

Theory of Operation

When on mains power: ~~D1~~
 - Diode ~~D1~~ block charging of the battery.
 - The cathodes of ~~Dn~~ and ~~Dn~~ are pulled up to +5.6V so that MEM PWR is at +5V. ~~D3 D4~~

When on battery standby:
 - Diode ~~D1~~..... ~~D2~~ CONDUCTS, POWERING MEMORY.
 D5 BLOCKS BATTERY FROM POWERING BUS.

R1 PULLS CS HIGH WHEN RELAY OPENS, AS POWER SUPPLY OUTPUT DECAYS, CS COMES TO BATTERY VOLTAGE LESS D2 DROP.

R2 LIMITS CURRENT DRAW ON +15V SUPPLY

R3 LIMITS LOAD ON POWER OK H

C1

(I USED 2N4401)

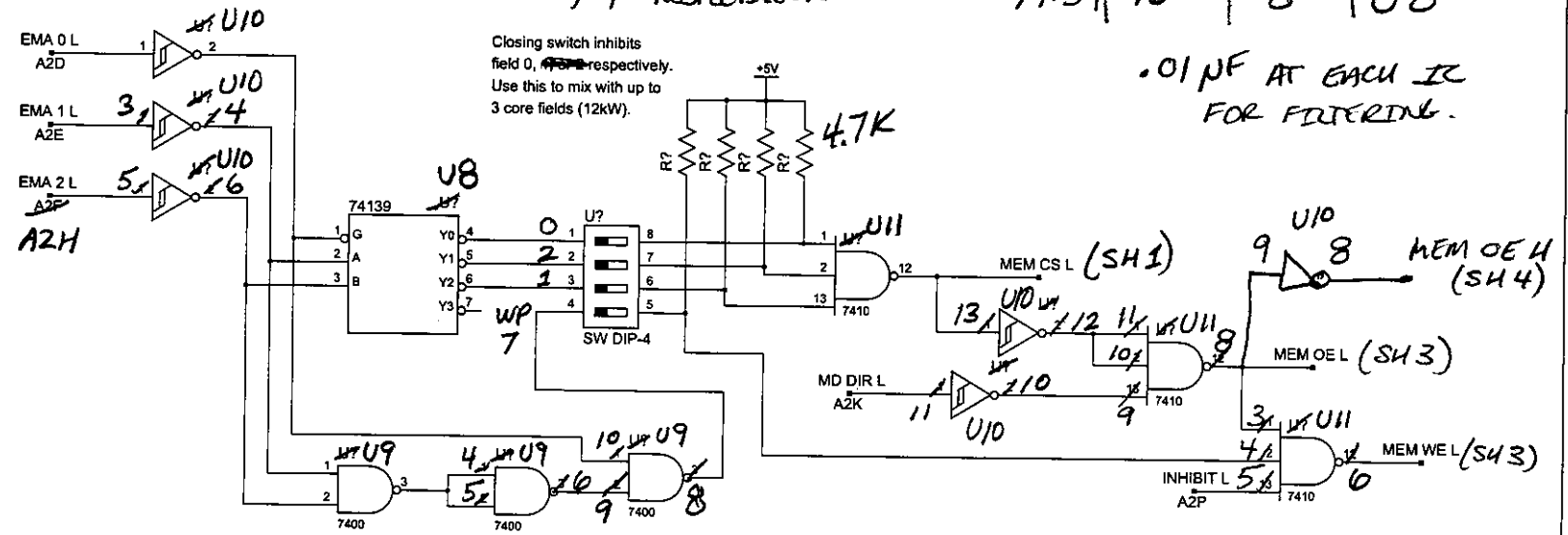
TITLE		REVISION:	
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	Vcc	GND	
7414	14	7	U10
7400	14	7	U9
7410	14	7	U11
74139	16	8	U8

