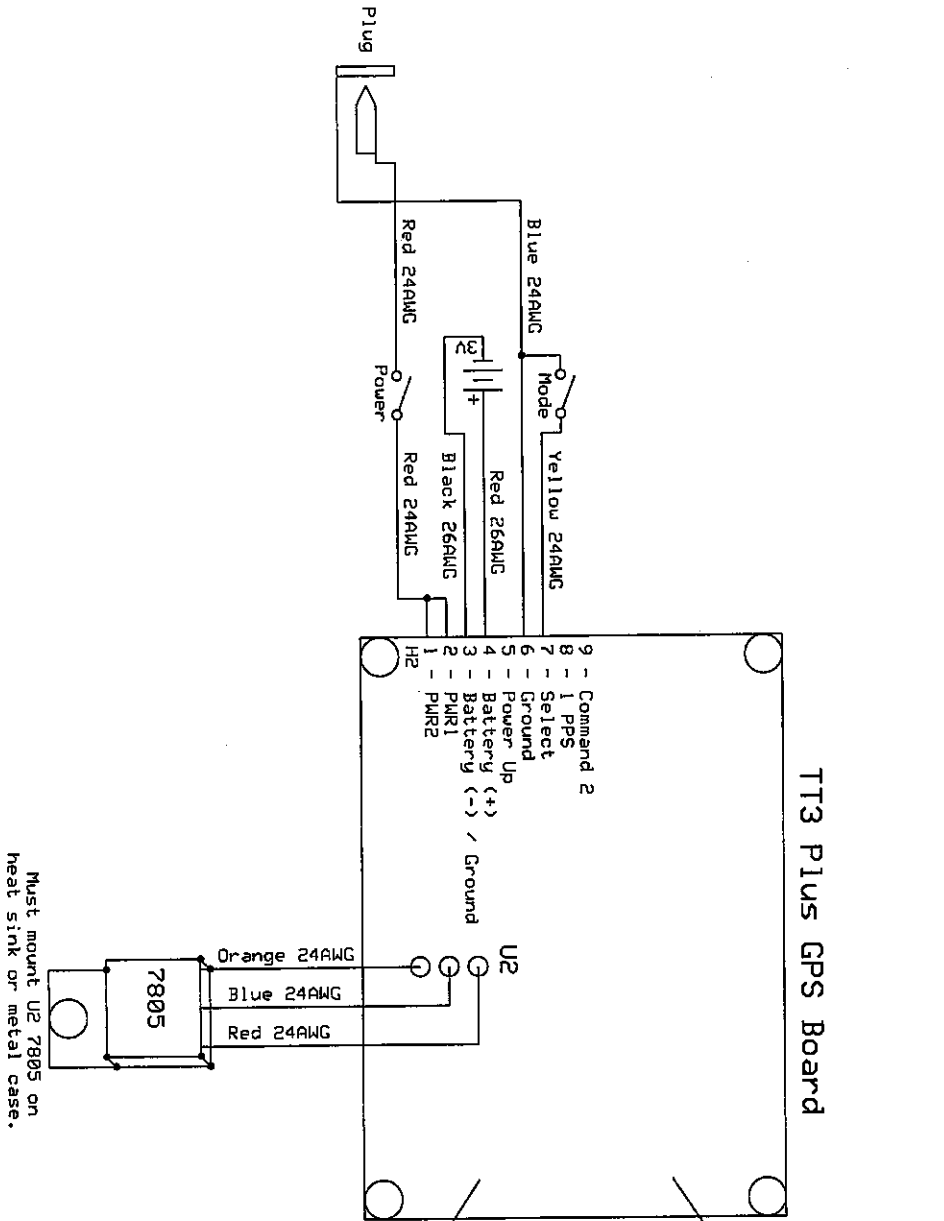
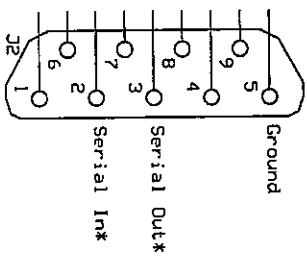
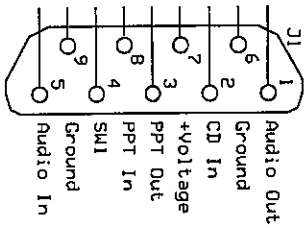


Note: U2 needs to be mounted on a heat sink or metal case to run cool.

