



DSLogic Series USB-based Logic Analyzer

DSLogic is a series of USB-based logic analyzer, with max sample rate up to 1GHz, and max sample depth up to 16G.

DSLogic is protected by a CNC metal case to enhance noise immunity. Combined with shielded fly wires, DSLogic can be used to capture up to 250MHz digital signals (under 1G sample rate).



-  [DSLogic Plus Data Sheet](#)
-  [DSLogic U3Pro16 Data Sheet](#)
-  [DSLogic U3Pro32 Data Sheet](#)
-  [DSView User Guide](#)



<p>\$199.00 \$149.00 Add to cart</p> <p>DSLogic Plus</p>	<p>Max Sample Rate 400MHz</p>	<p>Max Sample Depth 16G stream / 256M buffer</p>	<p>Trigger 16 stages / protocol trigger</p>	<p>Channels 16</p>	<p>Warranty 3-year</p>
<p>\$399.00 \$299.00 Add to cart</p> <p>DSLogic U3Pro16</p>	<p>Max Sample Rate 1GHz</p>	<p>Max Sample Depth 16G stream / 2G buffer</p>	<p>Trigger 16 stages / protocol trigger</p>	<p>Channels 16</p>	<p>Warranty 3-year</p>
<p>\$499.00 \$399.00 Add to cart</p> <p>DSLogic U3Pro32</p>	<p>Max Sample Rate 1GHz</p>	<p>Max Sample Depth 16G stream / 2G buffer</p>	<p>Trigger 16 stages / protocol trigger</p>	<p>Channels 32</p>	<p>Warranty 3-year</p>

What's Logic Analyzer ?

Have trouble on debugging digital circuits with **oscilloscope**?
For example: small depth, hard to trig, rough protocol decoders ...

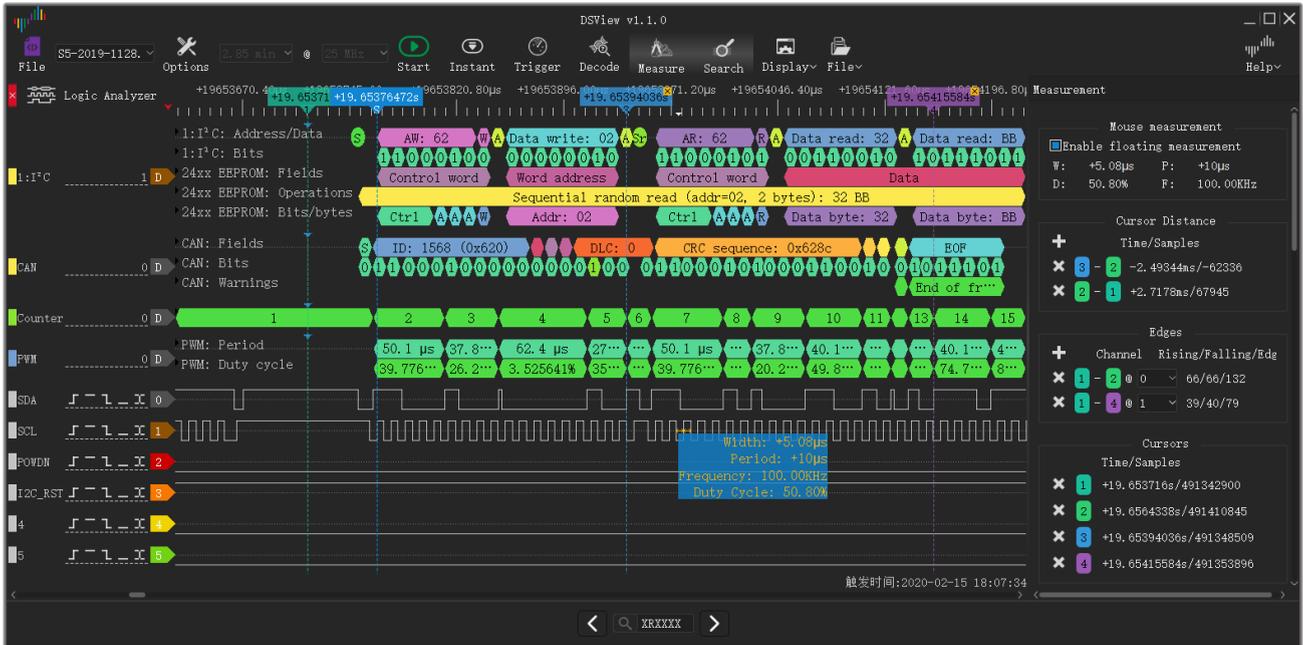
Logic analyzer is a dedicate debug tool for digital signals, which support long-time acquisition, no dead time, complex trig conditions and rich protocol decoders.

