

## Arbitrary waveform generator - bill of materials

### Main PCB

Reference	Value	Footprint
C1	100n	Capacitors_SMD:C_0805_HandSoldering
C10	10n	Capacitors_SMD:C_0805_HandSoldering
C11	100n	Capacitors_SMD:C_0805_HandSoldering
C12	100n	Capacitors_SMD:C_0805_HandSoldering
C13	10uf/10V	Capacitors_Tantalum_SMD:CP_Tantalum_Case-A_EIA-3216-18_Hand
C14	100n	Capacitors_SMD:C_0805_HandSoldering
C15	100n	Capacitors_SMD:C_0805_HandSoldering
C16	10uF/25V	Capacitors_SMD:CP_Elec_5x5.3
C17	10uF/25V	Capacitors_SMD:CP_Elec_5x5.3
C2	100n	Capacitors_SMD:C_0805_HandSoldering
C3	100n	Capacitors_SMD:C_0805_HandSoldering
C4	100n	Capacitors_SMD:C_0805_HandSoldering
C5	22p	Capacitors_SMD:C_0805_HandSoldering
C6	22p	Capacitors_SMD:C_0805_HandSoldering
C7	100n	Capacitors_SMD:C_0805_HandSoldering
C8	10uF	Capacitors_Tantalum_SMD:CP_Tantalum_Case-A_EIA-3216-18_Hand
C9	100n	Capacitors_SMD:C_0805_HandSoldering
D1	LED	LEDs:LED_0805
DS1	LCD16X2_I2C	Pin_Headers:Pin_Header_Straight_1x04_Pitch2.54mm
IC1	ATMEGA328-A	Housings_QFP:TQFP-32_7x7mm_Pitch0.8mm
P1	AVR-ICSP	Pin_Headers:Pin_Header_Straight_2x03_Pitch2.54mm
P2	POWER SUPPLY	Pin_Headers:Pin_Header_Straight_1x03_Pitch2.54mm
P3	Output	Connectors_TE-Connectivity:BNC_Socket_TYCO-AMP_LargePads
POT1	1K	Potentiometers:Potentiometer_Trimmer_Bourns_3296W
POT2	100K	Potentiometers:Potentiometer_Piher_T16H_Single_Vertical
R1	10K	Resistors_SMD:R_0805_HandSoldering
R2	1K3	Resistors_SMD:R_0805_HandSoldering
R3	1K3	Resistors_SMD:R_0805_HandSoldering
R4	1K3	Resistors_SMD:R_0805_HandSoldering
R5	200R	Resistors_SMD:R_0805_HandSoldering

Reference	Value	Footprint
SW1	Rotary_Encoder_Switch	Pin_Headers:Pin_Header_Straight_1x05_Pitch2.54mm
SW2	SW_SPDT	Pin_Headers:Pin_Header_Straight_1x03_Pitch2.54mm
U1	AD9833BRMZ	Housings_SSOP:MSOP-10_3x3mm_Pitch0.5mm
U2	TS1117-5	TO_SOT_Packages_SMD:SOT-223
U3	LM318N	Housings_SOIC:SOIC-8_3.9x4.9mm_Pitch1.27mm
X1	CFPS-72-24MHz	Oscillators:Oscillator_SMD_EuroQuartz_XO91-4pin_7.0x5.0mm_HandSoldering
Y1	16MHz	Crystals:Crystal_SMD_HC49-SD_HandSoldering

#### Power Supply

SW1	Mains Switch	-
T1	230V/110V to 12V 0V 12V	-
D1	Bridge rectifier 1A	-
C1	1000uF/35V	-
C2	1000uF/35V	-
U1	LM7812	-
U2	LM7912	-
C3	100uF/25V	-
C4	100uF/25V	-
C5	100n	-
C6	100n	-