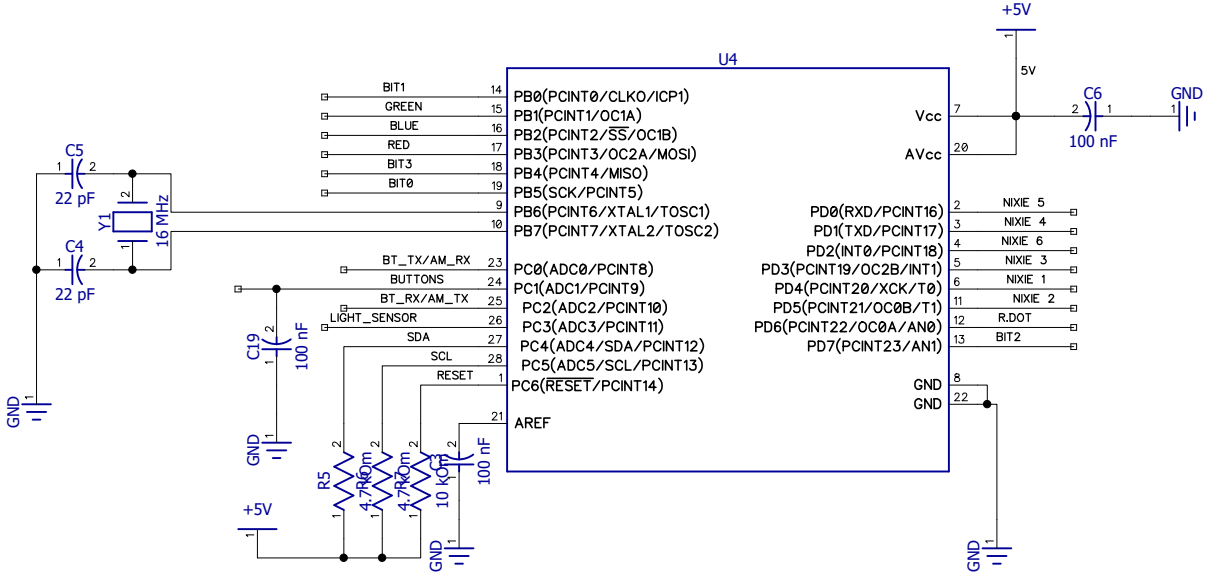
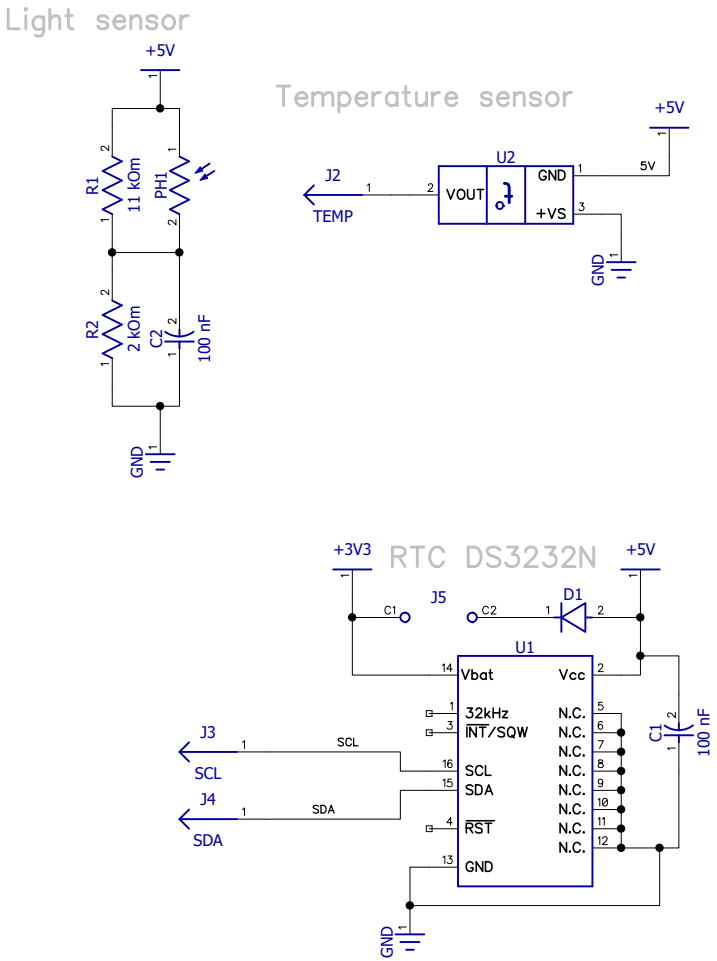
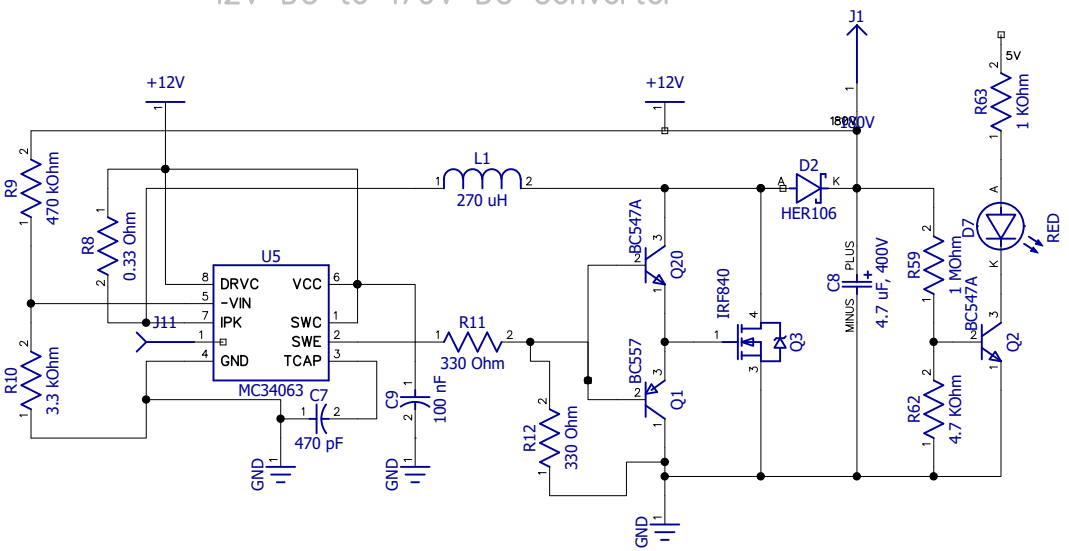
