C2 1 µF C3 0.22 µF C4 0.22 µF C5 0.1 ur Capacitor C6 0.1 ur Capacitor C7 (slupped risk) C8 0.1 ur Capacitor C8 0.1 ur Capacitor C9 1 µF C10 10 µF	Component Label	Part:	Label:	Sub - block	Spec				
C2	-								
C3									
C5									
C5									
C6			Instrument amplifier out	Vdd					
C7 (skipped #label)   C8					10 µF				
Co			( , 5		- r				
CO         1 μF         DC Block         potentity mattered short leg towards EEG design letters           C10         10 μF         Cook 0, 0.1%			LowPassFilter Out	Vss					
C10 10 μF R1 500 κ Ω, 0.1% R2 500 κ Ω, 0.5% R3 50 κ Ω, 0.5% R4 50 κ Ω, 0.5% R5 11 κ Ω, 5% R6 100 κ Ω R6 100 κ Ω R7 58 κ POT R8 500 κ Ω, 5% R9 10 Ω Ω R11 20 κ Ω, 5% R12 240 κ Ω, 5% R13 20 κ Ω, 5% R14 240 κ Ω, 5% R15 10 Ω, 5% R16 10 μ Ω, 5% R17 1 κ κ R18 20 κ Ω, 5% R19 10 Ω Ω R11 10 Ω Ω R12 240 κ Ω, 5% R13 10 Ω, 5% R14 10 κ Ω R15 10 Ω, 5% R16 10 μ Ω, 5% R17 1 κ μ R18 20 κ Ω, 5% R19 10 Ω Ω R21 10 κ Ω R22 20 κ Ω, 5% R24 10 κ Ω PWM R22 20 κ Ω, 5% R24 10 κ Ω PWM R25 10 Ω, 5% R24 10 κ Ω PWM R25 10 Ω, 5% R24 10 κ Ω PWM R25 10 Ω, 5% R25 10 Ω, 5% R26 10 Ω, 5% R27 10 Ω, 5% R28 10 Ω, 5% R29 10 Ω				DC Block	polarity matters!	short leg towards	s EEG design lette	ers	
R1         500 κ Ω, 0.1%           R2         500 κ Ω, 0.5%         50 κ Ω, 0.1%           R3         50 κ Ω, 0.5%         50 κ Ω, 0.1%           R4         50 κ Ω, 5%         50 κ Ω, 0.1%           R5         1 M Ω, 5%         DC Block         1 M Ω, 1%           R6         100 κ Ω         LPF           R7         5k POT         LPF           R8         500 κ Ω, 5%         500 κ Ω, 1%           R9         50 κ Ω, 5%         500 κ Ω, 1%           R10         10 Ω         20 κ Ω, 1%           R11         20 κ Ω, 5%         20 κ Ω, 1%           R12         240 κ Ω, 5%         247 κ Ω, 1%           R13         20 κ Ω, 5%         247 κ Ω, 1%           R14         240 κ Ω, 5%         247 κ Ω, 1%           R15         10 Ω, 5%         247 κ Ω, 1%           R16         10 MQ, 5%         240 κ Ω, 1%           R17         1k         Whole circuit           R18         20 κ Ω, 5%         20 κ Ω, 1%           R21         10 κ Ω         20 κ Ω, 1%           R22         10 κ Ω, 5%         20 κ Ω, 1%           R23         10 Ω, 5%         20 κ Ω, 1%           R24         10 κ Ω POT					. ,				
R2 500k Ω, 5% Sok Ω, 5% Sok Q, 0.1% Sok Q									
R3         50k Ω, 5%         50k Ω, 0.1%           R6         10k Ω         CB DBook         M Ω, 1%           R6         10k Ω         LPF           R7         5k POT         LPF           R8         500k Ω, 5%         500k Ω, 1%           R9         50k Ω, 5%         500k Ω, 1%           R10         10 Ω         20k Ω, 5%           R11         20k Ω, 5%         20k Ω, 1%           R12         240k Ω, 5%         247k Ω, 1%           R13         20k Ω, 5%         247k Ω, 1%           R14         240k Ω, 5%         247k Ω, 1%           R15         10 Ω, 5%         20k Ω, 1.1%           R16         10 MQ, 5%         20k Ω, 1.1%           R17         1k         Whole circuit           R18         20k Ω, 5%         20k Ω, 1.1%           R21         10 M, 5%         20k Ω, 1.1%           R22         20k Ω, 5%         20k Ω, 1.1%           R23         10 Ω, 5%         20k Ω, 1.1%           R24         10k Ω         PWM           R25         10 Ω, 5%         20k Ω, 1.1%           R24         10k Ω POT         Instrument AMP           R3         30 PIN					50k Ω, 0.1%				
R4         50k Ω, 5%         50k Ω, 0.1%         50k Ω, 0.1%           R6         1 MΩ, 9%         DC Block         1 MΩ, 1%         Amount of the property o									
R6         10 Ω Ω         LPF           R7         5K POT         LPF           R8         500 Ω 5%         500 Ω 1%           R9         50 Ω 5%         500 Ω 1%           R10         10 Ω            R11         20 Ω 5%          20 Ω 1%           R12         240 Ω 5%          247 Κ Ω 1%           R13         20 Κ Ω 5%          247 Κ Ω 1%           R14         240 Ω 5%          247 Κ Ω 1%           R15         10 Ω 5%          10 Ω 1%           R16         10 MΩ 5%          20 Ω 1%           R17         1k          Whole circuit           R18         20 K Ω 5%          20 K Ω 1%           R19           20 K Ω 1%           R20              R21         10 K Ω             R22         20 K Ω             R23         10 Ω             R24         10 K Ω          .									
