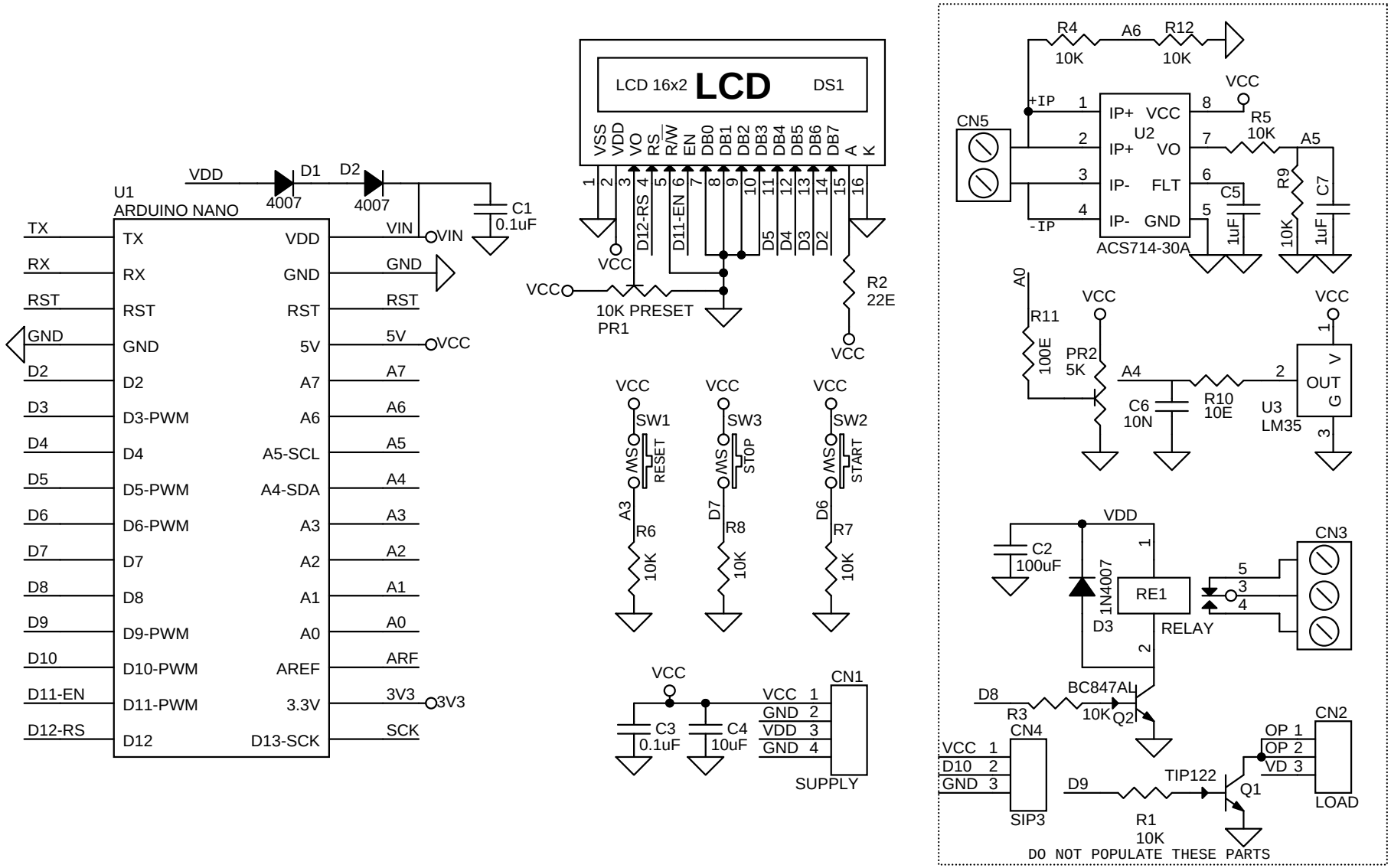
U1
ARDUINO NANO
TX
RX
RST
GND
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11-EN
D12-RS
D12
D11-PWM
D10-PWM
D9-PWM
D8
D7
D6-PWM
D5-PWM
D4
D3-PWM
VDD
GND
RST
5V
A7
A6
A5-SCL
A4-SDA
A3
A2
A1
A0
AREF
3.3V
D13-SCK
VIN
3V3
SCK
VDD
D1
4007
D2
4007
C1
0.1uF
LCD 16x2
LCD
DS1
VSS
VDD
VO
RS
R/W
EN
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
A
K
D12-RS
D11-EN
D5
D4
D3
D2
VCC
10K PRESET
PR1
R2
22E
SW1
RESET
SW3
STOP
SW2
START
A3
R6
10K
D7
R8
10K
D6
R7
10K
C3
0.1uF
C4
10uF
CN1
SUPPLY
R4
10K
A6
R12
10K
CN5
+IP
-IP
IP+
IP-
U2
ACS714-30A
FLT
R5
10K
A5
C5
1uF
R9
10K
C7
1uF
A0
R11
100E
PR2
5K
A4
C6
10N
R10
10E
U3
LM35
OUT
C2
100uF
1N4007
D3
RE1
RELAY
CN3
D8
R3
10K
BC847AL
Q2
CN4
SIP3
D10
GND
D9
TIP122
Q1
R1
10K
CN2
LOAD
OP
VD
DO NOT POPULATE THESE PARTS