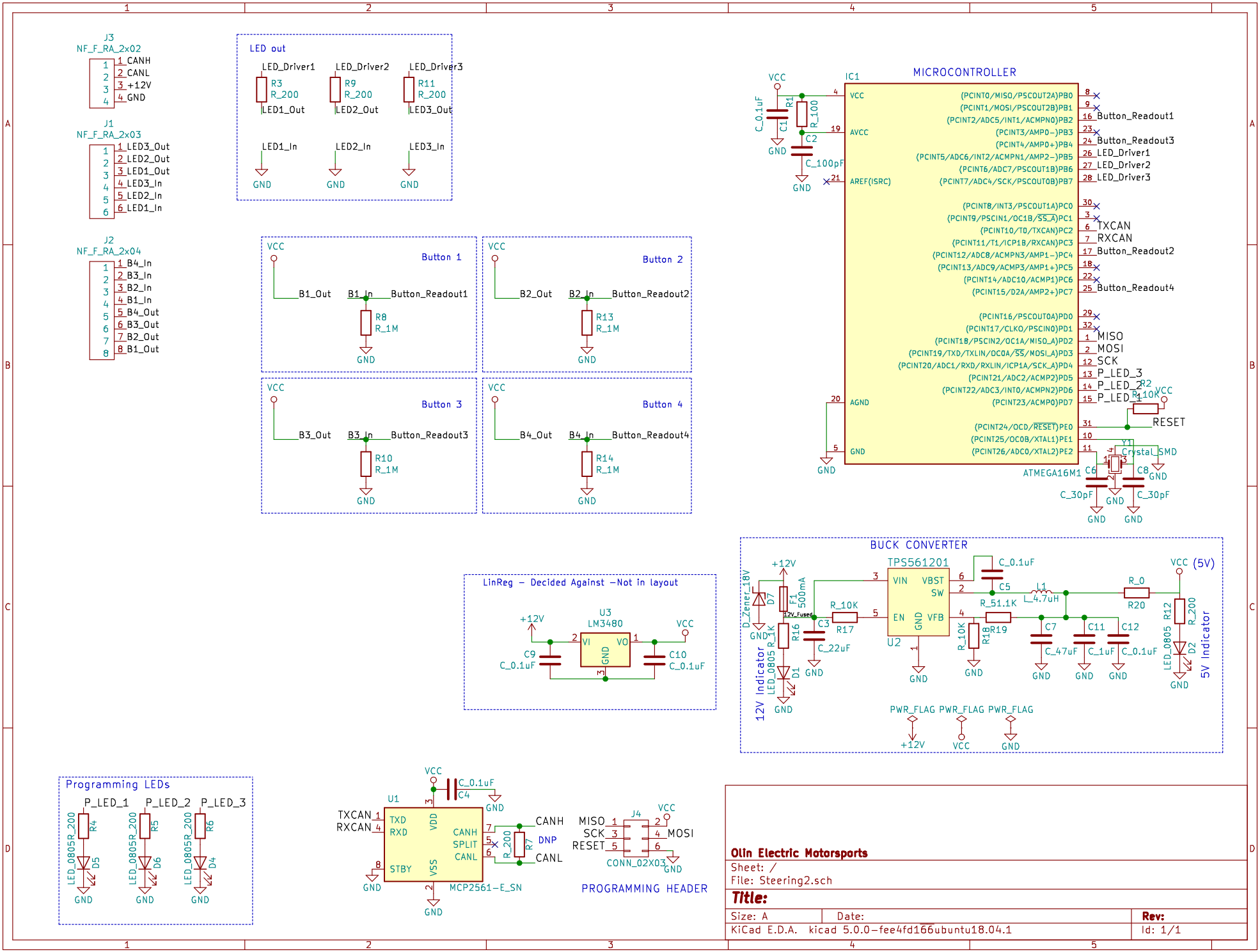
J3
NF_F_RA_2x02
1 CANH
2 CANL
3 +12V
4 GND
J1
NF_F_RA_2x03
1 LED3_Out
2 LED2_Out
3 LED1_Out
4 LED3_In
5 LED2_In
6 LED1_In
J2
NF_F_RA_2x04
1 B4_In
2 B3_In
3 B2_In
4 B1_In
5 B4_Out
6 B3_Out
7 B2_Out
8 B1_Out
LED out
LED_Driver1
LED_Driver2
LED_Driver3
R3 R_200
R9 R_200
R11 R_200
LED1_Out
LED2_Out
LED3_Out
LED1_In
LED2_In
LED3_In
GND
Button 1
B1_Out
B1_In
Button_Readout1
R8 R_1M
Button 2
B2_Out
B2_In
Button_Readout2
R13 R_1M
Button 3
B3_Out
B3_In
Button_Readout3
R10 R_1M
Button 4
B4_Out
B4_In
Button_Readout4
R14 R_1M
MICROCONTROLLER
IC1
VCC
AVCC
AREF(ISRC)
AGND
GND
C_0.1uF
R1 R_100
C1
C2
C_100pF
(PCINT0/MISO/PSCOUT2A)PB0
(PCINT1/MOSI/PSCOUT2B)PB1
(PCINT2/ADC5/INT1/ACMPN0)PB2
(PCINT3/AMP0−)PB3
(PCINT4/AMP0+)PB4
(PCINT5/ADC6/INT2/ACMPN1/AMP2−)PB5
(PCINT6/ADC7/PSCOUT1B)PB6
(PCINT7/ADC4/SCK/PSCOUT0B)PB7
(PCINT8/INT3/PSCOUT1A)PC0
(PCINT9/PSCIN1/OC1B/SS_A)PC1
(PCINT10/T0/TXCAN)PC2
(PCINT11/T1/ICP1B/RXCAN)PC3
(PCINT12/ADC8/ACMPN3/AMP1−)PC4
(PCINT13/ADC9/ACMP3/AMP1+)PC5
(PCINT14/ADC10/ACMP1)PC6
(PCINT15/D2A/AMP2+)PC7
(PCINT16/PSCOUT0A)PD0
(PCINT17/CLKO/PSCIN0)PD1
(PCINT18/PSCIN2/OC1A/MISO_A)PD2
(PCINT19/TXD/TXLIN/OC0A/SS/MOSI_A)PD3
