Saelig Introduces Tiny DIP Oscilloscope Module

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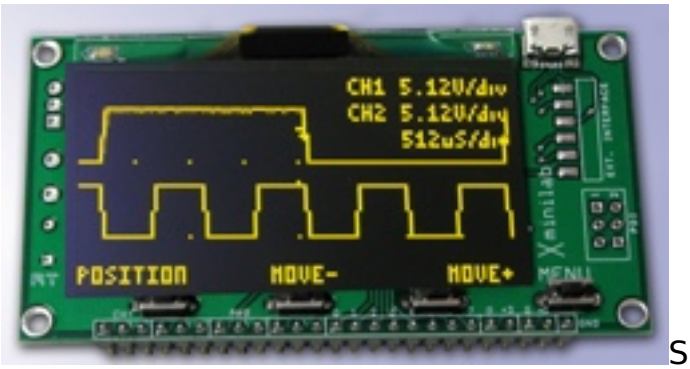

Saelig has introduced Xminilab - an amazingly sophisticated miniature combination of three electronic instruments: a mixed signal oscilloscope, an arbitrary waveform generator, and a protocol sniffer. Measuring only 3.3” x 1.75”, it can be mounted directly on a breadboard or pcb for in situ testing and verification. A graphic 2.4” 128x64 pixel OLED display is mounted on the board, displaying the monitored signals with automatic measurements, adjustable persistence, cursors, and grids. The two analog channels can be added, multiplied, inverted, or averaged. Based on Atmel’s ATXMEGA32A4 microcontroller, with 32KB Flash, 4KB SRAM, 1KB EEPROM, Xminilab can also be used as a development board for the AVR’s XMEGA microcontroller.

As a Mixed Signal Oscilloscope, Xminilab offers simultaneous 2MSa/s sampling of 2 analog signals (d.c. to 200kHz) as well as 8 digital lines. Advanced Trigger options include: Normal / Single / Auto / Free, with edge or slope types, rising or falling; adjustable trigger level, and the ability to view signals prior to the trigger. VDC, VPP and frequency can all be displayed too. Xminilab even features an XY Mode for plotting Lissajous figures, V/I curves or for checking the phase difference between two waveforms.

An FFT Spectrum Analyzer offers different windowing options and selectable vertical logarithmic display for signals up to 200kHz, with FFT spectrum frequency plotted as vs. magnitude for each analog channel.

A +/-2V 8-bit Arbitrary Waveform Generator with frequency sweep generates signals up to 44kHz. Arbitrary Waveform Generator offers +/- 2V Sine, Triangle, and Square waves, with control of amplitude, frequency, offset and duty cycle. Xminilab’s Sweep feature increases the frequency of the wave automatically on each screen refresh of the oscilloscope. Since the sweep is synchronized with the oscilloscope, displaying perfect frequency plots is easy.

Protocol Decoding and Sniffing is provided for SPI, I2C, UART, as well as Parallel Decoding, which shows hexadecimal values of the 8 bit digital input lines.

Four onboard tactile switches are provided for function control, and Xminilab can be powered either via external +5V or via the micro-USB connector, which also enables

future enhancements.

For more information, please visit www.saelig.com [1].

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Links:
[1] http://www.saelig.com