

Controller

Source: E:/Tuner/Controller/Controller.sch

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Tool: Eeschema 4.0.7

Component Count: 169

Ref	Value
C1	0.1 uF 50 V ceramic disc capacitor
C2	0.1 uF 50 V ceramic disc capacitor
C3	0.1 uF 630 V ceramic disc capacitor
C4	1000 uF 10 V electrolytic radial capacitor
C5	0.1 uF 630 V ceramic disc capacitor
C6	100 uF 25 V electrolytic radial capacitor
C7	0.1 uF 50 V ceramic disc capacitor
C8	10 nF 50 V ceramic disc capacitor
C9	10 nF 50 V ceramic disc capacitor
C10	10 nF 50 V ceramic disc capacitor
C11	10 nF 50 V ceramic disc capacitor
C12	10 nF 50 V ceramic disc capacitor
C13	10 nF 50 V ceramic disc capacitor
C14	10 nF 50 V ceramic disc capacitor
C15	100 nF 50 V ceramic disc capacitor
C16	100 nF 50 V ceramic disc capacitor
C17	0.1 uF 50 V ceramic disc capacitor
C18	10 nF 50 V ceramic disc capacitor
C19	100 nF 50 V ceramic disc capacitor
C20	0.1 uF 50 V ceramic disc capacitor
C21	100 nF 50 V ceramic disc capacitor
C22	10 nF 50 V ceramic disc capacitor
C23	10 nF 50 V ceramic disc capacitor
C24	10 nF 50 V ceramic disc capacitor
C25	0.1 uF 50 V ceramic disc capacitor
C26	0.1 uF 50 V ceramic disc capacitor
C27	10 nF 50 V ceramic disc capacitor
C28	NC
C29	NC
C30	0.1 uF 50 V ceramic disc capacitor
C31	0.1 uF 50 V ceramic disc capacitor
C32	0.1 uF 50 V ceramic disc capacitor
C33	0.1 uF 50 V ceramic disc capacitor
C34	0.1 uF 50 V ceramic disc capacitor
C35	0.1 uF 50 V ceramic disc capacitor
C36	100 uF 10 V electrolytic radial capacitor
D1	1N4001
D2	1N4001
D3	1N5711
D4	1N5711
D5	1N5711
D6	1N5711
D7	1N5711
D8	3 mm LED

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D9	1N5711
D10	1N5711
D11	1N5711
D12	1N5819
D13	1N4148
D14	1N5819
D15	1N4148
D16	1N4148
D17	1N5711
D18	1N4148
D19	1N4148
D20	1N4148
D21	1N4729A
D24	1N5819
D25	1N5819
J1	JST 2.54 mm male 5/6 pin socket
J2	JST 2.54 mm male 5/6 pin socket
J3	JST 2.54 mm male 5/6 pin socket
J4	JST 2.54 mm male 5/6 pin socket
J5	JST 2.54 mm male 5/6 pin socket
J6	JST 2.54 mm male 5/6 pin socket
J7	5.08 mm spacing 2 pin screw terminal block
J8	2.54 mm spacing 6 pin header
J9	JST 2.54 mm male 5/6 pin socket
J10	2.54 mm spacing 5 pin header
J12	5.08 mm spacing 2 pin screw terminal block
J15	5.08 mm spacing 2 pin screw terminal block
J16	2.54 mm spacing 6 pin header
J22	JST 2.54 mm male 5/6 pin socket
J26	5.08 mm spacing 2 pin screw terminal block
J27	5.08 mm spacing 2 pin screw terminal block
J28	5.08 mm spacing 2 pin screw terminal block
J30	5.08 mm spacing 2 pin screw terminal block
JP1	2.54 mm spacing 2 pin header
JP2	2.54 mm spacing 2 pin header
JP3	2.54 mm spacing 2 pin header
JP4	2.54 mm spacing 2 pin header
L3	100 uH RF choke 3 A
L5	100 uH RF choke 3 A
Q1	2N3904
Q2	2N3904
Q3	2N3904
Q4	2N3904
Q5	2N3904
Q6	2N3904
Q7	2N3904
Q8	2N3904
R1	10k ¼ watt resistor
R2	10k ¼ watt resistor

