U22
RS232_TTL
TX_IN   VIN
RX_IN   TX
GND   RX

5V

TX
RX

VDD
VCC
GND

UART
TX
RX
GND

U1
ATMEGA128

PORT D
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
TWI_CLK, TWI_DAT, ALARM_TONE, CLK_INH

PORT E
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
RADIO_RST_N, VOLUME, SHIFT_LD_N, RADIO_INT2

PORT F
| 61 | 60 | 59 | 58 | 57 | 56 | 55 | 54 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
CDS_ADC

PORT A
| 51 | 50 | 49 | 48 | 47 | 46 | 45 | 44 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
A, B, C, D, E, F, G, DP

PORT B
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
REGCLK, SRCLK, SDIN, SER_OUT, SEL0, SEL1, SEL2, PWM

PORT C
| 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
EN, EN_N

ZACH STEINBERG

VDD

Q6
R30 22k

Q1

PWM

Q5

R29 20k
··· x5 total
R9 20k
✗ ✗

VCC   U8 74HCT138
A
B
C
G2A
G2B
G1
(GND)

VDD
SEL0
SEL1
SEL2

EN0
EN1

Y0
Y1
Y2
Y3
Y4
Y5
Y6
Y7

···
x5
total

8

··· x8 total

2 | 4 | 6

··· x5 total

1

LTC_4627JS

A B C D E F G DP
16 13 3 5 11 15 7

S1

··· x8 total

R8 620
R7 620
R6 620
R5 620
R4 620
R3 620
R2 620
R1 620

A
B
C
D
E
F
G
DP

VDD

U11 74HC595
VDD
RCLK
SRCLK
SER
SRCLR
OE
GND
QH'

QA
QB
QC
QD
QE
QF
QG
QH

16
12
11
14
10
13
8
9

15
1
2
3
4
5
6
7

R35 330
D17

··· x8 total

R42 330
D16

REG CLK
SR CLK
SDIN

VDD

OE

VDD   5
Y   4
1
3
2
74LVC1G7

··· x8 total

VDD

C102 0.1μF
C101 0.1μF
C36 0.1μF
C35 0.1μF
C4 10μF
C3 0.1μF
C5 0.47μF
C12 10μF
C13 0.47μF
C8 0.47μF