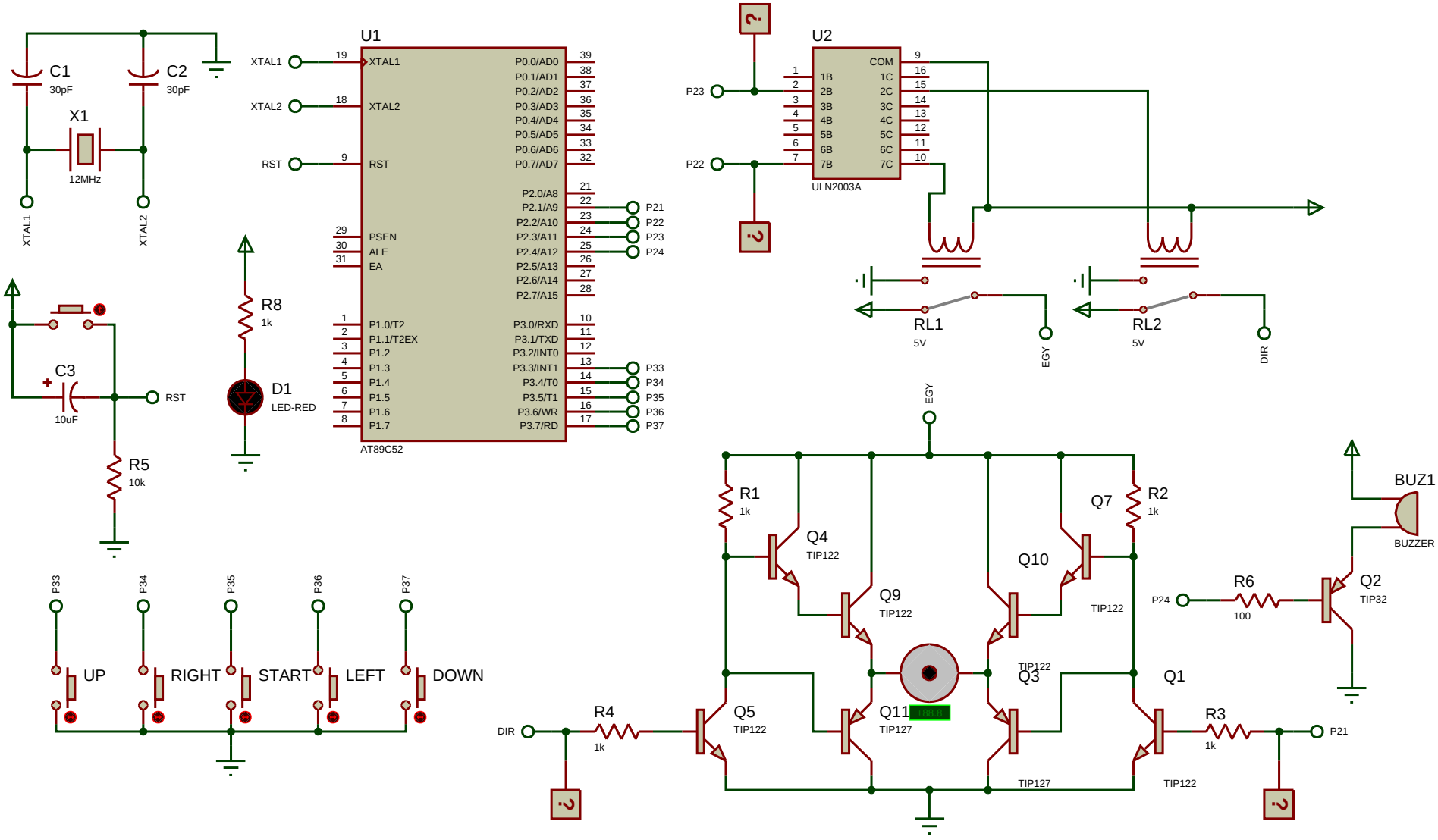
U1
AT89C52
XTAL1
XTAL2
RST
PSEN
ALE
EA
P0.0/AD0
P0.1/AD1
P0.2/AD2
P0.3/AD3
P0.4/AD4
P0.5/AD5
P0.6/AD6
P0.7/AD7
P2.0/A8
P2.1/A9
P2.2/A10
P2.3/A11
P2.4/A12
P2.5/A13
P2.6/A14
P2.7/A15
P1.0/T2
P1.1/T2EX
P1.2
P1.3
P1.4
P1.5
P1.6
P1.7
P3.0/RXD
P3.1/TXD
P3.2/INT0
P3.3/INT1
P3.4/T0
P3.5/T1
P3.6/WR
P3.7/RD
C1
30pF
C2
30pF
X1
12MHz
C3
10uF
R5
10k
R8
1k
D1
LED-RED
U2
ULN2003A
COM
1B
2B
3B
4B
5B
6B
7B
1C
2C
3C
4C
5C
6C
7C
RL1
5V
RL2
5V
EGY
DIR
P21
P22
P23
P24
P33
P34
P35
P36
P37
UP
RIGHT
START
LEFT
DOWN
R1
1k
R2
1k
Q4
TIP122
Q7
Q10
Q9
TIP122
Q3
Q1
Q5
TIP122
Q11
TIP127
R4
1k
R3
1k
R6
100
Q2
TIP32
BUZZER
BUZ1