<b>TinyTrak3 GPS Plus</b>	
Rev: D.RunK1e	Rev A
KCOKEP	7/22/2003
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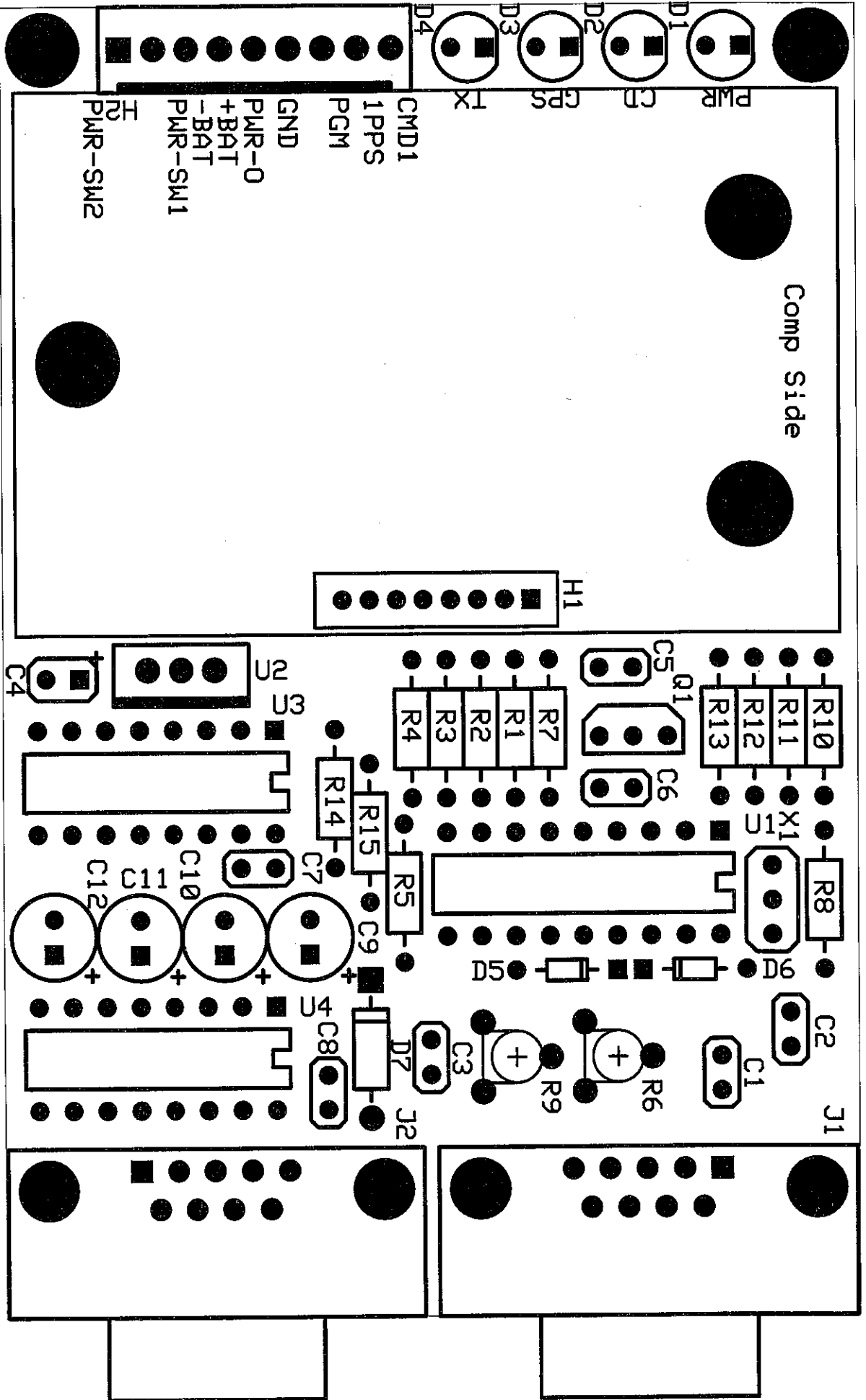


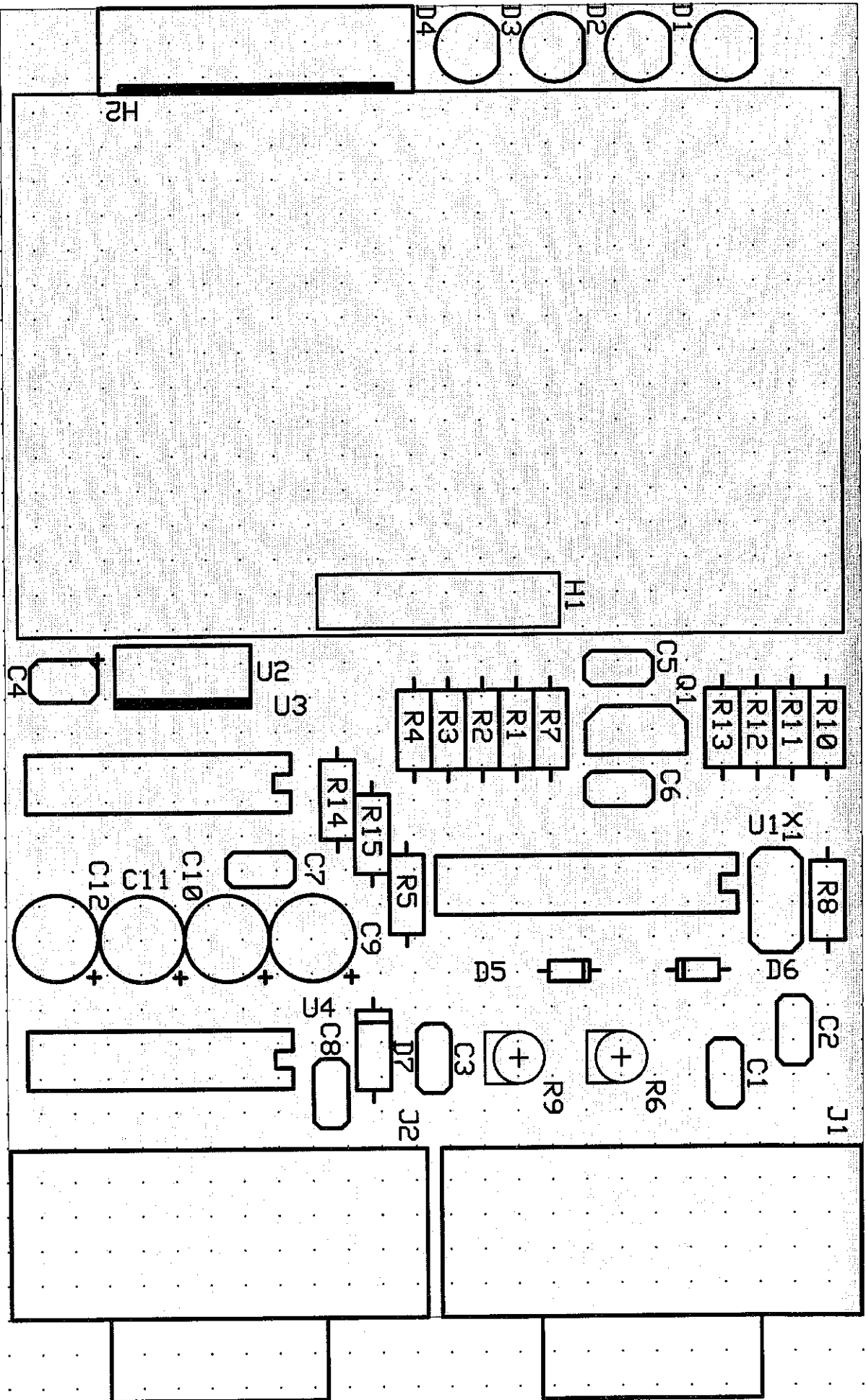
Must mount U2 7805 on heat sink or metal case.

