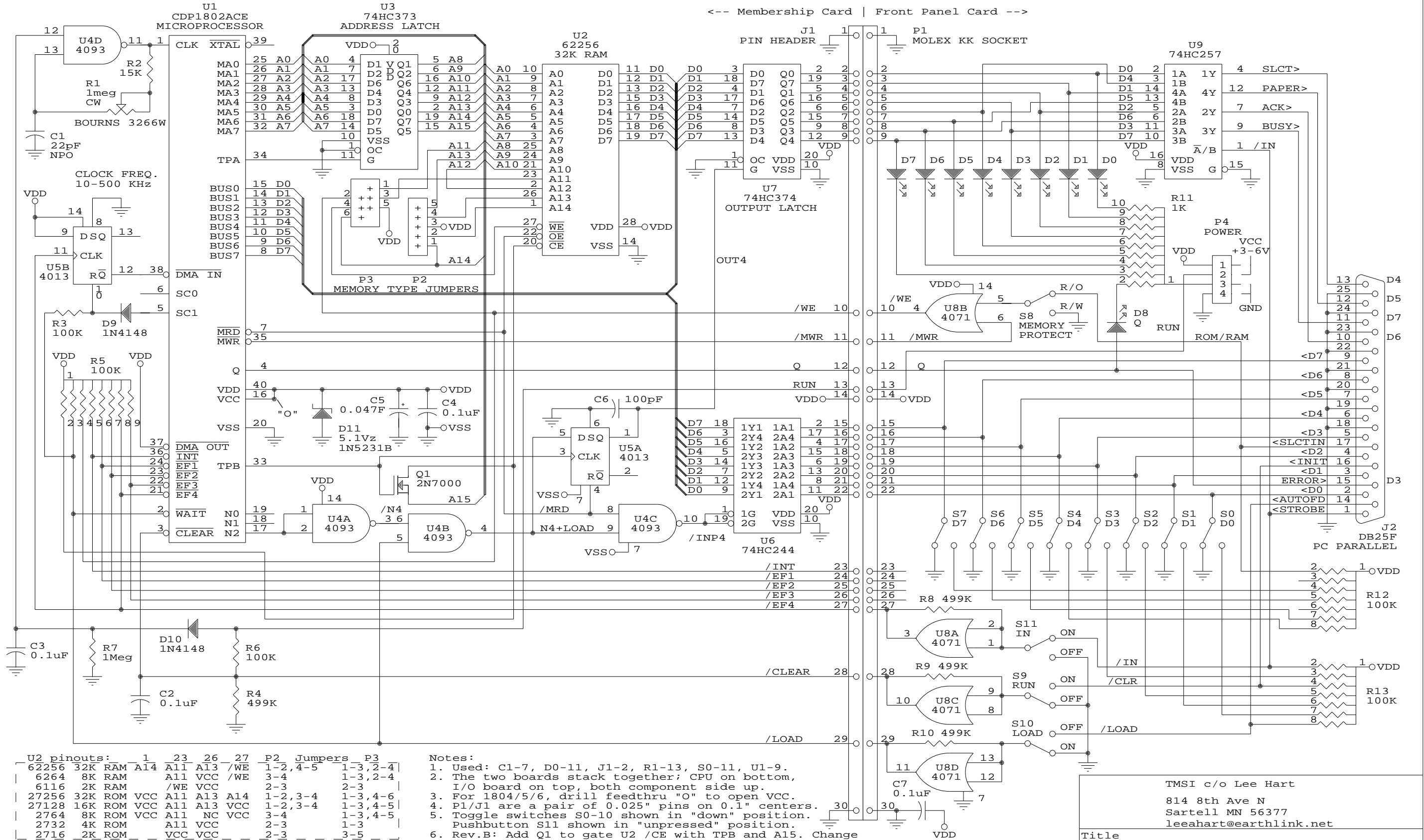


--- Membership Card | Front Panel Card ---



U2 pinouts:

U2	pinouts:	1	23	26	27	P2	Jumpers	P3
62256	32K RAM	A14	A11	A13	/WE	1-2, 4-5	1-3, 2-4	
6264	8K RAM	A11	VCC	/WE		3-4	1-3, 2-4	
6116	2K RAM	/WE	VCC			2-3	2-3	
27256	32K ROM	VCC	A11	A13	A14	1-2, 3-4	1-3, 4-6	
27128	16K ROM	VCC	A11	A13	VCC	1-2, 3-4	1-3, 4-5	
2764	8K ROM	VCC	A11	NC	VCC	3-4	1-3, 4-5	
2732	4K ROM	VCC	A11	VCC		2-3	1-3	
2716	2K ROM	VCC	VCC			2-3	3-5	

P2 power connector pin 1: +3 to +5 VDC (3 AA cells etc.)  
 pin 2: to pin 1 to RUN, open to stop osc.  
 pin 3: to pin 4 enables LEDs, open is off  
 pin 4: common for power

- Notes:
- Used: C1-7, D0-11, J1-2, R1-13, S0-11, U1-9.
  - The two boards stack together; CPU on bottom, I/O board on top, both component side up.
  - For 1804/5/6, drill feedthru "O" to open VCC.
  - P1/J1 are a pair of 0.025" pins on 0.1" centers.
  - Toggle switches S0-10 shown in "down" position. Pushbutton S11 shown in "unpressed" position.
  - Rev. B: Add Q1 to gate U2 /CE with TPB and A15. Change R8-10 from 100K to 470K. Add C6=82pF. Route RUN to P4. Add 1804/5/6 option. Change I/O port from 5 to 4.
  - Errors: Silkscreen mislabels INP4 and OUT4 as 5-7.
  - Change R4,8-10 from 470K to 499K. Change C6 to 100pF.

TMSI c/o Lee Hart  
 814 8th Ave N  
 Sartell MN 56377  
 leeahart@earthlink.net

Title		COSMAC ELF Membership Card (1 and 2 of 2)	
Size/Document Number		REV	
B	C:\ORCAD\SHEET\1802\DEV3.SCH	B	
Date:	November 6, 2010	Sheet	1 of 1