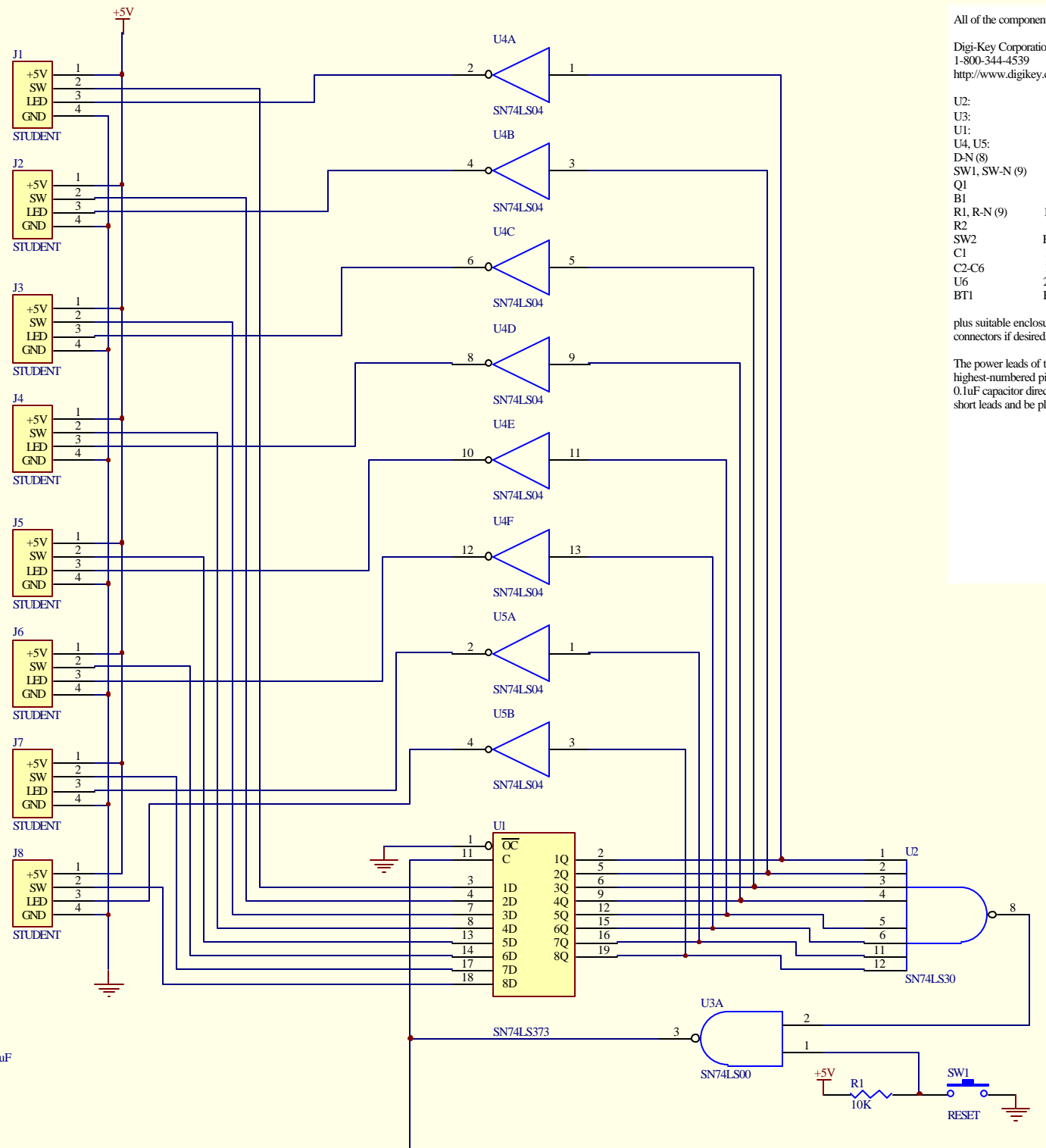


CONTESTANT UNIT



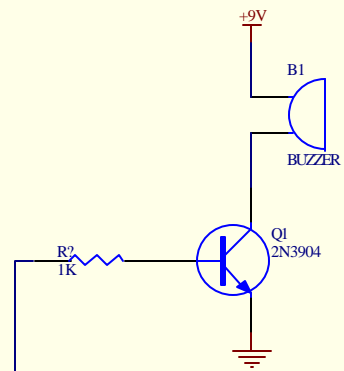
All of the components for this circuit can be purchased from:

Digi-Key Corporation
1-800-344-4539
<http://www.digikey.com>

U2:	DM74LS30-ND	74LS30 8-input NAND gate
U3:	296-1626-5-ND	74LS00 IC quad 2-input NAND gate
U1:	296-1660-5-ND	74LS373 IC octal D-type latch
U4, U5:	296-1629-5-ND	74LS04 IC Hex Inverter, 14-DIP
D-N (8)	HLMP5750-ND	Red LED
SW1, SW-N (9)	502PB-ND	Pushbutton Switch
Q1	2N3904-ND	2N3904-ND NPN Bipolar Transistor
B1	140C-ND	Buzzer
R1, R-N (9)	10KQBK-ND	10K Resistor
R2	1KQBK-ND	1K Resistor
SW2	EG1902-ND	Toggle Switch
C1	P10267-ND	47uF electrolytic capacitor
C2-C6	1109PHCT-ND	0.1uF capacitor
U6	296-1974-5-ND	7805 Power Regulator
BT1	BS12FHD-ND	9V Battery Snap Cable

plus suitable enclosures (i.e. soap boxes), cables, hook-up wire, prototyping boards, connectors if desired, etc.

The power leads of the IC's are not shown on the schematic. Connect +5V to the highest-numbered pin. Connect GND to the pin in the opposite corner. Connect a 0.1uF capacitor directly across the power leads of each IC. The capacitor should have short leads and be placed as close to the IC as possible.



PRELIMINARY

Title			LOCKOUT BUZZER SYSTEM		
Size	Number	Revision			
B	ARA KNAIAN (617) 921-0652	BOB ALTSHULER	01		
Date:	14-May-2000	Sheet of			
File:	C:\ara\Projects\AOPS\hardware\line card\5.0\line card\line card.DDB				