

# U of A MAX7K Project Board Help Sheet

**Header 1 Pin Connection Table**

HOLE NUMBER	SIGNAL/PIN	HOLE NUMBER	SIGNAL/PIN
1	75	2	76
3	77	4	NC
5	79	6	80
7	81	8	NC
9	83	10	84
11	1	12	2
13	NC	14	4
15	5	16	6
17	NC	18	8
19	9	20	10
21	11	22	NC
23	12	24	NC
25	NC	26	15
27	16	28	17
29	18	30	NC
31	20	32	21
33	22	34	NC
35	24	36	25
37	NC	38	27
39	28	40	29
41	30	42	31
43	NC	44	NC

**Push-Button Table**

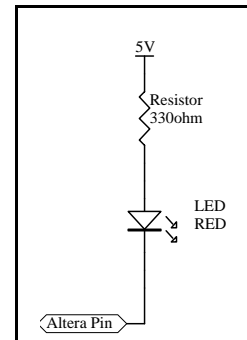
Button Number	Signal/Pin
PB1	40
PB2	1/GCLR

**DIP Switch Table**

Switch Number	Signal/Pin
1	44
2	45
3	46
4	48
5	49
6	50
7	51
8	52

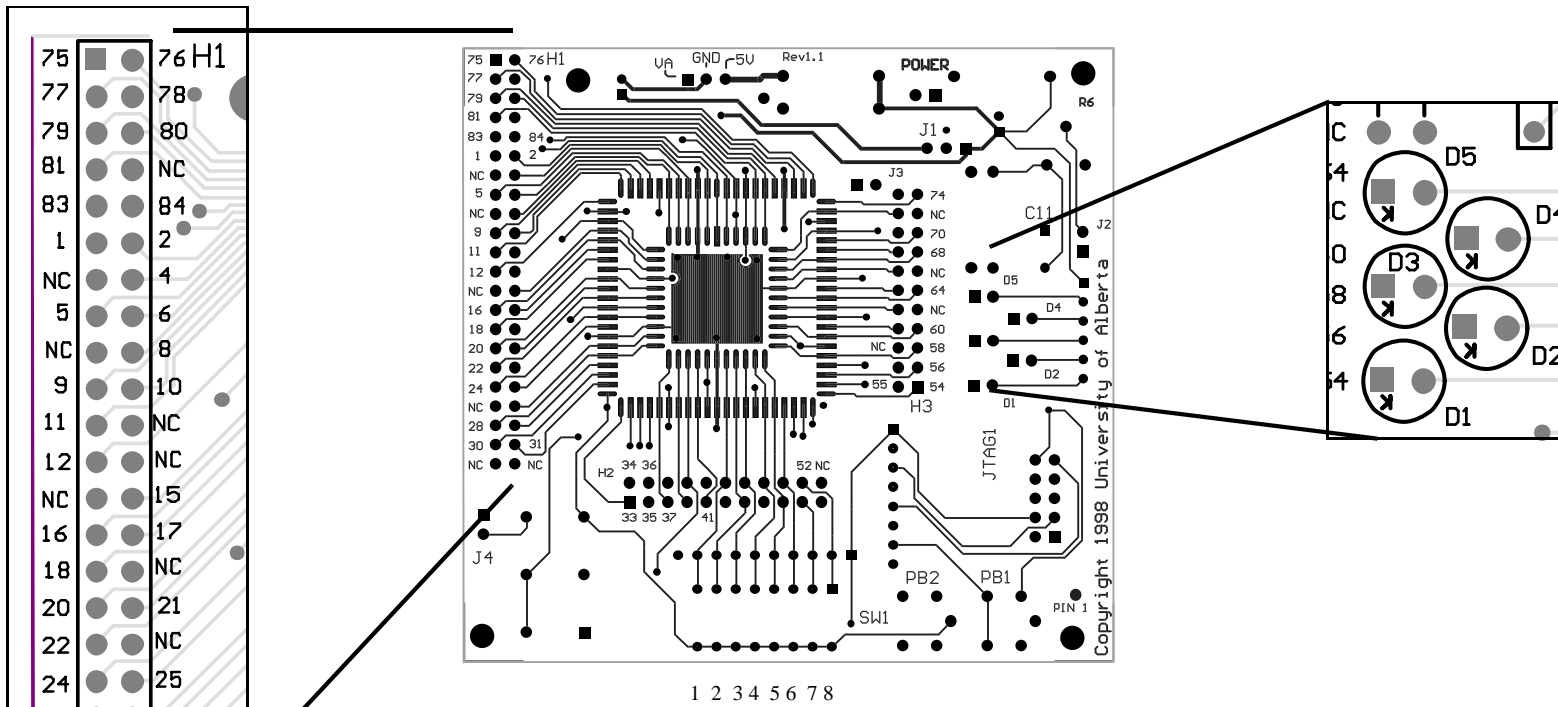
**LED Table**

LED #	Pin
1	54
2	55
3	56
4	57
5	58



**Additional Notes:**

1. Make sure +5V power is connected correctly (ask your TA)
2. Pins connected to switches and pushbuttons should either be declared as inputs or left unsigned. (Declaring them as outputs may damage the chip)
3. NC means NO CONNECT.
4. The LED's are active low which means that when you output a 0 they will be on and when you output a 1 they will be off. The circuit is shown above.
5. Switches are active low, so when they are closed, their pins will be at logic 0.



**RC Oscillator Circuit**

The EE480 board has an RC oscillator as pictured on the left. When the inverters are programmed onto the chip as shown, a clock signal is generated. R2 is a fixed and variable resistor in series; the clock frequency can be adjusted with the pot at the top right corner of the board. Here are the pinouts for the oscillator:

Desicription	Pin Number
R1 (system input)	68
C (positive feedback)	70
R2 (negative feedback)	73
Clock Output	69 (also routed to pin 83)