Oscilloscope is wonderful for analyzing periodic voltage and noise changes; **Logic analyzer** only record low/high status, and is much better at analyzing process of digital communications and complex protocols.

Why DSLogic ?



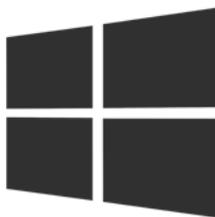
1. Continuous Improvement



5 years, 1800 days and nights, 300 improvements



Software **Open source**, Hardware **Patented & Certified**



Windows



macOS



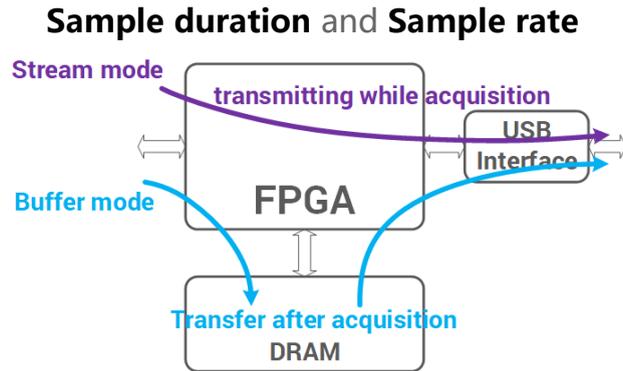
Linux

Multi-platform support
Driver with digital signature



2. Dual Mode Support

Main spec. of LA:



Buffer mode: **High sample rate**
 Stream mode: **Long sample duration**

Why you need a high sample rate?