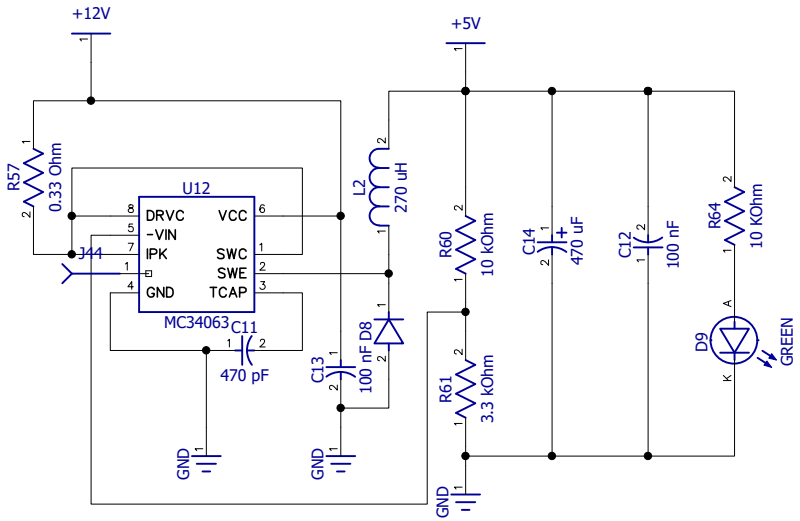
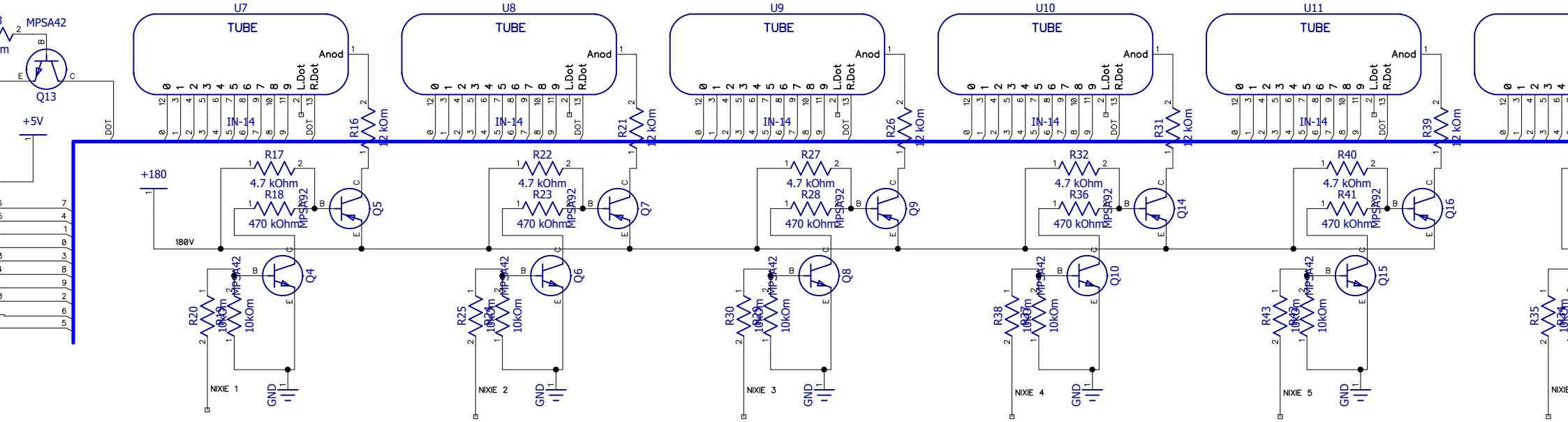