R6         100k Ω         LPF           R7         5k PCT         LPF           R8         500k Ω, 5%         500k Ω, 1%           R9         50k Ω, 5%         500k Ω, 1%           R10         10 Ω         500k Ω, 1%           R11         20k Ω, 5%         20k Ω, 1%           R12         240k Ω, 5%         247k Ω, 1%           R13         20k Ω, 5%         20k Ω, 1%           R14         240k Ω, 5%         247k Ω, 1%           R15         10 Ω, 5%         247k Ω, 1%           R16         10 MΩ, 5%         247k Ω, 1%           R17         1k         Whole circuit           R18         20k Ω, 5%         20k Ω, 1%           R19         20k Ω, 5%         20k Ω, 1%           R20         20k Ω, 5%         20k Ω, 1%           R21         10k Ω         PWM         20k Ω, 1%           R22         20k Ω, 5%         20k Ω, 1%         20k Ω, 1%           R23         10 Ω, 5%         20k Ω, 1%         20k Ω, 1%           R24         10k Ω POT         Instrument AMP         30 PIN         30 PIN           J3         Battery headers         30 PIN         30 PIN         30 PIN         30 PIN <td></td> <td></td> <td></td> <td>DC Block</td> <td></td> <td></td> <td></td> <td></td>				DC Block					
R7	R6								
R8         500k Ω, 5%         500k Ω, 1%           R9         50k Ω, 5%         500k Ω, 1%           R10         10 Ω         500k Ω, 1%           R11         20k Ω, 5%         20k Ω, 1%           R12         240k Ω, 5%         247k Ω, 1%           R13         20k Ω, 5%         20k Ω, 1%           R14         240k Ω, 5%         247k Ω, 1%           R15         10 Ω, 5%         10 Ω, 1%           R16         10 MΩ, 5%         20k Ω, 1%           R17         1k         Whole circuit           R18         20k Ω, 5%         20k Ω, 1%           R20         20k Ω, 5%         20k Ω, 1%           R21         10 Ω         PWM           R22         20k Ω, 5%         20k Ω, 1%           R23         10 Ω, 5%         20k Ω, 1%           R24         10 Ω POT         Instrument AMP           R25         10 Ω, 5%         20k Ω, 1%           R24         10 Ω POT         Instrument AMP           R25         10 Ω, 5%         20k Ω, 1%           J3         Battery headers         30 PIN         30 PIN           J6         80 PIN         30 PIN         30 PIN           J6									
R9         50 k Ω, 5%         500k Ω, 1%         60           R10         10 Ω         60         60           R11         20 k Ω, 5%         20 k Ω, 1%         60           R12         240k Ω, 5%         247k Ω, 1%         60           R13         20 k Ω, 5%         20 k Ω, 1%         60           R14         240k Ω, 5%         247k Ω, 1%         60           R15         10 Ω, 5%         10 Ω, 1%         60           R16         10 MΩ, 5%         70         20 k Ω, 1%         60           R17         1k         Whole circuit         60         60           R18         20 k Ω, 5%         20 k Ω, 1%         60         60           R19         20 k Ω, 5%         20 k Ω, 1%         60         60           R20         90					500k Ω, .1%				
R10         10 Ω           R11         20k Ω, 5%         20k Ω, 1%           R12         240k Ω, 5%         247k Ω, 1%           R13         20k Ω, 5%         20k Ω, 1%           R14         240k Ω, 5%         247k Ω, 1%           R15         10 Ω, 5%         10 Ω, 1%           R16         10 MΩ, 5%         20k Ω, 1%           R17         1k         Whole circuit           R18         20k Ω, 5%         20k Ω, 1%           R19         20k Ω, 1%         20k Ω, 1%           R20         PWM         20k Ω, 1%           R21         10k Ω         PWM         20k Ω, 1%           R22         20k Ω, 5%         20k Ω, 1%         20k Ω, 1%           R22         20k Ω, 5%         20k Ω, 1%         20k Ω, 1%           R23         10 Ω, 5%         20k Ω, 1%         20k Ω, 1%           R24         10k Ω POT         Instrument AMP         20k Ω, 1%         20k Ω, 1%           R25         10 Ω, 5%         20k Ω, 1%           J3         Battery headers         3         30k PIN         30k PIN         30k PIN         30k PIN         30k PIN         30k									