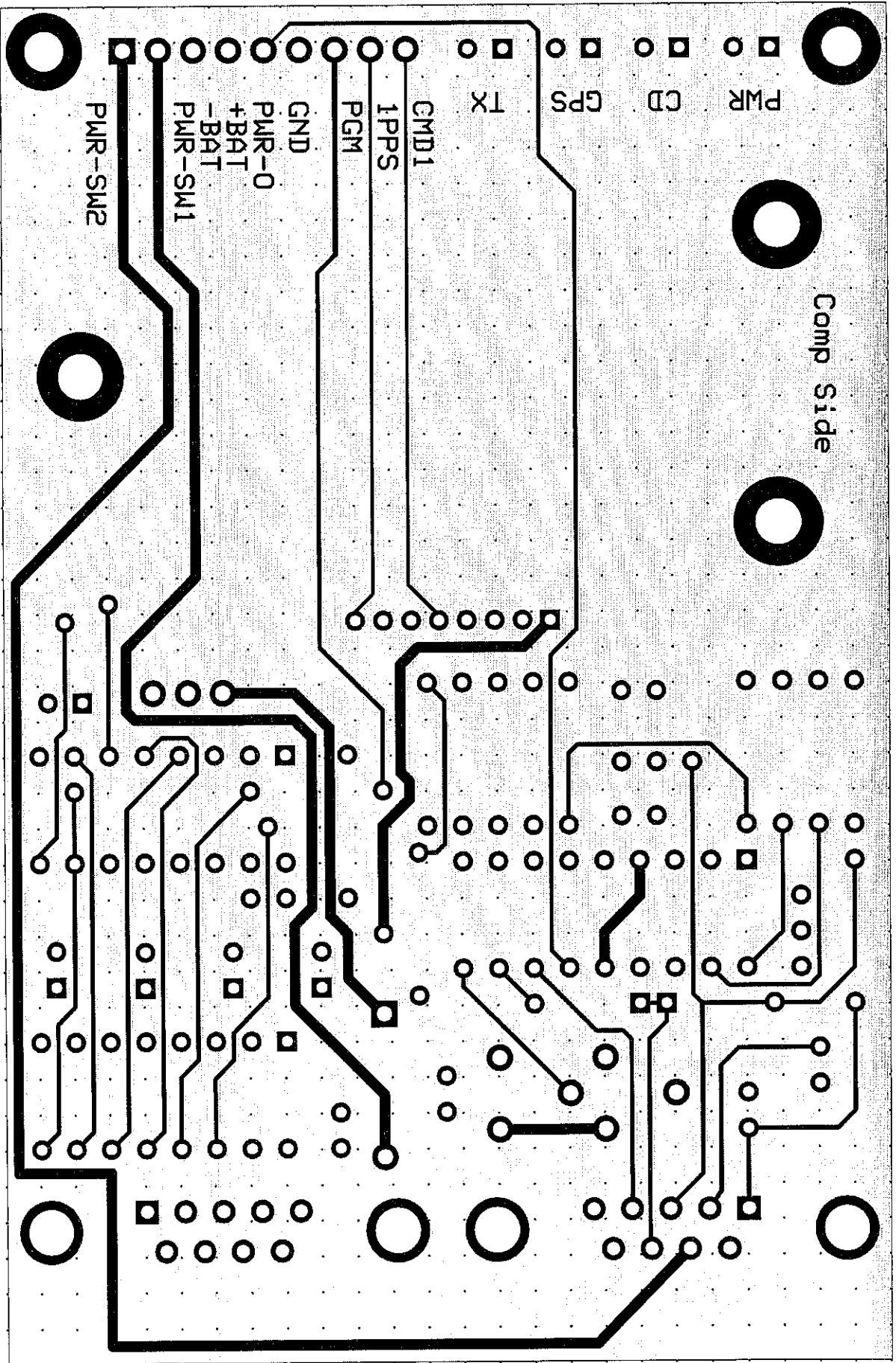


**NOTE:**  
 \* Jumpers JP1 - JP4 can be used to select how the serial port J2 in setup. The default is JP2 and JP3 are shorted. Cutting JP2 and JP3 and shorting JP1 and JP4 will switch serial out and in on connector J2.

