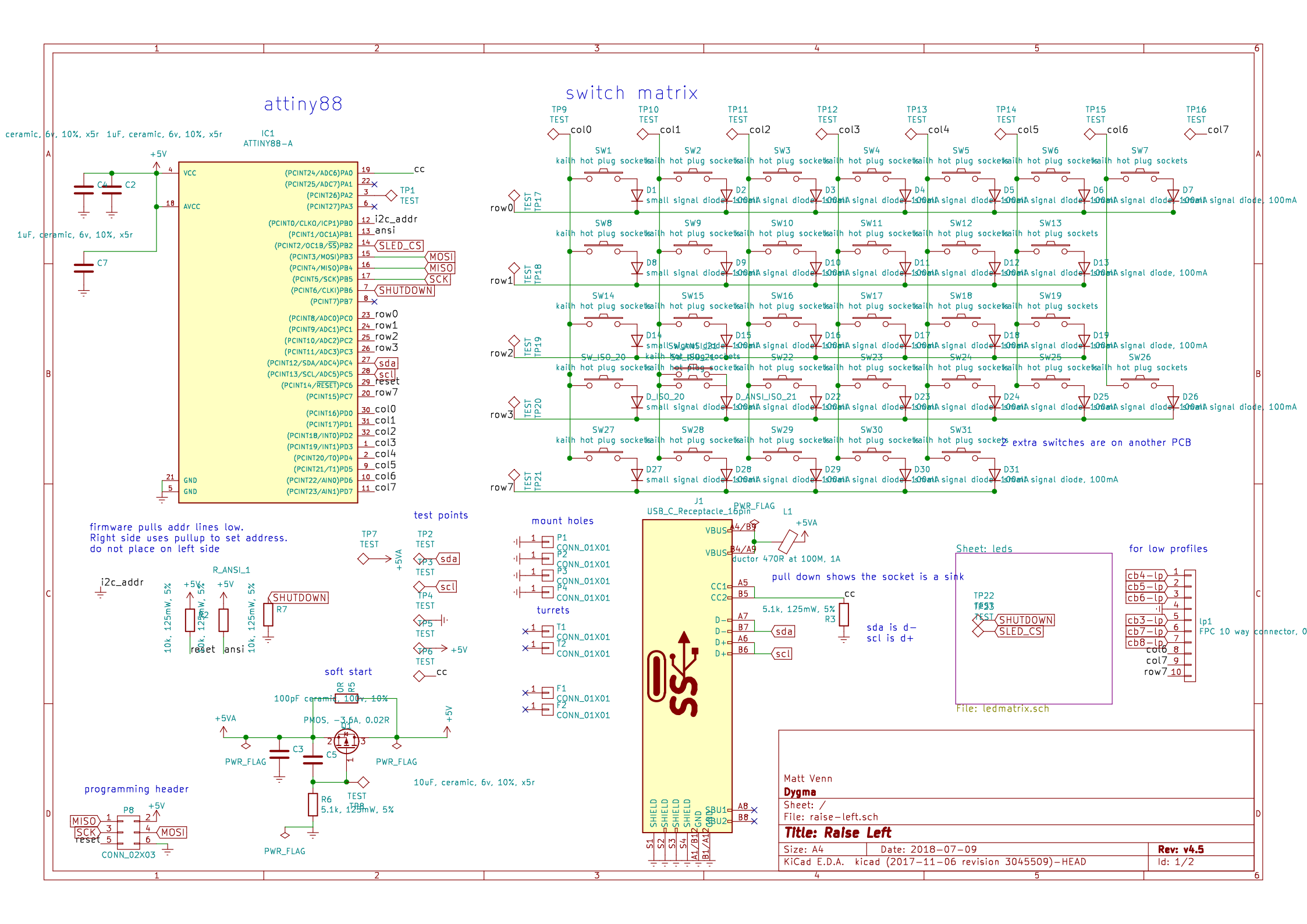