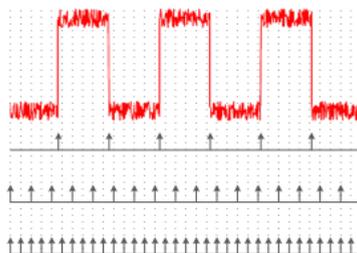


Sample rate is like screen resolution

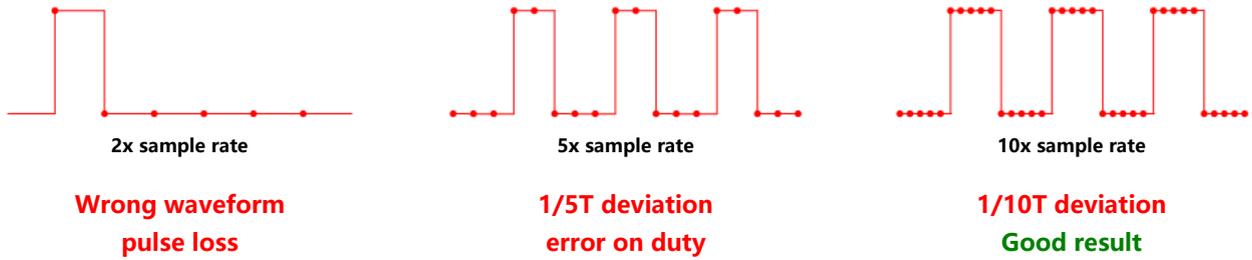
The higher the better

Under test signal

2x sample rate
 5x sample rate
 10x sample rate



Results at different sample rates



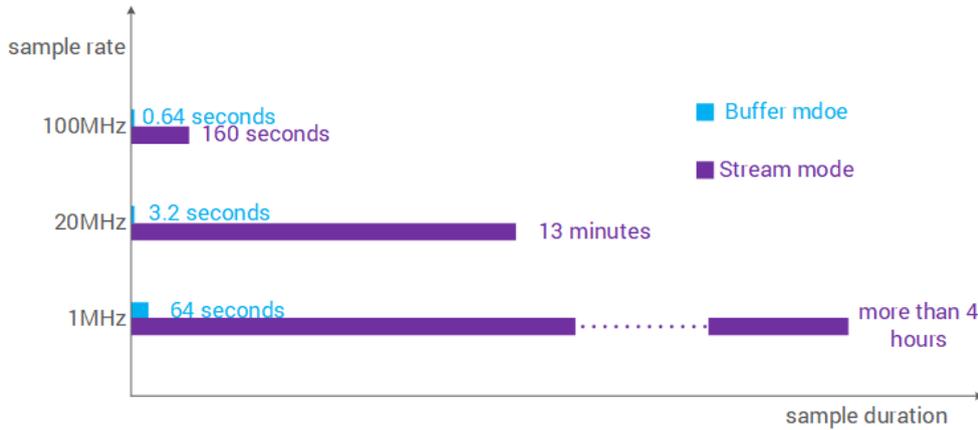
The higher sample rate the better restored waveform

We recommend the sample rate should be **10x – 100x** than frequency of under test signal

Stream mode

Data are transferred to computer in real-time through USB

Greatly increase the sample duration



Sample duration

Buffer mode vs Stream mode

Stream mode problem:

Real-time transmission is limited by USB bandwidth

Only 3 channels support under 100M sample rate



DSLogic U3Pro support super stream mode

Use USB 3.0, bandwidth up to 5Gbps

10 times than normal stream mode

sample rate ⇩	Normal stream mode	super Stream mode	
		DSLogic U3Pro16	DSLogic U3Pro32
1GHz	Not support ✗	3 channles	3 channles
500MHz	Not support ✗	6 channles	6 channles
250MHz	Not support ✗	12 channles	12 channles
100MHz	3 channles	16 channles	30 channles
50MHz	6 channles	16 channles	32 channles

