SBK_WRIST_BLATER_II_PCB V1.3						
Description	Dimensions / Value	Qté	Supplier	Part Number	Comments	
PCB	57 x 58 x 1.6mm	1	SBK	SBK WRIST BLATER II PCB V0	Email me for inquiries : SmartBuildsKits@gmail.com	
Arduino Nano Every with 2x male header 1x15	Arduino Nano Every	1	Digikey, Mouser	ABX00033		
DFPlayer Mini with 2x male header 1x08	DFR0299	1	Digikey, Mouser	DFR0299		
Micro SD card	Recommanded Class 4 128 MB min. (for sound effects and a few music tracks only) 16 GB max (unlimited music tracks!)	1	Amazon		Size up to your taste: for the sound effects and few tracks, a 128MB is sufficient. If you want to put a lot of music tracks, well you can go up to 16GB.	
Power supply module	DFR0753 , DC-DC Buck Converter 6~14V to 5V/8A Replica can be found under the name CK1408	1	Digikey or Mouser	DFR0753	0 1 2	
LTK5128 5W Class D mono Amp module	12x15x1.6mm	1	Amazon	5W 5128 Class D mono amplifier module	15mm Faultic curpus (a) Faultic curpus (b) Faultic curpus (c) Fa	
Female header	Female 2.54mm 1x08	2	Amazon	Male and femal 2.54 headers kit	You can buy a kit on Amazon to cover all your needs for this	
Female header	Female 2.54mm 1x15	2	7			
Male header	Male 2.54mm 1x06	1	7			
Male header	Male 2.54mm 1x02	1	7			
Male header	Male 2.54mm 1x01	3	7			
Male header	Male 2.54mm 2x08	1	7			
Male header	Male 2.54mm 2x03	2	7			
JST XH254 terminal male plug	JST-XH 2.54mm male terminal, THT, 1x05	1			V 1 10 4 1 10 10 10 10 10 10	
JST XH254 terminal male plug	JST-XH 2.54mm male terminal, THT, 1x03	1	Amazon	JST-XH 2.54mm kit	You can buy a kit on Amazon to cover all your needs for this	
JST XH254 terminal male plug	JST-XH 2.54mm male terminal, THT, 1x02	5	7		project.	
	10k THT 1/4W	2	Amazon	<u>resistors kit</u>	You can buy a kit on Amazon to cover all your needs for this project.	
	4K7 THT 1/4W	2				
Resistor 1/4W	1k THT 1/4W	1				
	470 THT 1/4W	3				
	150 THT 1/4W (for fire button yellow led)	1				
Ceramic capacitor	0.1uF - 5mm between pins	3	Amazon	0.1uF 104 multilayer Ceramic Capacitor		
Low ESR Electrolityc Capacitor	220 uF 10V 6mm dia x 7mm, 2.5mm between pins	1	Digikey, Mouser, Amazon	220 uF 10V 6mm dia x 7mm	This capacitor is under the board, there is other size, but the 7mm high is more convenient to fit under the board.	
Low ESR Electrolityc Capacitor	1500 uF 10V 10mm dia x 17mm, 5mm between pins	1	Digikey, Mouser, Amazon	1500 uF	Various size available, but max diameter is 13mm.	
trimer pot	50K, 3362P Serie, P503, THT	1	Amazon, Mouser, Digikey	trim pot kit		
MOSFET	BS170 TO-92 NMOS - DGS (Drain-Gate-Source)	2	Amazon, Mouser, Digikey	BS170TO-92	Be aware that some Chinese knockouts are not DGS but SGD So test your MOSFET before soldering them. The SGD can still be used, you need to rotate them 180° on the pcb regarding to silkscreen marking	
Flyback diode	1N5819 THT	2	Amazon, Mouser, Digikey	<u>1N5819</u>	Not on the PCB but should be installed accross 5V and GND of pump and fan for the smoke effect. Could be solederd under the PBC on the JST-XH pins below the board. See schematics for details.	

