

CSE 3323 - Electronics

Bill of Materials for LED Dice Circuits

Version 1 - NAND Gates Only (Breadboard)

Version 2 - OR/AND/NAND Gates (PCB)

Qty V1 Breadboard	Qty V2 PCB	Value	Part Description	Mouser Number
7	7	RED	LED 5mm	941-C503BRCNCW0Z0AA1
1	1	GREEN	LED 3mm	604-WP710A10GD
3	3	680Ω	1/4W Resistor	660-MF1/4LCT52R681J
3	3	1kΩ	1/4W Resistor	660-MF1/4LCT52R102G
2	2	1.5kΩ	1/4W Resistor	660-MF1/4LCT52R152G
1	1	10kΩ	1/4W Resistor	660-MF1/4LCT52R103G
1	1	50kΩ	TrimPOT	652-3362P-1-503LF
3	3	10nF	Capacitor	594-K103K10X7RH5TH5
1	1	10uF	Capacitor	810-FG28X5R1E106MR00
1	1	SN74HC193NE4	Counter IC (4-bit)	595-SN74HC193NE4
	1	16 pin	DIP Socket	571-1-2199298-4
1	1	NE555P	555-Timer (CMOS)	595-NE555P
	1	8 pin	DIP Socket	571-1-2199298-2
4	4	2N7000TA	N-Ch. MOSFET	512-2N7000TA
	1	SN74LVC1G10DBVR	NAND Gate - SMD	595-SN74LVC1G10DBVR
	1	SN74LVC1G08QDBQ1	AND Gate - SMD	595-SN74LVC1G08QDBQ1
	1	NC7SZ32M5X	OR Gate - SMD	512-NC7SZ32M5X
1		SN74HC132N	NAND 4-gate 2-input Schmitt	595-SN74HC132N
1		SN74HC10N	NAND 3-gate 3-input	595-SN74HC10N
1	1	SPDT	Slider Switch	612-EG1218
1	1	SPST	Push Button Switch	506-FSM4JH
	1		DC Power Jack	992-CON-SOCJ-2155
	4		Leg Standoffs Kit - (3mm)	Amazon Link
	1	5VDC	Wall Power Supply	Amazon Link