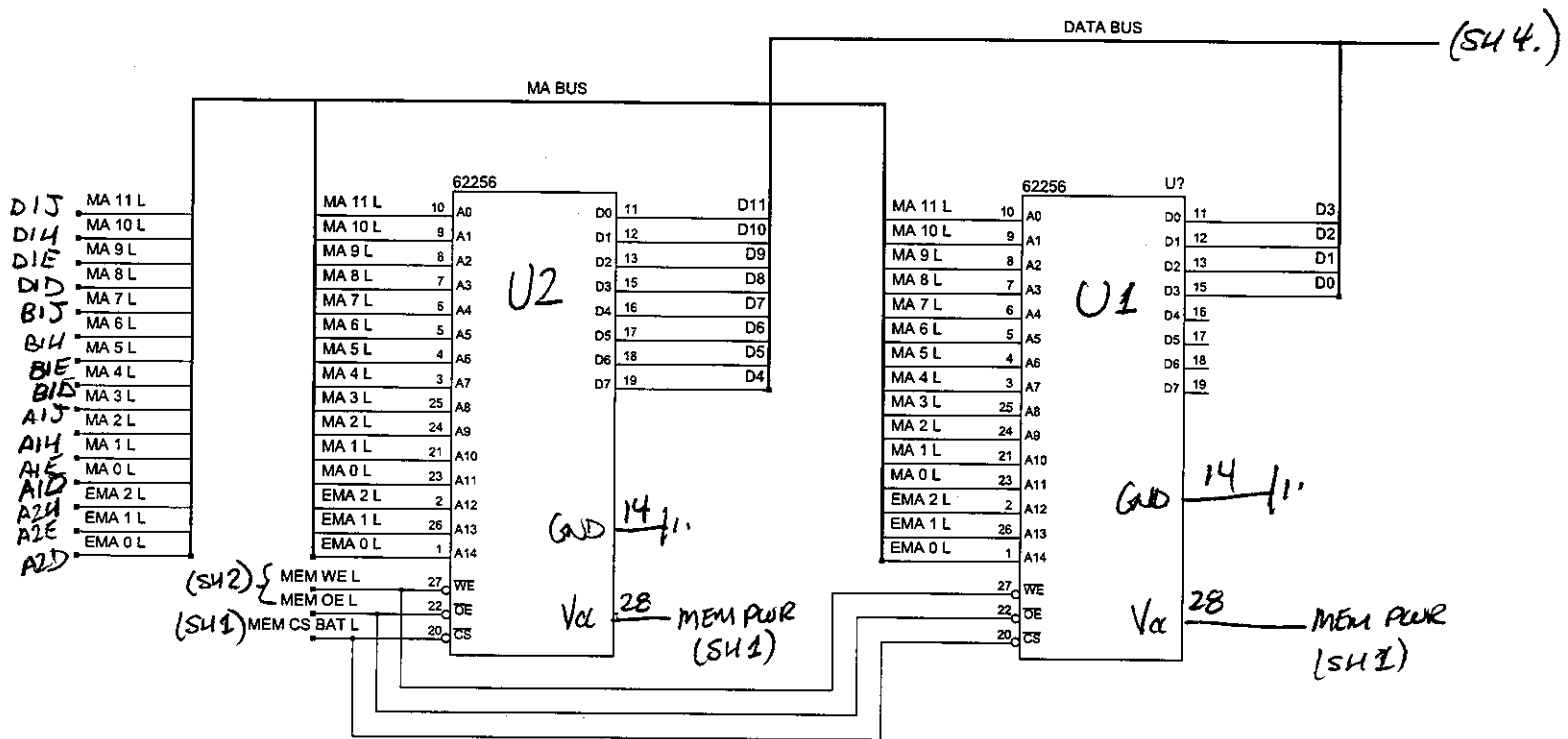
0,2,1 RESPECTIVELY.