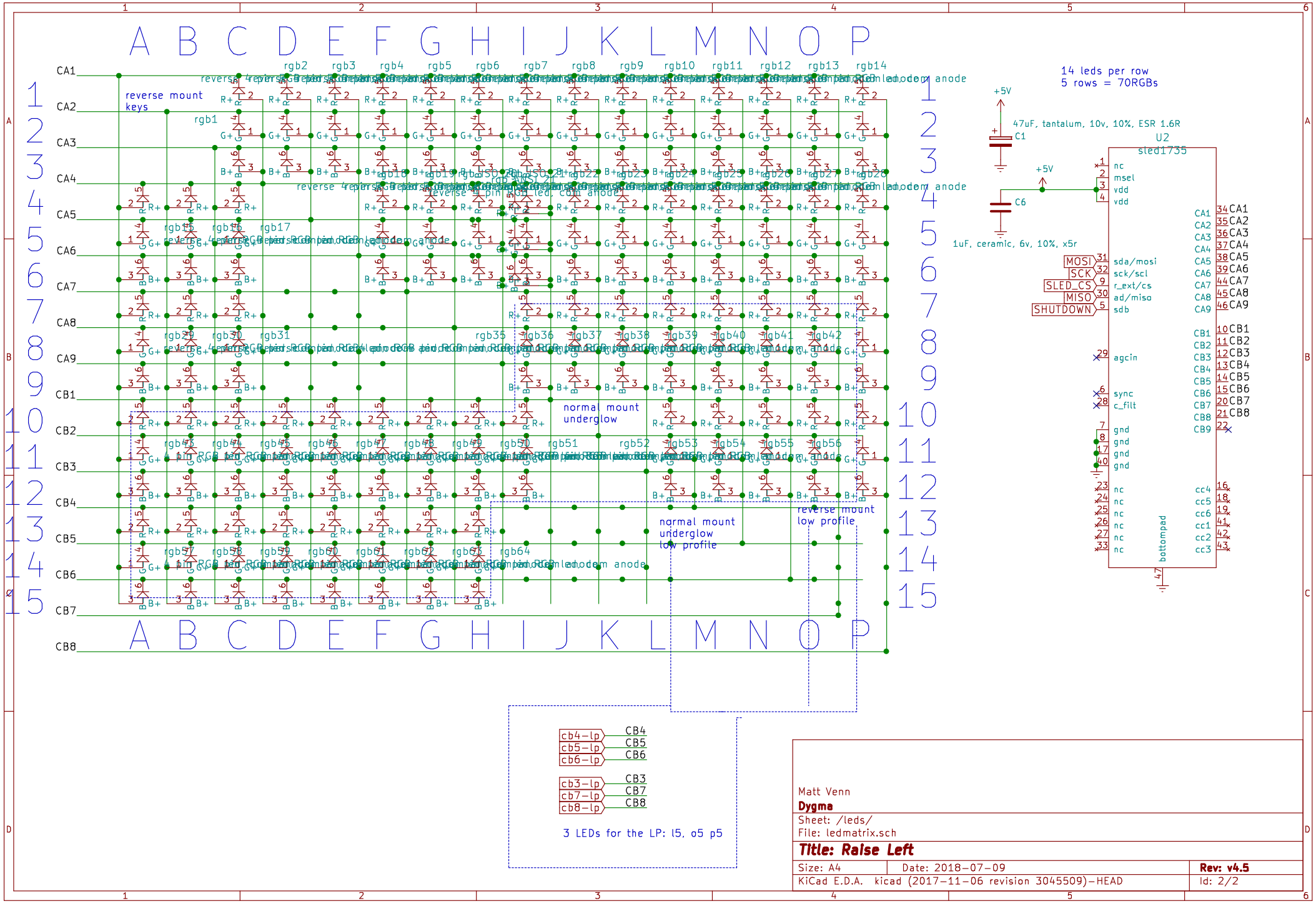