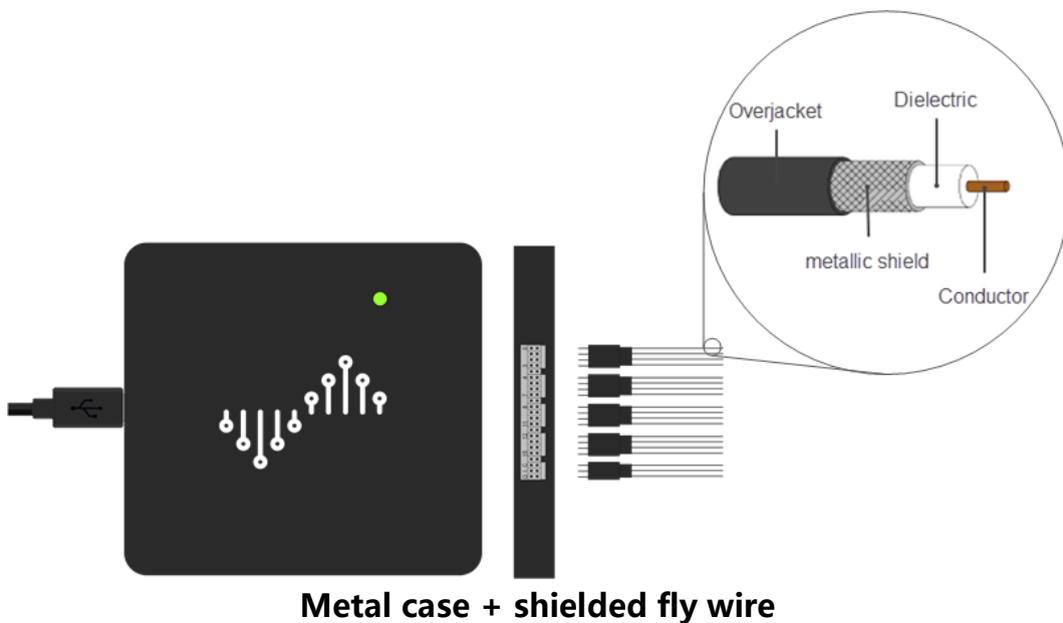
DSLogic vs DSLogic U3Pro

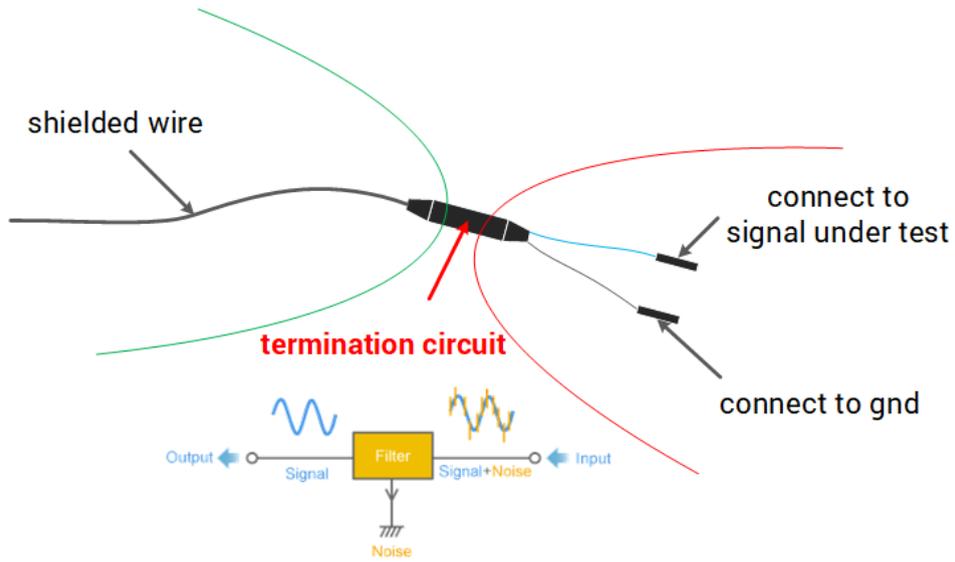


3. Signal Integrity

As a qualified LA, high sample rate is **not enough**. It is necessary to ensure that high-frequency signals can be transmitted without distortion on the entire path of signal acquisition.

DSLogic ensure the signal integrity with following designs

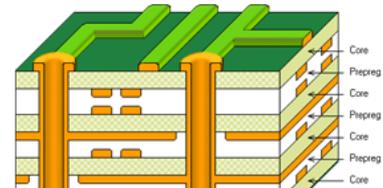




Structure of shielded fly wire

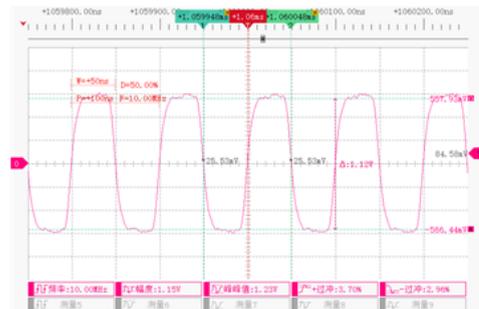
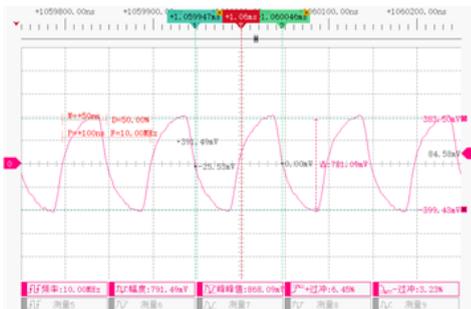