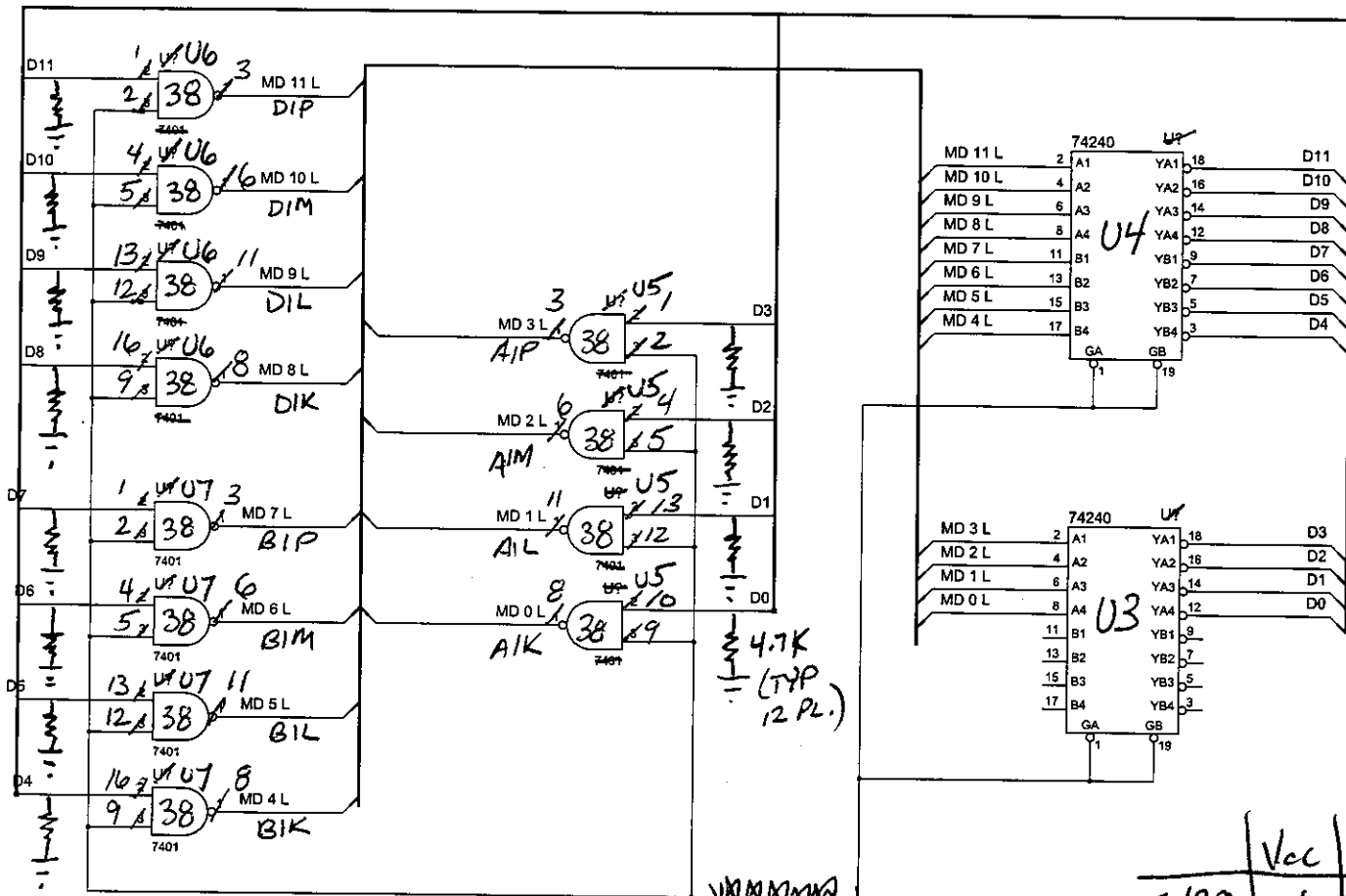
Closing switch inhibits field 0, ~~1,2~~ respectively. Use this to mix with up to 3 core fields (12kW).

.01 uF AT EACH IC FOR FILTERING.



SW 4 WRITE PROTECTS FIELD 7.





* PULL DOWN RESISTORS SHOULD BE UNNECESSARY. I ADDED THEM WHILE TROUBLESHOOTING.

MEM OE H (SH2) MEM WE L (SH2)

	Vcc	GND	
7438	14	7	U5, U6, U7
74240	20	10	U3, U4

.01µF FILTER CAPS ON ENCL