https://github.com/jetperch/js220_evk1.