Bar Meter PCBs					
Description	Dimensions / Value	Qté	Supplier	Part Number	Comments
Bar meter driver PCB	54.1*20.4mm	1	SBK	SBK_WB_BG_xx_DR_PCB V0	xx = SA -> Common Anode
	54.1 20.411111				xx = SK -> Common Cathode
Bar meter PCB	47.2x20.4mm	1	SBK	SBK WB BG 28SEG PCB VO	Fits both SA or SK bar meter
Leds driver chip	MAX7221 DIP-24	1	Digikey, Mouser, Amazon	MAX7221 DIP-24	Can find knock off on Amazon or Aliexpress
Bar Meter 28segments yellow			Aliexpress	BL28-3005xx04Y	Must fit your driver PCB :
		1			xx = SA -> Common Anode
	BL28-3005xx04Y				xx = SK -> Common Cathode
					Can find various sellers on Aliexpress, I do not recommand
					one in particular
JST XH254 terminal male plug	JST-XH 2.54mm male terminal, THT, 1x05	1	Amazon	JST-XH 2.54mm kit	You can buy a kit on Amazon to cover all your needs for this
	JST-XITZ.34IIIITIIIate terriiiiat, 1111, 1X03	1			project.
Male header	Male 2.54mm 1x06	1	Amazon	Male and femal 2.54 headers kit	You can buy a kit on Amazon to cover all your needs for this project.
Male header	Male 2.54mm 1x05	1			
Male header	Male 2.54mm 1x02	1			
Resistor 1/4W	27kOhms	1	Amazon	27kOhms 1/4W resistor	You won't find those easily in a kit
Ceramic capacitor	0.1uF - 5mm between pins	3	Amazon	0.1uF 104 multilayer Ceramic Capacitor	
Capacitor	10uF 10V 4mm dia x 7mm, 1.5mm between pins	1	Digikey, Mouser, Amazon	10 uF 25V 4x7mm	6.3V is the minimum for this capacitor.

Câbles and jumpers					
Description	Dimensions / Value	Qté	Supplier	Part Number	Comments
Bar meter jumper connector	JST-XH254 5pins female-female 10-15 cm	1	Amazon, Aliexpress	JST-XH254 5pins female-female 10-15 cm	10cm is a little short, 20 is a little long, 15cm rarely
					available unfortunatly
Potentiometer connector plug	Dupont female plug 1x03	2	Amazon, Aliexpress	Dupont kit	You can try to build a kit from this link for your needs. You
Switches and buttons connector plug	Dupont female plug 2x06	1			can take longuer pre-clamp wire and cut them in half to
Wires for potentiometer, switches and buttons	Dupon female pre-clamp wire 20cm	18			make 2 wires
Leds Strip jumper connector	Female JST-XH254 3pins to wire jumper 20cm	1	Amazon, Aliexpress	JST-XH254 jumper	You can try to make your jumper out of a kit like that.
Speaker connector	Female JST-XH254 2pins to wire jumper 20cm	1			
Smoke vacuum pump connector	Female JST-XH254 2pins to wire jumper 20cm	1			
Smoke fan connector	Female JST-XH254 2pins to wire jumper 20cm	1			
Batterie connector	Female JST-XH254 2pins to wire jumper 20cm	1			

Accesories					
Description	Dimensions / Value	Qté	Supplier	Part Number	Comments
Toggle switche	Blue mini MTS-101 2-pin SPST	4	Amazon	Blue mini MTS-101 SPST	Could also be MTS-102 3pin SPDT
Push button with yellow led indicator	R16-503 16mm Momentary Push Button 4pin Yellow	1	Amazon, Digikey, Mouser	R16-503 16mm Momentary Push Button 4pin Yellow	Be carefull, choose Momentory and 4 pins
				Link for refrence only	
Speaker	2 inches 5W 4Ohms	1	Amazon, Aliexpress	53mm	I do not recommand any speaker. Foot print must match this :
Potentiometer	B10K, 15mm shaft	2	Amazon	B10K15mm shaft	For the hue control in the Clippard valve, potentiometer pins could have to be bent or cut to fit inside
			Amazon, Aliexpress	No model number	
Mini vacuum pump (for smoke)	5VDC, less then 500mA	1		87.8mm 21.000	Must fit these dimensions to fit in the Clippard Valve
Fan (for smoke)	3006 or 3007, 2pins, 5VDC, less then 500mA	1	Amazon	3006 5v 2pin fan	3006 are more expensive then 3007 fan