

## Product Fact Sheet

# Saleae Logic Pro 16 USB Logic Analyzer



### Key Features

Feature	Description
<b>Channels</b>	Sixteen digital inputs, sixteen analog inputs (shared with digital channels)
<b>Maximum Sample Rates</b>	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
<b>Bandwidth</b>	Digital: 100 MHz square wave when sampling at 500 MSPS Analog: 5 MHz when sampling at 50 MSPS
<b>Trigger</b>	Edge or pulse width trigger
<b>Software</b>	Cross-platform Windows, Mac and Linux support
<b>Supported Protocols</b>	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
<b>Capture Buffer Length</b>	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.
<b>Analog Resolution</b>	12 bits, 4.88 mV per LSB
<b>Analog Input Range</b>	-10V to 10V
<b>Supported digital IO standards</b>	1.2V, 1.8V, 2.5V, 3.3V, 5.0V, RS-232, +12V TTL

### What is a Logic Analyzer?

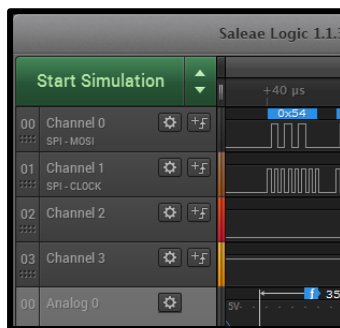
Logic analyzers are great for debugging embedded applications.

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](http://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.

