PCB backside

Amount	Part Type	Designation	Properties
5	Generic female header - 1 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 1; pin spacing 0.1in (2.54mm)
1	AS2164	AS2164	package DIP (Dual Inline) [THT];
2	Electrolytic Capacitor	C1, C2	package 0605 [SMD, electrolytic]; capacitance 47µF; voltage 35V
2	Electrolytic Capacitor	C7, C8	package 0405 [SMD, electrolytic]; capacitance 10µF; voltage 16V
2	Film or C0G Capacitor	C10, C12	package 200 mil [THT, multilayer]; capacitance 1nF; voltage 16V
18	Ceramic Capacitor	C3 > C6, C15 > C22, C29 > C32, C34, C35	package 0805 [SMD, multilayer]; capacitance 100nF; voltage 16V
1	Film or C0G Capacitor	C23	package 200 mil [THT, multilayer]; capacitance 100nF; voltage 16V
4	Film or C0G Capacitor	C9, C11, C24, C27	package 200 mil [THT, multilayer]; capacitance 560pF; voltage 16V
3	Poly Styrene Capacitor	C25, C26, C28	package 100 mil [THT, multilayer]; capacitance 220pF; voltage 16V
3	Ceramic Capacitor	C33, C36, C37	package 200 mil [THT, multilayer]; capacitance 47pF; voltage 16V
1	CD4021	package DIP16 [THT]; type HEF4094	package DIP16 [THT]; type HEF4094; variant variant 1; part # IC1 - CD4021
2	Rectifier Diode	D1, D2	package Melf DO-213 AA [SMD]; type Rectifier; part # 1n5817
6	Schottky Diode	D7 > D12	package 300 mil [THT]; type Schottky; part # 1N4148
3	TL074 or OPA4134	IC4, IC6, IC9	package DIP (Dual Inline); devices 4; chip label IC; variant variant 3; pins 14; spacing 300mil; inputs per device 2
4	TL072 or OPA2134	IC5, IC7, IC8, IC10	package DIP (Dual Inline) [THT];
1	POWER TRAN +	IC11	package sot89; variant sot89; part # NJM78L09
1	POWER TRAN -	IC12	package sot89; variant sot89; part # NJM79L09
2	Generic female header - 3 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 3; pin spacing 0.1in (2.54mm)
2	Generic female header - 4 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 4; pin spacing 0.1in (2.54mm)
1	Generic female header - 9 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 9; pin spacing 0.1in (2.54mm)
1	Generic female header - 12 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 12; pin spacing 0.1in (2.54mm)
1	Generic shrouded header - 10 pins		package THT; hole size 1.0mm,0.508mm; row double; form ♂ (shrouded male); pins 10; pin spacing 0.1in (2.54mm)
1	Generic molex header - 4 pins		package THT; hole size 1.0mm,0.508mm; row single; form molex; pins 4; pin spacing 0.1in (2.54mm)
1	Generic molex header - 4 pins		package THT; hole size 1.5mm,0.508mm; row single; form molex; pins 4; pin spacing 0.156in (3.96mm)
4	NPN-Transistor	Q1 > Q4	package TO92 [THT]; type NPN (EBC); part # 2N3904
11	30k Ω Resistor	R3, R6, R15, R23, R32, R34, R49, R50, R55, R58, R59	package THT; tolerance ±1%; bands 4; resistance 30kΩ; pin spacing 400 mil
1	62k Ω Resistor	R33	package THT; tolerance ±1%; bands 4; resistance 62kΩ; pin spacing 400 mil
9	100k Ω Resistor	R4, R24, R35, R46, R60, R61, R82, R85, R88	package THT; tolerance ±1%; bands 4; resistance 100kΩ; pin spacing 400 mil
2	240k Ω Resistor	R38, R39	package THT; tolerance ±1%; bands 4; resistance 240kΩ; pin spacing 400 mil
3	120k Ω Resistor	R40, R41, R42	package THT; tolerance ±1%; bands 4; resistance 120kΩ; pin spacing 400 mil
8	15k Ω Resistor	R2, R22, R31, R43, R52, R83, R86, R89	package THT; tolerance ±1%; bands 4; resistance 15kΩ; pin spacing 400 mil
1	150k Ω Resistor	R44	package THT; tolerance ±1%; bands 4; resistance 150kΩ; pin spacing 400 mil
10	10k Ω Resistor	R5, R14, R45, R62, R69, R70, R74, R75, R79, R80	package THT; tolerance ±1%; bands 4; resistance 10kΩ; pin spacing 400 mil

9	51k Ω Resistor	R7, R9, R16, R17, R47, R48, R63, R64, R65	package THT; tolerance ±1%; bands 4; resistance 51kΩ; pin spacing 400 mil
4	510 Ω Resistor	R1, R21, R51, R56	package THT; tolerance ±1%; bands 4; resistance 510Ω; pin spacing 400 mil
1	1.5k Ω Resistor	R53	package THT; tolerance ±1%; bands 4; resistance 1.5kΩ; pin spacing 400 mil
1	470k Ω Resistor	R57	package THT; tolerance ±1%; bands 4; resistance 470kΩ; pin spacing 400 mil
3	3.9k Ω Resistor	R66, R71, R76	package THT; tolerance ±1%; bands 4; resistance 3.9kΩ; pin spacing 400 mil
6	1k Ω Resistor	R67, R72, R77, R81, R84, R87	package THT; tolerance ±1%; bands 4; resistance 1kΩ; pin spacing 400 mil
3	4k Ω Resistor	R68, R73, R78	package THT; tolerance ±5%; bands 4; resistance 4kΩ; pin spacing 400 mil

PCB Frontside

Amount	Part Type	Designation	Properties
2	Generic female header - 3 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 3; pin spacing 0.1in (2.54mm)
2	Generic female header - 4 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 4; pin spacing 0.1in (2.54mm)
1	Generic female header - 9 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 9; pin spacing 0.1in (2.54mm)
1	Generic female header - 12 pins		package THT; hole size 1.0mm,0.508mm; row single; form ♀ (female); pins 12; pin spacing 0.1in (2.54mm)
3	BLUE Banana	CV A, CV B, CV FILTER	
4	RED Banana	XOR, BIT1, BIT2, BIT3	
10	BLACK Banana	PULSE a & B, TRI A & B, PWM, CHAOS, HP, BP, LP, INPUT	
3	LED holders or lens 5mm		
3	Red LED - 5mm		package 5 mm [THT]; leg yes; color Red (633nm)
12	Alpha Potentiometer B10K		package THT; row single; variant variant 16; pin spacing 0.1in (2.54mm); part # B10K
1	47k Ω Resistor		package THT; tolerance ±1%; bands 4; resistance 47kΩ; pin spacing 400 mil
3	ON-ON SPDT		variant variant 4
12	Knobs		