DSLogic 4 layers pcb



DSLogic U3Pro 8 layers pcb

High-speed PCB design

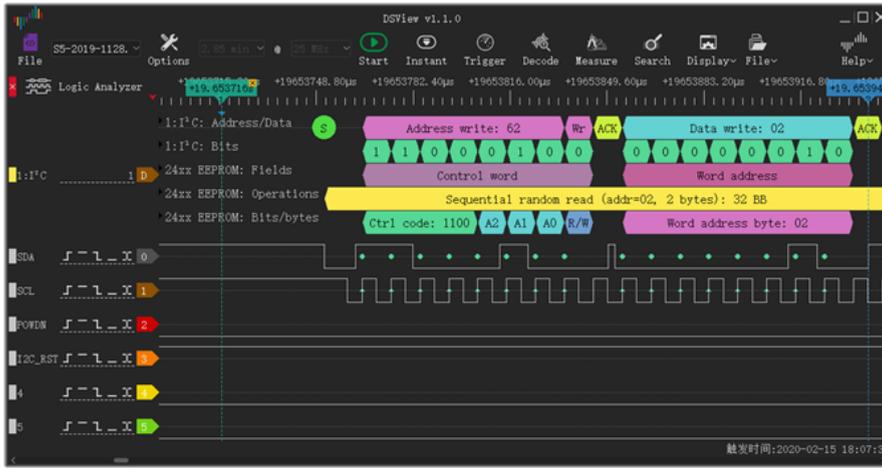


Dupont fly wire vs Shielded fly wire

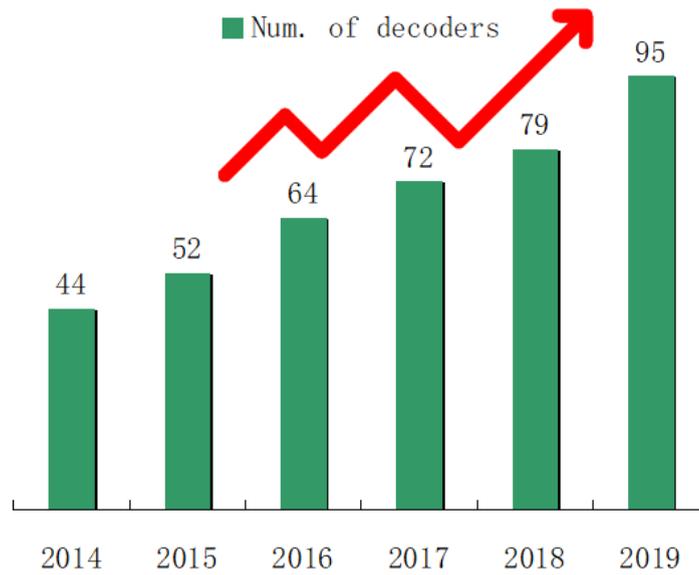


4. Rich Protocol Decoders

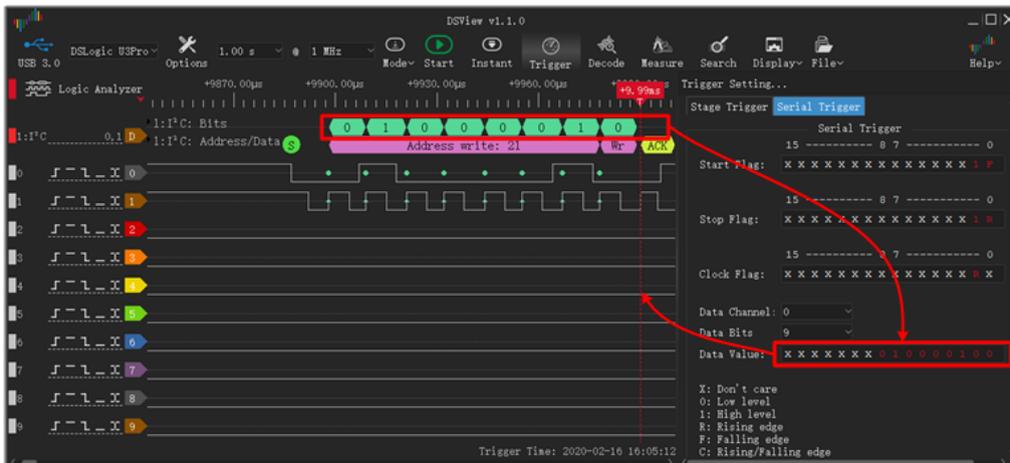
Support **not only** base decoders, **but also** stack decoders.
More intuitive results.