<b>TinyTrack3 Plus GPS</b>		
Rev: D.Runkle	Rev A	Page 1 of 1
KCOKEP	9/19/2003	

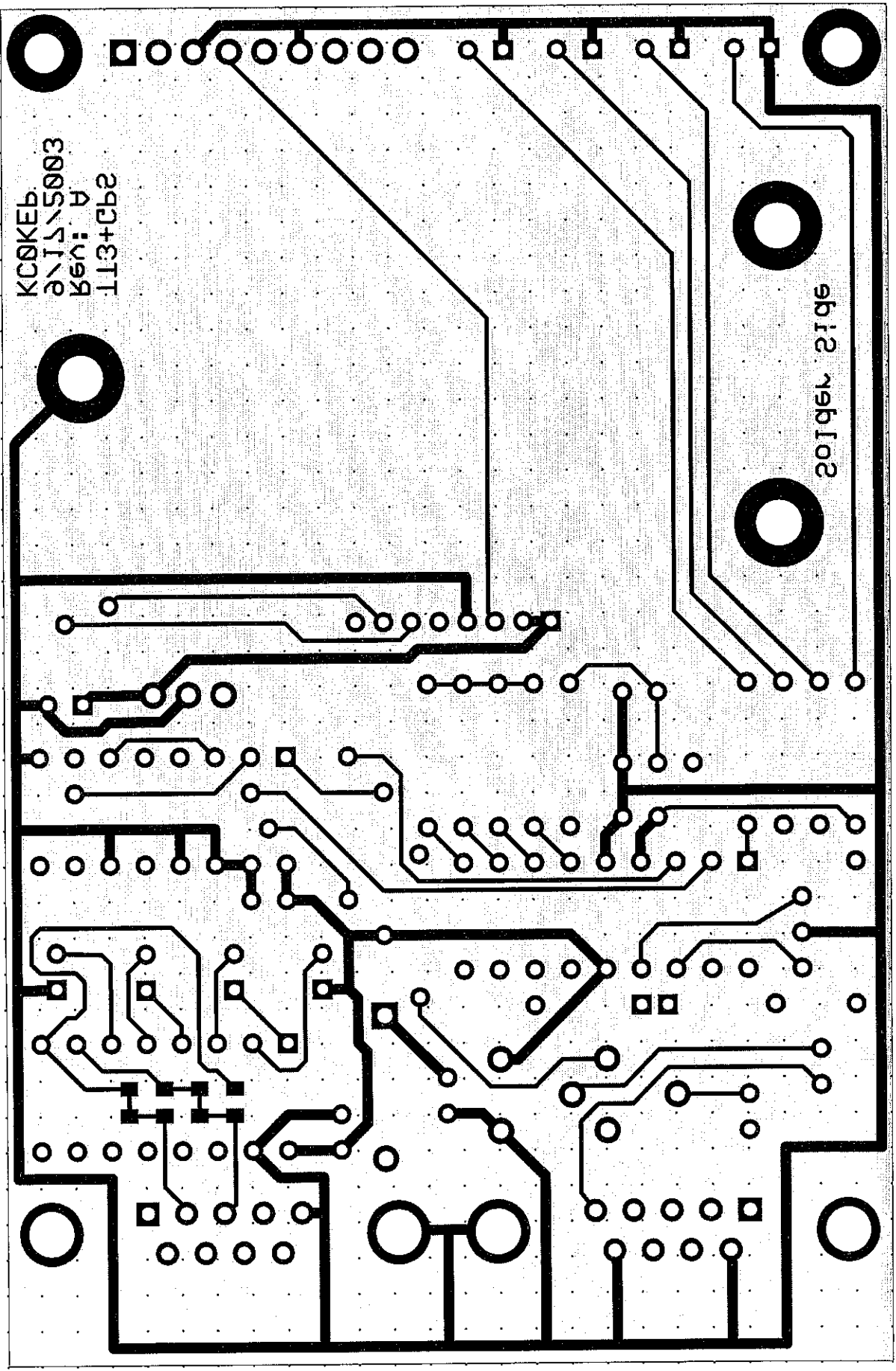


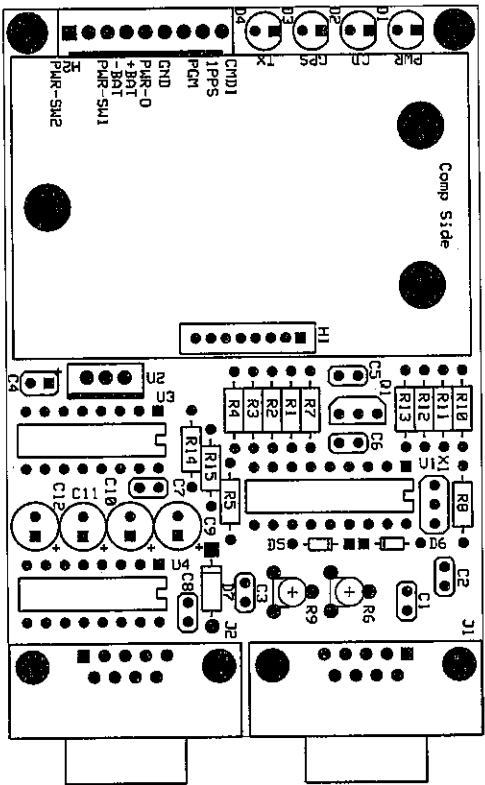




KC0KEP  
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Rev: A  
TT3+CP2

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TinyTrak3 Plus GPS  
Parts List Rev: A

Label	Description	Part Number	Source	Cost	Min QTY	MFG Part Number	MFG
B1	AAA Battery Holder	270-413	Radio Shack	\$ 1.19	1		
C1	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C2	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C3	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C4	Capacitor: 1uF, 16WVDC, Tantalum	P2105-ND	Digikey	\$ 0.42	1	ECS-F1CE105K	Panasonic
C5	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C6	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C7	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C8	Capacitor: 0.1uF, 50VDC, 20%	399-2127-ND	Digikey	\$ 0.16	1	C315C104M5U5CA	Cemet
C9	Capacitor: 10uF, 35WVDC	P5161-ND	Digikey	\$ 0.21	1	ECA-1VM100	Panasonic
C10	Capacitor: 10uF, 35WVDC	P5161-ND	Digikey	\$ 0.21	1	ECA-1VM100	Panasonic
C11	Capacitor: 10uF, 35WVDC	P5161-ND	Digikey	\$ 0.21	1	ECA-1VM100	Panasonic
C12	Capacitor: 10uF, 35WVDC	P5161-ND	Digikey	\$ 0.21	1	ECA-1VM100	Panasonic
D1	Led: Red, 5mm (1 3/4)	P300-ND	Digikey	\$ 0.17	10	LN21RPHL	Panasonic
