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INDUSTRIAL PRODUCT DATASHEET

Xprotolab Portable

The Xprotolab Portable is a retired combination mixed signal oscilloscope, arbitrary waveform generator, and protocol sniffer with a rechargeable battery and 1.3" OLED display.

SKU	UPDATED	PRICE
109990023	2024-08-09 02:09:42	$98.00(Excl. VAT)



Overview



The Xprotolab Portable combines a mixed signal oscilloscope, arbitrary waveform generator, and protocol sniffer in a compact enclosure with a rechargeable LiPo battery and a 1.3" OLED display. This product is retired; consider Xminilab Portable as an alternative.

Key Features

This product is retired, please consider our **Xminilab Portable** as your alternative choice.

This is the portable version of the **Xprotolab**, featuring an enclosure with a LiPo battery good for 12 hours of use per charge, and a bigger display 1.3" OLED provides fast refresh rates and high contrast.

What is Xprotolab?

The **Xprotolab** is a combination of three electronic instruments: a mixed signal oscilloscope, an arbitrary waveform generator, and a protocol sniffer. The Xprotolab was awarded as one of the **100 Hot Products of 2011**, by the EDN magazine. The Xprotolab has been featured in several other online magazines, such as **Hack a Day** and **Elektor**.

The Xprotolab has been in development for several years, the hardware and firmware are stable. Now its time to put the device in an enclosure and add a rechargeable battery. The input connectors are going to be 3.5mm stereo audio plugs, and the logic port is going be a 0.1" male pin connector.

Features

- Mixed Signal Oscilloscope: Simultaneous sampling of analog and digital signals.
- Advanced Trigger: Normal / Single / Auto, with rising or falling edge and adjustable trigger level.
- Meter Mode: Average, Peak to peak and Frequency readout.
- XY Mode (Plot Lissajous patterns or see the phase difference between two waveforms).
- Spectrum Analyzer with different windowing options and selectable vertical log.
- Horizontal and Vertical Cursors with automatic waveform measurements.
- Arbitrary Waveform Generator with Sweep on all parameters.
- Display options: Persistence, Different grid options, and more.
- Curve tracer function.

General Specifications

- ATXMEGA32A4U 36KB Flash, 4KB SRAM, 1KB EEPROM
- Graphic OLED display 1.3", 128x64 pixels
- Enclosure size: 3" x 2" x 0.7"
- Internal PDI interface
- 4 tactile switches
- USB connectivity: PC application available, Android App available.

Logic Analyzer Specifications

- 8 Digital Inputs, 3.3V or 5V compatible
- Maximum sampling rate: 2MSPS
- Frequency counter: 12Mhz
- Protocol Sniffer: UART, I2C, SPI

- Internal pull up or pull down.
- Buffer size: 256

Oscilloscope Specifications

- 2 Analog Inputs
- Maximum Sampling rate: 2MSPS
- Analog Bandwidth: 200kHz
- Resolution: 8bits
- Input Impedance: 1MΩ, 10pF
- Buffer size per channel: 256
- Input Voltage Range: -14V to +14V

Arbitrary Waveform Generator Specifications

- 1 Analog Output
- Maximum conversion rate: 1MSPS
- Analog Bandwidth: 50kHz
- Resolution: 8bits
- Output current > +/- 7mA
- Buffer size: 256
- Output Voltage: +/- 3V

Packing List

- Xprotolab Portable x1
- Analog Probes (3.5mm to hook clips) x2
- Logic Analyzer Probe x1
- Micro USB Cable x1

Resources

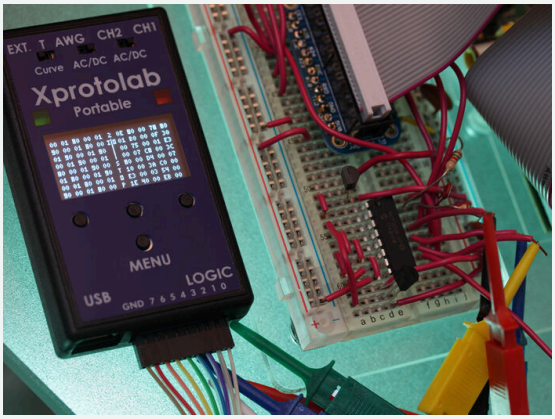
- User’s Manual
- Schematics
- Code
- Hex
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- Videos
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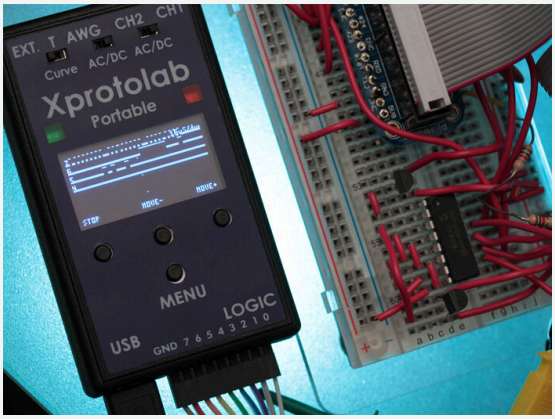
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Resource Links

- https://www.seeedstudio.com/Xprotolab-Portable-p-1583.html

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