U4
+5V
5V
C6
100 nF
GND
C5
22 pF
C4
22 pF
Y1
16 MHz
BIT1
GREEN
BLUE
RED
BIT3
BIT0
BT_TX/AM_RX
BUTTONS
BT_RX/AM_TX
LIGHT_SENSOR
SDA
SCL
RESET
AREF
PB0(PCINT0/CLKO/ICP1)
PB1(PCINT1/OC1A)
PB2(PCINT2/SS/OC1B)
PB3(PCINT3/OC2A/MOSI)
PB4(PCINT4/MISO)
PB5(SCK/PCINT5)
PB6(PCINT6/XTAL1/TOSC1)
PB7(PCINT7/XTAL2/TOSC2)
PC0(ADC0/PCINT8)
PC1(ADC1/PCINT9)
PC2(ADC2/PCINT10)
PC3(ADC3/PCINT11)
PC4(ADC4/SDA/PCINT12)
PC5(ADC5/SCL/PCINT13)
PC6(RESET/PCINT14)
Vcc
AVcc
PD0(RXD/PCINT16)
PD1(TXD/PCINT17)
PD2(INT0/PCINT18)
PD3(PCINT19/OC2B/INT1)
PD4(PCINT20/XCK/T0)
PD5(PCINT21/OC0B/T1)
PD6(PCINT22/OC0A/AN0)
PD7(PCINT23/AN1)
GND
GND
NIXIE 5
NIXIE 4
NIXIE 6
NIXIE 3
NIXIE 1
NIXIE 2
R.DOT
BIT2
C19
100 nF
R5
4.7 kOm
4.7 kOm
10 kOm
100 nF
+5V
GND
GND
GND