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R3	1k $\frac{1}{4}$ watt resistor
R4	330R $\frac{1}{4}$ watt resistor
R5	470R $\frac{1}{4}$ watt resistor
R6	10k $\frac{1}{4}$ watt resistor
R7	51R $\frac{1}{4}$ watt resistor
R8	10k $\frac{1}{4}$ watt resistor
R9	10k $\frac{1}{4}$ watt resistor
R10	1k $\frac{1}{4}$ watt resistor
R11	330R $\frac{1}{4}$ watt resistor
R12	1k $\frac{1}{4}$ watt resistor
R13	330R $\frac{1}{4}$ watt resistor
R14	10k $\frac{1}{4}$ watt resistor
R15	1k $\frac{1}{4}$ watt resistor
R16	50R 2 watt resistor
R17	50R 2 watt resistor
R18	10k $\frac{1}{4}$ watt resistor
R19	100R $\frac{1}{4}$ watt resistor
R20	22k $\frac{1}{4}$ watt resistor
R21	220R $\frac{1}{4}$ watt resistor
R22	220R $\frac{1}{4}$ watt resistor
R23	51R $\frac{1}{4}$ watt resistor
R24	1k $\frac{1}{4}$ watt resistor
R25	1k $\frac{1}{4}$ watt resistor
R26	1k $\frac{1}{4}$ watt resistor
R27	51R $\frac{1}{4}$ watt resistor
R28	220R $\frac{1}{4}$ watt resistor
R29	1k $\frac{1}{4}$ watt resistor
R30	1k $\frac{1}{4}$ watt resistor
R31	1k $\frac{1}{4}$ watt resistor
R32	100R $\frac{1}{4}$ watt resistor
R33	1k $\frac{1}{4}$ watt resistor
R34	50R 2 watt resistor
R35	10k $\frac{1}{4}$ watt resistor
R36	1k $\frac{1}{4}$ watt resistor
R37	1.5k $\frac{1}{4}$ watt resistor
R38	1.5k $\frac{1}{4}$ watt resistor
R39	1k $\frac{1}{4}$ watt resistor
R40	1k $\frac{1}{4}$ watt resistor
R41	220R $\frac{1}{4}$ watt resistor
R42	100R $\frac{1}{4}$ watt resistor
R43	1.5k $\frac{1}{4}$ watt resistor
R44	1.5k $\frac{1}{4}$ watt resistor
R45	10k $\frac{1}{4}$ watt resistor
R46	1k $\frac{1}{4}$ watt resistor
R47	22k $\frac{1}{4}$ watt resistor
R48	100R $\frac{1}{4}$ watt resistor
R49	220R $\frac{1}{4}$ watt resistor
R50	0R wire
R51	22k $\frac{1}{4}$ watt resistor

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R52	220R $\frac{1}{4}$ watt resistor
R53	0R wire
R54	10k $\frac{1}{4}$ watt resistor
R55	0R wire
R56	1k $\frac{1}{4}$ watt resistor
R57	1k $\frac{1}{4}$ watt resistor
R58	1k $\frac{1}{4}$ watt resistor
R59	1.5k $\frac{1}{4}$ watt resistor
R60	1.5k $\frac{1}{4}$ watt resistor
R61	1.5k $\frac{1}{4}$ watt resistor
R62	220R $\frac{1}{4}$ watt resistor
R63	10k $\frac{1}{4}$ watt resistor
U1	74HC393 DIP-14
U2	74HC14 DIP-14
U3	74HC86 DIP-14
U4	LM350 or LM338 TO-220 package
UB1	2 X 20 pin 2.54 mm spacing header sockets