attiny88
switch matrix
IC1
ATTINY88-A
ceramic, 6v, 10%, x5r
1uF, ceramic, 6v, 10%, x5r
+5V
C4
C2
C7
VCC
AVCC
GND
(PCINT24/ADC6)PA0
(PCINT25/ADC7)PA1
(PCINT26)PA2
(PCINT27)PA3
(PCINT0/CLKO/ICP1)PB0
(PCINT1/OC1A)PB1
(PCINT2/OC1B/SS)PB2
(PCINT3/MOSI)PB3
(PCINT4/MISO)PB4
(PCINT5/SCK)PB5
(PCINT6/CLKI)PB6
(PCINT7)PB7
(PCINT8/ADC0)PC0
(PCINT9/ADC1)PC1
(PCINT10/ADC2)PC2
(PCINT11/ADC3)PC3
(PCINT12/SDA/ADC4)PC4
(PCINT13/SCL/ADC5)PC5
(PCINT14/RESET)PC6
(PCINT15)PC7
(PCINT16)PD0
(PCINT17)PD1
(PCINT18/INT0)PD2
(PCINT19/INT1)PD3
(PCINT20/T0)PD4
(PCINT21/T1)PD5
(PCINT22/AIN0)PD6
(PCINT23/AIN1)PD7
cc
TP1
i2c_addr
ansi
SLED_CS
MOSI
MISO
SCK
SHUTDOWN
row0
row1
row2
row3
sda
scl
reset
row7
col0
col1
col2
col3
col4
col5
col6
col7
TP9
TP10
TP11
TP12
TP13
TP14
TP15
TP16
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW12
SW13
SW14
SW15
SW16
SW17
SW18
SW19
SW_ISO_20
SW_ANSI_21
SW22
SW23
SW24
SW25
SW26
SW27
SW28
SW29
SW30
SW31
kailh hot plug sockets
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
D18
D19
D_ISO_20
D_ANSI_ISO_21
D22
D23
D24
D25
D26
D27
D28
D29
D30
D31
small signal diode, 100mA
2 extra switches are on another PCB
TP17
TP18
TP19
TP20
TP21
TEST
firmware pulls addr lines low.
Right side uses pullup to set address.
do not place on left side
test points
TP7
TP2
TP3
TP4
TP5
TP6
TP8
+5VA
R_ANSI_1
R1
R2
R7
10k, 125mW, 5%
reset
ansi
mount holes
P1
P2
P3
P4
CONN_01X01
turrets
T1
T2
F1
F2
soft start
100pF ceramic, 100v, 10%
PMOS, -3.6A, 0.02R
Q1
R5
R6
5.1k, 125mW, 5%
C3
C5
PWR_FLAG
10uF, ceramic, 6v, 10%, x5r
programming header
P8
CONN_02X03
J1
USB_C_Receptacle_16pin
L1
ductor 470R at 100M, 1A
pull down shows the socket is a sink
sda is d-
scl is d+
R3
VBUS
CC1
CC2
D-
D+
SBU1
SBU2
SHIELD
GND
Sheet: leds
File: ledmatrix.sch
for low profiles
cb4-lp
cb5-lp
cb6-lp
cb3-lp
cb7-lp
cb8-lp
lp1
FPC 10 way connector, 0
Matt Venn
Dygma
Sheet: /
File: raise-left.sch
Title: Raise Left
Size: A4
Date: 2018-07-09
Rev: v4.5
KiCad E.D.A. kicad (2017-11-06 revision 3045509)-HEAD
Id: 1/2

common anode type 3 matrix



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Dygma

Sheet: /leds/

File: ledmatrix.sch

Title: Raise Left

Size: A4	Date: 2018-07-09	**Rev: v4.5**
KiCad E.D.A. kicad (2017-11-06 revision 3045509)-HEAD		Id: 2/2