Light sensor
+5V
R1
11 kOm
PH1
R2
2 kOm
C2
100 nF
GND
Temperature sensor
+5V
J2
TEMP
U2
VOUT
GND
+VS
5V
GND
+3V3
RTC DS3232N
+5V
J5
C1
C2
D1
U1
Vbat
Vcc
32kHz
INT/SQW
SCL
SDA
RST
GND
N.C.
J3
SCL
J4
SDA
C1
100 nF
GND

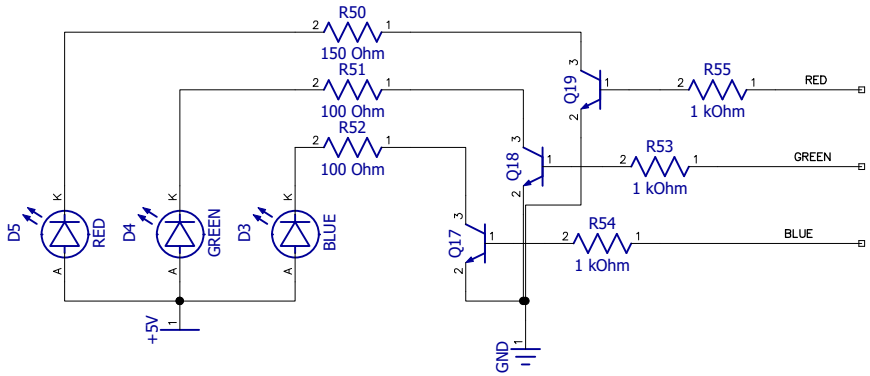

12V DC to 170V DC Converter
J1
+12V
+12V
5V
R63
1 KOhm
R9
470 kOhm
R8
0.33 Ohm
L1
270 uH
D2
HER106
D7
RED
U5
DRVC
VCC
-VIN
IPK
SWC
SWE
GND
TCAP
MC34063
J11
R10
3.3 kOhm
C7
470 pF
C9
100 nF
R11
330 Ohm
R12
330 Ohm
BC547A
Q20
BC557
Q1
IRF840
Q3
C8
4.7 uF, 400V
R59
1 MOhm
BC547A
Q2
R62
4.7 KOhm
GND
GND
GND