D2	Led: Yellow, 5mm (1 3/4)	P306-ND	Digikey	\$ 0.24	10	LN41YPHL	Panasonic
D3	Led Green	P303-ND	Digikey	\$ 0.22	10	LN21RPHL	Panasonic
D4	Led: Red, 5mm (1 3/4)	P300-ND	Digikey	\$ 0.17	10	LN21RPHL	Panasonic
D5	Led: Red, 5mm (1 3/4)	P300-ND	Digikey	\$ 0.17	10	LN21RPHL	Panasonic
D6	1N4148	1N4148DICT-ND	Digikey	\$ 0.23	1	1N4148-T	Diodes Inc
D7	1N4148	1N4001DICT-ND	Digikey	\$ 0.26	1	1N4001-T	Diodes Inc
D7	1N4001	A23303-ND	Digikey	\$ 1.94	1	A23303	Amp/Tyco
J1	Connector: DB9, Socket (female pins), Right Angle, Gold Pins	A23277-ND	Digikey	\$ 1.64	1	PNJ2222BU	Fairchild Semiconductors
J2	Connector: DB9, Plug (male pins), Right Angle, Gold Pins	PNJ2222-ND	Digikey	\$ 0.30	1	PNJ2222BU	Fairchild Semiconductors
Q1	Resistor: 8.2K, 1/4W, 5%, Carbon Film	8.2KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-8K2	Yageo
R2	Resistor: 3.9K, 1/4W, 5%	3.9KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-3K9	Yageo
R3	Resistor: 2K, 1/4W, 5%	2KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-2K0	Yageo
R4	Resistor: 1K, 1/4W, 5%	1.0KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-1K0	Yageo
R5	Resistor: 220K, 1/4W, 5%	220KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-220K	Yageo
R6	Pot: 10K, 3/4 turn	3306F-103-ND	Digikey	\$ 0.57	1	3306F-1-103	Bourns Inc.