R11         20k Ω, 5%         20k Ω, 1%            R12         240k Ω, 5%         247k Ω, 1%            R13         20k Ω, 5%         20k Ω, 1%            R14         240k Ω, 5%         247k Ω, 1%            R15         10 Ω, 5%         10 Ω, 1%            R16         10 MΩ, 5%             R17         1k         Whole circuit            R18         20k Ω, 5%          20k Ω, 1%           R19              R20              R21         10k Ω             R22         20k Ω, 5%              R23         10 Ω, 5%               R24         10k Ω POT         Instrument AMP              R24         10k Ω POT         Instrument AMP              J2         Battery headers                J3         Battery headers             <									
R12       240 k Ω, 5%       247 k Ω, 1%          R13       20 k Ω, 5%       20 k Ω, 1%          R14       240 k Ω, 5%       247 k Ω, 1%          R15       10 Ω, 5%       10 Ω, 1%          R16       10 MΩ, 5%       10 Ω, 1%          R17       1 k       Whole circuit          R18       20 k Ω, 5%       20 k Ω, 1%          R29       PWM           R21       10 k Ω       PWM           R22       20 k Ω, 5%       20 k Ω, 1%           R23       10 Ω, 5%       20 k Ω, 1%            R24       10 k Ω POT       Instrument AMP					20k Ω, .1%				
R13         20k Ω, 5%         20k Ω, 1%         8           R14         240k Ω, 5%         247k Ω, 1%         8           R15         10 Ω, 5%         10 Ω, 1%         8           R16         10 MΩ, 5%         8         10 Ω, 1%         8           R17         1k         Whole circuit         8         9           R18         20k Ω, 5%         20k Ω, 1%         9         9           R20         8         9         9         9         9           R21         10k Ω         9WM         9									
R14         240k Ω, 5%         247k Ω, 11%            R15         10 Ω, 5%         10 Ω, 1%            R16         10 MΩ, 5%             R17         1k         Whole circuit            R18         20k Ω, 5%          20k Ω, 1%           R20              R21         10k Ω         PWM            R22         20k Ω, 5%          20k Ω, 1%           R23         10 Ω, 5%             R24         10k Ω POT         Instrument AMP            R25         10 Ω, 5%             J1         80 PIN             J2         Battery headers             J3         Battery headers              J4         80 PIN              J5         80 PIN              J6         80 PIN               J8         80 PIN									
R15         10 Ω, 5%         10 Ω, 1%         10 Ω, 1%           R16         10 MΩ, 5%         10 Ω, 1%         10 Ω, 1%           R17         1k         Whole circuit         10 Ω           R18         20k Ω, 5%         20k Ω, 1%         10 Ω           R19         10 Ω         10 Ω         10 Ω           R20         10 Ω         10 Ω         10 Ω           R21         10k Ω         10 Ω         10 Ω           R22         20k Ω, 5%         20k Ω, 1%         10 Ω           R23         10 Ω, 5%         10 Ω         10 Ω           R24         10k Ω POT         10 Ω         10 Ω         10 Ω           R25         10 Ω, 5%         10 Ω         10 Ω         10 Ω           J1         30 PIN         10 Ω         10 Ω         10 Ω           J2         Battery headers         10 Ω         10 Ω         10 Ω           J3         Battery headers         10 Ω         10 Ω         10 Ω           J4         80 PIN         10 Ω         10 Ω         10 Ω           J5         30 PIN         10 Ω         10 Ω         10 Ω           J8         30 PIN         10 Ω         10 Ω									
R16         10 MΩ, 5%         Whole circuit         Mode circuit									
R17         1k         Whole circuit         Common state of the circuit         Mode circuit         Common state of the circuit <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
R18       20k Ω, 5%       20k Ω, 1%       1         R19       20k Ω, 1%       1       1         R20       6       6       6       6         R21       10k Ω       PWM       6       6         R22       20k Ω, 5%       20k Ω, 1%       6       6         R23       10 Ω, 5%       6       6       6       6         R24       10k Ω POT       1       1       6       7       7       8       7       7       8       9       1       6       6       7       6       6       7       6       6       7       7       7       8       9       1       7       7       8       9       1				Whole circuit					