12V DC to 5V DC Converter

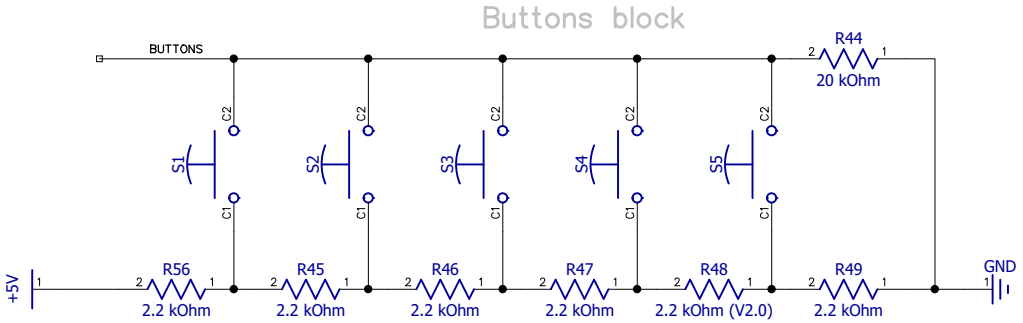


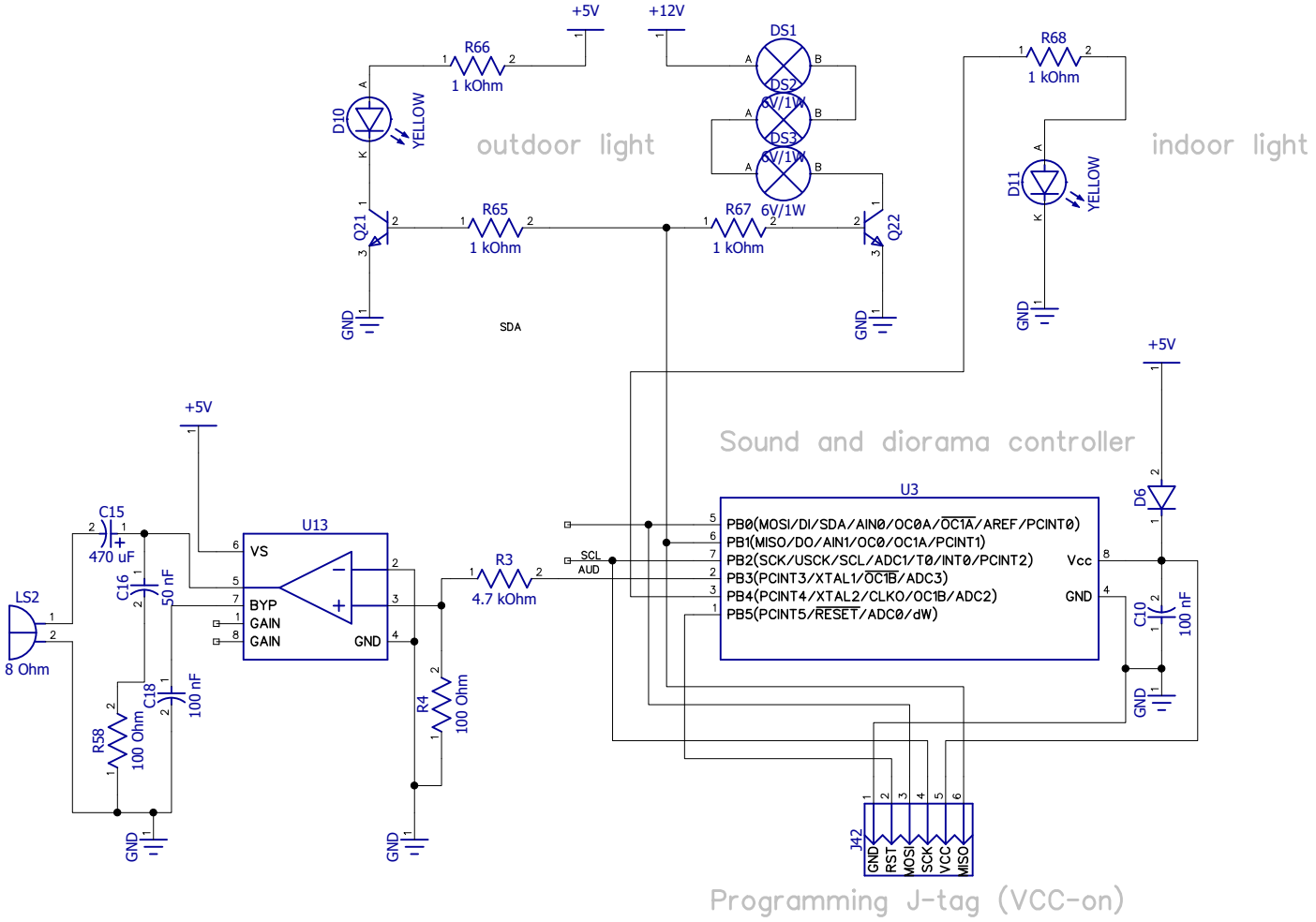

MPSA42
Q13
+5V
DOT
U7
U8
U9
U10
U11
TUBE
Anod
L.Dot
R.Dot
IN-14
R16
R21
R26
R31
R39
12 kOm
R17
R22
R27
R32
R40
4.7 kOhm
R18
R23
R28
R36
R41
470 kOhm
MPSA92
Q5
Q7
Q9
Q14
Q16
+180
180V
Q4
Q6
Q8
Q10
Q15
R20
R25
R30
R38
R43
10kOm
NIXIE 1
NIXIE 2
NIXIE 3
NIXIE 4
NIXIE 5
GND

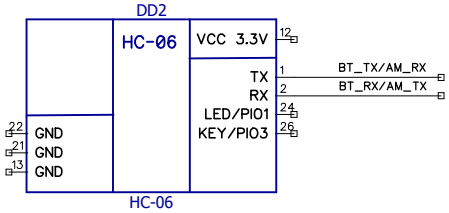
LED block



Buttons block




+5V
+12V
R66
1 kOhm
D10
YELLOW
outdoor light
DS1
DS2
6V/1W
DS3
6V/1W
R68
1 kOhm
indoor light
D11
YELLOW
Q21
R65
1 kOhm
R67 6V/1W
1 kOhm
Q22
GND
SDA
Sound and diorama controller
U3
PB0(MOSI/DI/SDA/AIN0/OC0A/OC1A/AREF/PCINT0)
PB1(MISO/DO/AIN1/OC0/OC1A/PCINT1)
PB2(SCK/USCK/SCL/ADC1/T0/INT0/PCINT2)
PB3(PCINT3/XTAL1/OC1B/ADC3)
PB4(PCINT4/XTAL2/CLKO/OC1B/ADC2)
PB5(PCINT5/RESET/ADC0/dW)
Vcc
GND
SCL
AUD
D6
C10
100 nF
C15
470 uF
C16
50 nF
U13
VS
BYP
GAIN
GAIN
GND
LS2
8 Ohm
R3
4.7 kOhm
R4
100 Ohm
R58
100 Ohm
C18
100 nF
J42
GND
RST
MOSI
SCK
VCC
MISO
Programming J-tag (VCC-on)


DD2
HC-06
VCC 3.3V
12
TX
1
BT_TX/AM_RX
RX
2
BT_RX/AM_TX
LED/PIO1
24
KEY/PIO3
26
22
GND
21
GND
13
GND
HC-06