

Specifications

Hardware Features

- Works on USB1 & USB2 without any drivers needed.
- 20 MSPS sampling rate.
- Ultra precise quartz based timings.
- 256K*4 sampling buffer.
- 4 channels Capture mode.
- 4 channels generator / playback.
- 2 channels record + 2 channels playback in mixed mode.
- Trigger position from 0% to 100% (Anywhere over the span of the sampling depth).
- Trigger on Falling edge, Rising edge or Logic state change.
- Firmware upgrade feature for future evolutions.
- Live scrolling mode with 50, 100 and 250ms refresh rate (Useful to monitor the logic states of the 4 channels).

Software features

- Mouse-wheel zooming and panning.
- Unlimited markers and time measurements.
- Decoder: UART, SPI, I2C (More protocols come with PC software FREE updates).
- Data generator allowing to generate different types of sequences (e.g. UART packets).
- Flexible 4 channels PWM sequences generator (Variable Phase, Envelope and carrier).
- Save/load captured data for later visualization and or playback.
- Image export feature to facilitate technical report writing.
- FFT (Fast Fourier Transformation) allowing in depth frequency analysis.
- Software update feature for future evolutions.
- Parameters and configuration auto-saving.
- Possibility to configure colors for better visual appearance.



SCANALOGIC 2 Starter's guide



SELF-MADE KIT EDITION

www.ikalogic.com/scanalogic2/

TOP face components:

Component	Value / comment
C5	10nF
IC1	ATMEGA168-20A
IC2	SN74LVC1G125DCKR
JP1 (for factory testing only)	Don't connect
JP2	2.54mm 5P connector
LED3	CMS LED
Q4	20 MHz oscillator
R1	100
R3	1MΩ
R11	1KΩ
U1,U2,U3,U4	23K256
U5	LP2985IM5-3.6
X1	USB connector

BOTTOM face components:

Component	Value / comment
C1,C3,C4	22µF
C2	10nF
DZ1,DZ2	Zener diode 3V6
IC3,IC4	74125
R2	1.5 KΩ
R12	1.5 KΩ
R4, R5	~ 56Ω
R6,R7,R8,R9,R10	1KΩ
RN1	100K (4 elements resistor network)

NOTE: R13, R14, R15, R16, R17 are not to be connected and are not given in the KIT.