Show **page operations** of EEPROM

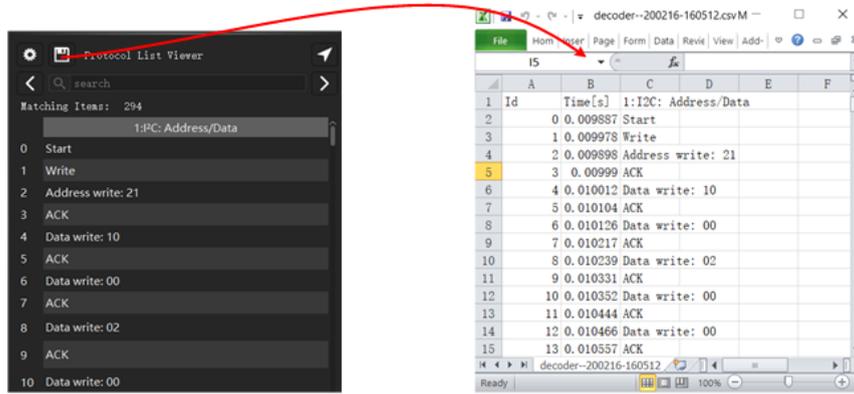


Support **open-source decoder library**.
More decoders are under development.



Support protocol-based trig

For example: trig by **dedicate byte** in I2C operations.



Support **search & export** of decoder results

Base decoders:

I²C, UART, SPI, CAN, I²S, JTAG, 1-Wire link layer, DMX512, PWM, Parallel, SWD, USB PD, USB signalling, SWIM, SD card (SD mode), PS/2, MDIO, Stepper motor, Timing, Z80, AC ' 97, Counter, IR NEC, IR RC-5, AM230x, AUD, AVR PDI, CEC, DALI, DCF77, DSI, EM4100, EM4305, GPIB, Gray code, Guess bitrate, Jitter, LPC, Maple bus, MCS-48, Microwire, Miller, Morse, OOK, Qi, RC encode, RGB LED (WS281x), SDA2506, S/PDIF, ST7735, T55xx, TI TLC5620, Wiegand...

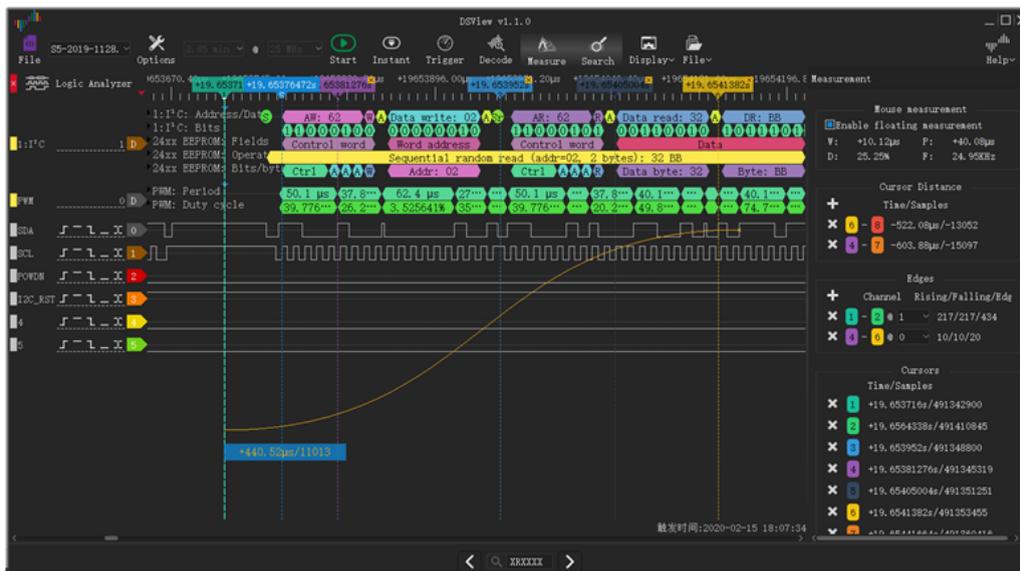
Stack decoders:

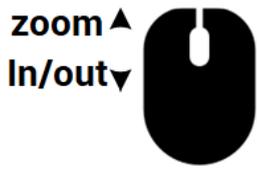
LIN, 24xx EEPROM, 93xx EEPROM, USB request, USB packet, 1-Wire network layer, AVR ISP, nRF24L01(+), RGB LED (SPI), SD card (SPI mode), SPI flash/EEPROM, Modbus, MIDI, I²C demux, I²C filter, ARM ETMv3, ARM ITM, ARM TPIU, ATSHA204A, DS1307, EDID, LM75, MLX90614, MXC6225XU, Nunchuk, RTC-8564, TI TCA6408A, XFP, JTAG / EJTAG, JTAG / STM32, CFP, DS243x, DS28EA00, Oregon, OOK visualisation, ADE77xx, ADF435x, ADNS-5020, MAX7219, MRF24J40, RFM12, SSI32, PAN1321...

List of supported decoders



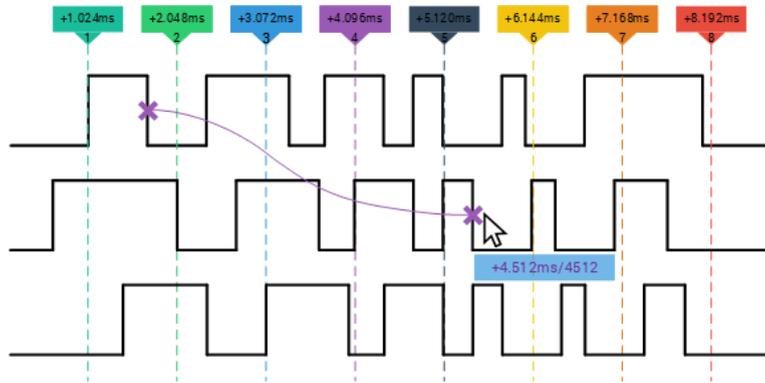
5. Intuitive HMI



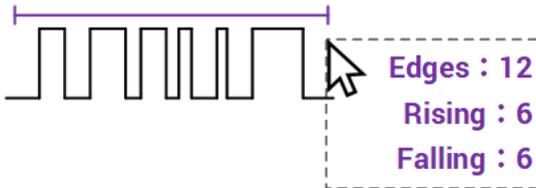


Width : +11.456ms
Period : +12.992ms
Frequency : 76.97Hz
Duty Cycle : 88.18%

Support zoom by mouse **wheel/right click/gesture**
support mouse **hover measurements**

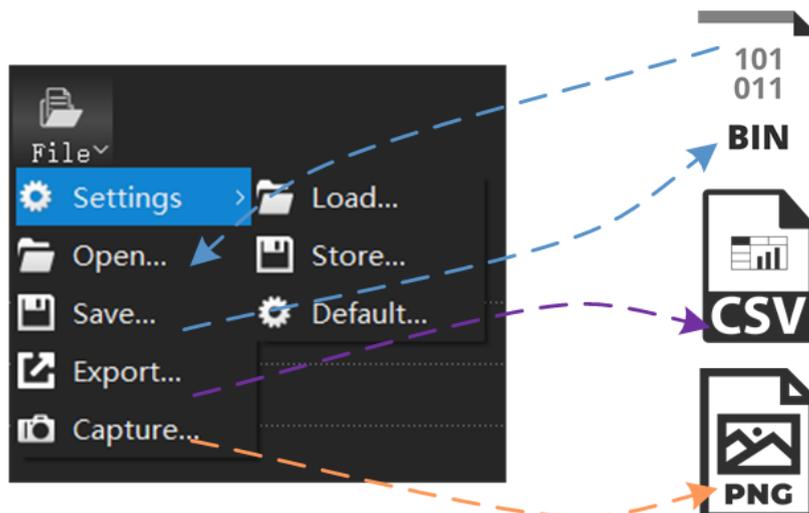


Support **cursors** with **edge snap** and
edge **interval measurement**



Edges		
+	Channel	Rising/Falling/Edges
×	1-2 @ 0	91/91/182
×	3-4 @ 1	103/102/205
×	5-6 @ 2	87/86/173
×	7-8 @ 3	72/72/144