R7	Resistor: 10K, 1/4W, 5%	10KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-10K	Yageo
R8	Resistor: 2.2K, 1/4W, 5%	2.2KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-2K2	Yageo
R9	Pot: 10K, 3/4 turn	3306F-103-ND	Digikey	\$ 0.57	1	3306F-1-103	Bourns Inc.
R10	Resistor: 1K, 1/4W, 5%	1.0KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-1K0	Yageo
R11	Resistor: 1K, 1/4W, 5%	1.0KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-1K0	Yageo
R12	Resistor: 1K, 1/4W, 5%	1.0KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-1K0	Yageo
R13	Resistor: 1K, 1/4W, 5%	1.0KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-1K0	Yageo
R14	Resistor: 10K, 1/4W, 5%	10KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-10K	Yageo
RP1	Resistor: 10K, 1/4W, 5%	10KQBK-ND	Digikey	\$ 0.06	5	CFR-25JB-10K	Yageo
U2	IC: 7805, Voltage regulator	LM7805CT-ND	Digikey	\$ 0.48	1	LM7805CT	Fairchild Semiconductors
U3	IC: SN74HCT157N	296-8397-5-ND	Digikey	\$ 0.45	1	SN74HCT157N	Texas Instruments
U4	IC: MAX232CPE	MAX232CPE-ND	Digikey	\$ 3.31	1	MAX232CPE	Maxim
U1	Socket: 18-pin x .3	A9418-ND	Digikey	\$ 1.44	1	2-640359-4	Amp/Tyco
U3	Socket: 16-pin x .3	A9416-ND	Digikey	\$ 0.87	1	2-640358-4	Amp/Tyco
U4	Socket: 16-pin x .3	A9416-ND	Digikey	\$ 0.87	1	2-640358-4	Amp/Tyco
X1	Ceramic resonator: 10MHZ, with caps	X906-ND	Digikey	\$ 0.54	1	ZTT-10.00MT	ECS Inc

