

Product Fact Sheet

Saleae Logic Pro 16 USB Logic Analyzer



Key Features

Feature	Description
Channels	Sixteen digital inputs, sixteen analog inputs (shared with digital channels)
Maximum Sample Rates	Digital: 500 MSPS @ 4 channels, 100 MSPS @ 16 channels (USB 3.0 required) Analog: 50 MSPS @ 3 channels, 12.5 MSPS @ 13 channels, 6.25 MSPS @ 16 channel
Bandwidth	Digital: 100 MHz square wave when sampling at 500 MSPS Analog: 5 MHz when sampling at 50 MSPS
Trigger	Edge or pulse width trigger
Software	Cross-platform Windows, Mac and Linux support
Supported Protocols	Serial, SPI, I2C, Atmel SWI, Biss-C, CAN, DMX-512, HD44780, HDLC, I2S, JTAG, LIN, MDIO, MIDI, Manchester, Modbus, 1-Wire, PS/2 Keyboard & Mouse, SMBus, SWD, Synchronous Parallel, USB, UNI/O
Capture Buffer Length	Limited by installed memory and digital data density. When recording analog at 50 MSPS, captures 10-60 seconds usually possible. Without analog, buffer length is dependent on digital activity density. 1 MHz SPI: up to 10 Minutes. I2C – several hours – 9600 baud serial – over 1 day.
Analog Resolution	12 bits, 4.88 mV per LSB
Analog Input Range	-10V to 10V
Supported digital IO standards	1.2V, 1.8V, 2.5V, 3.3V, 5.0V, RS-232, +12V TTL

What is a Logic Analyzer?

Logic analyzers are great for debugging embedded applications.

They operate by sampling a digital input connected to a device under test (DUT) and then displaying the recording on your computer.

This is great for debugging a wide range of embedded problems. For instance, if an I2C device isn't responding, you can record SDA and SCL to see if the start condition, device address, and ACK/NAK bit frame look right. It is a huge help for any project with a microcontroller, FPGA or ARM chip.

Easy-to-use Software

The Saleae Logic devices connect to your PC over USB. Just download the software at www.saleae.com.



Navigate your data easily and intuitively with Logic's fluid and fully animated mouse-driven interface. Drag the display with the mouse, zoom with the scroll wheel, even toss the display to find nearby events.

Protocol Decoding

The Saleae products support decoding for over 20 different protocols. This means when you record those SPI messages, or a CAN bus, you won't need to stare at transitions and clock edges. Instead, just add the protocol decoder and read the data entire bytes – or even transactions at a time.