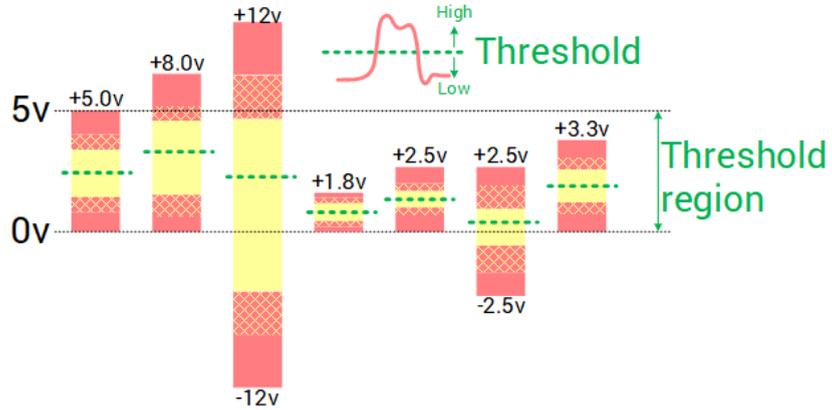
Support multiple ways of **edge statistics**



File & settings load/store
easy to **review & share & reprocess**

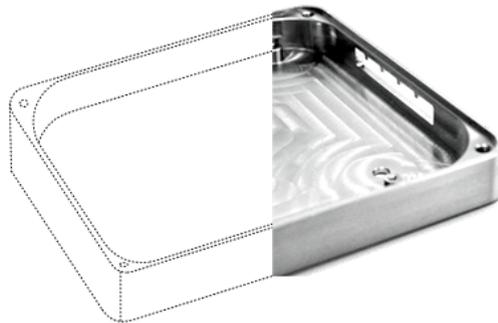


6. More Highlights

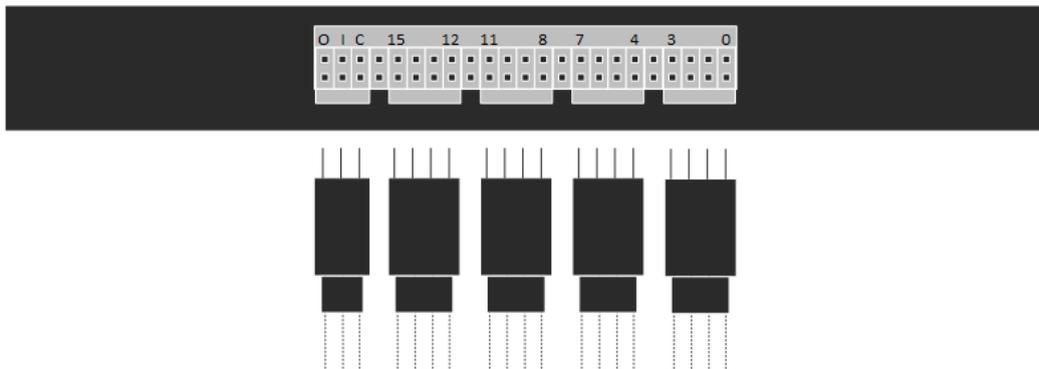


Adjustable threshold

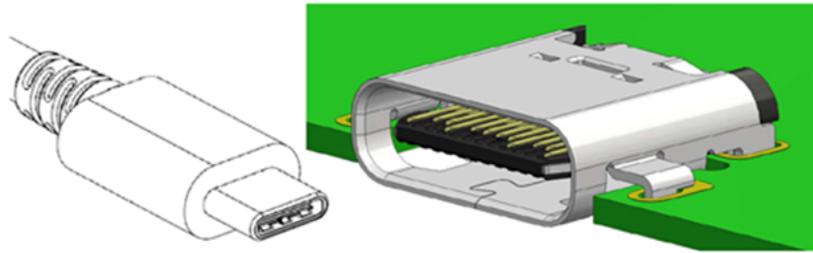
Compatible with various voltage standards
1.2V/1.8V/2.5V/3.3V/5.0V ...



CNC aluminum case



Grouped & Fool-proofing design of fly wires



USB Type-C interface

END

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