R19         R20         PWM         PWM <td></td> <td></td> <td></td> <td></td> <td>20k Ω, .1%</td> <td></td> <td></td> <td></td>					20k Ω, .1%				
R20       PWM       PWM       PWM         R21       10k Ω       PWM       20k Ω, 1%       PWM         R22       20k Ω, 5%       20k Ω, 1%       PWM         R23       10 Ω, 5%       PWM       PWM       PWM         R24       10k Ω POT       Instrument AMP       PWM       PWM       PWM         R25       10 Ω, 5%       PWM	R19								
R21         10k Ω         PWM         M									
R22       20k Ω, 5%       20k Ω, 1%       9         R23       10 Ω, 5%       9       9         R24       10k Ω POT       Instrument AMP       9         R25       10 Ω, 5%       9       9         J1       80 PIN       9       9         J2       Battery headers       9       9       9         J3       Battery headers       9       9       9       9       9         J4       80 PIN       9		10k Ω		PWM					
R23         10 Ω, 5%         Instrument AMP         Image: Control of the c					20k Ω, .1%				
R24         10k Ω POT         Instrument AMP            R25         10 Ω, 5%         Instrument AMP            J1         80 PIN         Instrument AMP         Instrument AMP         Instrument AMP           J1         80 PIN         Instrument AMP         Instrument AMP <td>R23</td> <td>10 Ω, 5%</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	R23	10 Ω, 5%							
R25       10 Ω, 5%	R24			Instrument AMP					
J2       Battery headers         J3       Battery headers         J4       80 PIN         J5       80 PIN         J6       80 PIN         J7       80 PIN         J8       80 PIN         J9       80 PIN         J10       80 PIN         J11	R25								
J3       Battery headers         J4       80 PIN         J5       80 PIN         J6       80 PIN         J7       80 PIN         J8       80 PIN         J9       80 PIN         J10       80 PIN         J11       J12         U1       DIP SOCKETS 8 CHAN         U2       DIP SOCKETS 8 CHAN         U3       DIP SOCKETS 8 CHAN         U4       LM7805 +5V REG         U5       DIP SOCKETS 8 CHAN	J1	80 PIN							
J4 80 PIN J5 80 PIN J6 80 PIN J7 80 PIN J8 80 PIN J9 80 PIN J10 80 PIN J11	J2	Battery headers							
J5 80 PIN J6 80 PIN J7 80 PIN J8 80 PIN J8 80 PIN J9 80 PIN J10 80 PIN J11	J3	Battery headers							
J6 80 PIN	J4								
J6 80 PIN	J5	80 PIN							
J8 80 PIN J9 80 PIN J10 80 PIN J11	J6	80 PIN							
J9 80 PIN  J10 80 PIN  J11	J7	80 PIN							
J10       80 PIN         J11       (1)         J12       (2)         U1       DIP SOCKETS 8 CHAN         U2       DIP SOCKETS 8 CHAN         U3       DIP SOCKETS 8 CHAN         U4       LM7805 +5V REG         U5       DIP SOCKETS 8 CHAN	J8	80 PIN							
J11  J12  U1 DIP SOCKETS 8 CHAN  U2 DIP SOCKETS 8 CHAN  U3 DIP SOCKETS 8 CHAN  U4 LM7805 +5V REG  U5 DIP SOCKETS 8 CHAN	J9	80 PIN							
J12       U1       DIP SOCKETS 8 CHAN       U2       DIP SOCKETS 8 CHAN       U3       DIP SOCKETS 8 CHAN       U3       U4       LM7805 +5V REG       U5       DIP SOCKETS 8 CHAN       U5 <td>J10</td> <td>80 PIN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	J10	80 PIN							
U1       DIP SOCKETS 8 CHAN         U2       DIP SOCKETS 8 CHAN         U3       DIP SOCKETS 8 CHAN         U4       LM7805 +5V REG         U5       DIP SOCKETS 8 CHAN	J11								
U2         DIP SOCKETS 8 CHAN           U3         DIP SOCKETS 8 CHAN           U4         LM7805 +5V REG           U5         DIP SOCKETS 8 CHAN	J12								
U3         DIP SOCKETS 8 CHAN           U4         LM7805 +5V REG           U5         DIP SOCKETS 8 CHAN	U1	DIP SOCKETS 8	CHAN						
U4         LM7805 +5V REG           U5         DIP SOCKETS 8 CHAN	U2	DIP SOCKETS 8							
U5 DIP SOCKETS 8 CHAN	U3	DIP SOCKETS 8	CHAN						
	U4	LM7805 +5V REG	}						
U6 LM7805 -5V REG	U5	DIP SOCKETS 8	CHAN						
	U6	LM7805 -5V REG							

SWAG	LED Light			
ON	LED Light			