(PCINT20/ADC1/RXD/RXLIN/ICP1A/SCK_A)PD4
(PCINT21/ADC2/ACMP2)PD5
(PCINT22/ADC3/INT0/ACMPN2)PD6
(PCINT23/ACMP0)PD7
(PCINT24/OCD/RESET)PE0
(PCINT25/OC0B/XTAL1)PE1
(PCINT26/ADC0/XTAL2)PE2
Button_Readout1
Button_Readout3
LED_Driver1
LED_Driver2
LED_Driver3
TXCAN
RXCAN
Button_Readout2
Button_Readout4
MISO
MOSI
SCK
P_LED_3
P_LED_2
P_LED_1
R2 10K
RESET
Y1 Crystal_SMD
C6
C8
C_30pF
ATMEGA16M1
LinReg − Decided Against −Not in layout
+12V
U3
LM3480
VI
VO
GND
VCC
C9
C_0.1uF
C10
C_0.1uF
BUCK CONVERTER
TPS561201
VIN
VBST
SW
EN
GND
VFB
U2
+12V
D_Zener_18V
D7
F1 500mA
R_10K
R16 R_1K
D1
12V Indicator
LED_0805
C3
C_22uF
R17
C_0.1uF
C5
R_51.1K
L1
L_4.7uH
R_10K
R18
R19
C7
C_47uF
C11
C_1uF
C12
C_0.1uF
R_0
R20
VCC (5V)
R12 R_200
D2
5V Indicator
PWR_FLAG
Programming LEDs
P_LED_1
P_LED_2
P_LED_3
R4 R_200
R5 R_200
R6 R_200
D5
D6
D4
LED_0805
U1
TXD
RXD
STBY
VDD
VSS
CANH
SPLIT
CANL
TXCAN
RXCAN
C4 C_0.1uF
R7 R_200
DNP
MCP2561−E_SN
J4
MISO
SCK
RESET
MOSI
CONN_02X03
PROGRAMMING HEADER
Olin Electric Motorsports
Sheet: /
File: Steering2.sch
Title:
Size: A
Date:
Rev:
KiCad E.D.A. kicad 5.0.0−fee4fd166ubuntu18.04.1
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