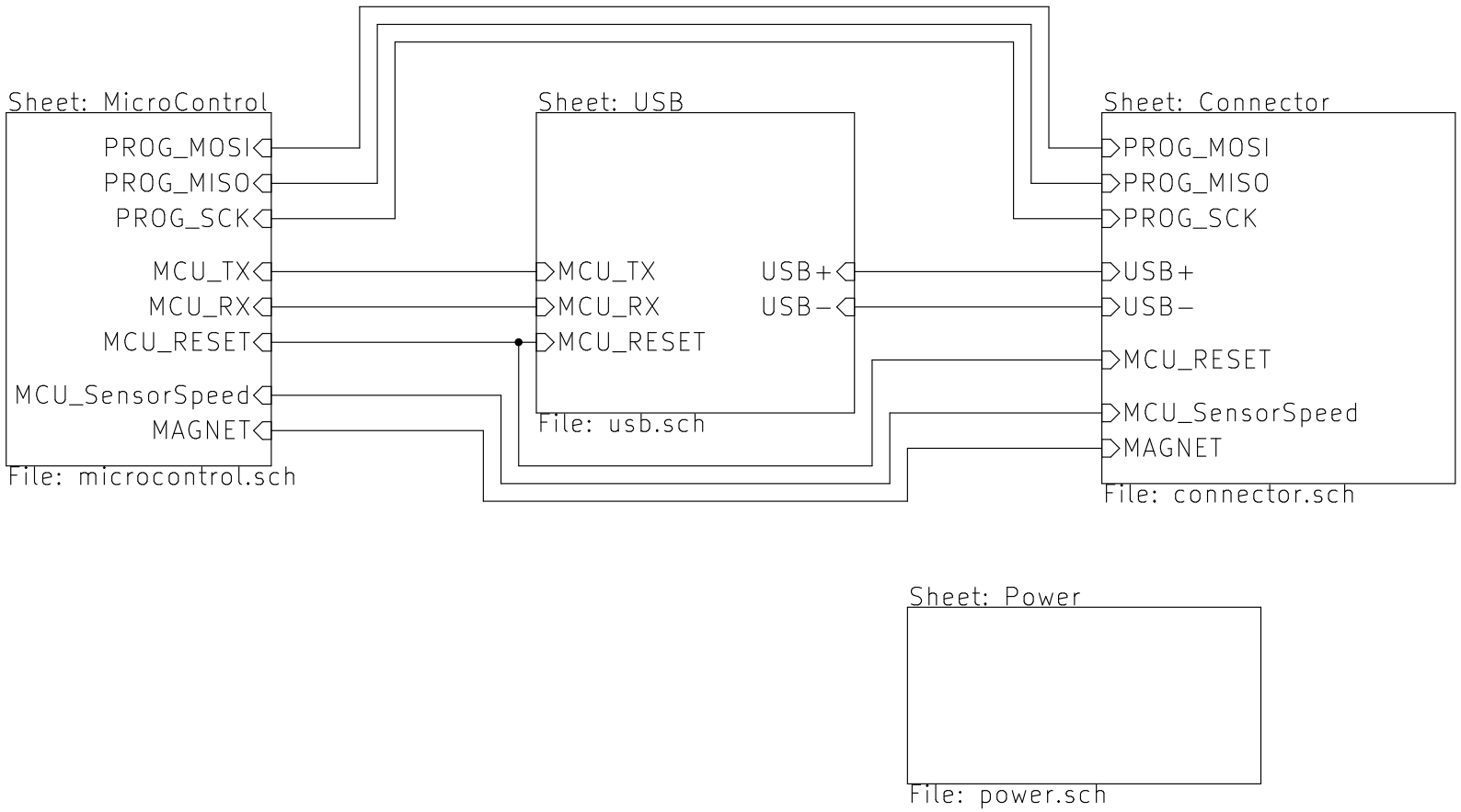

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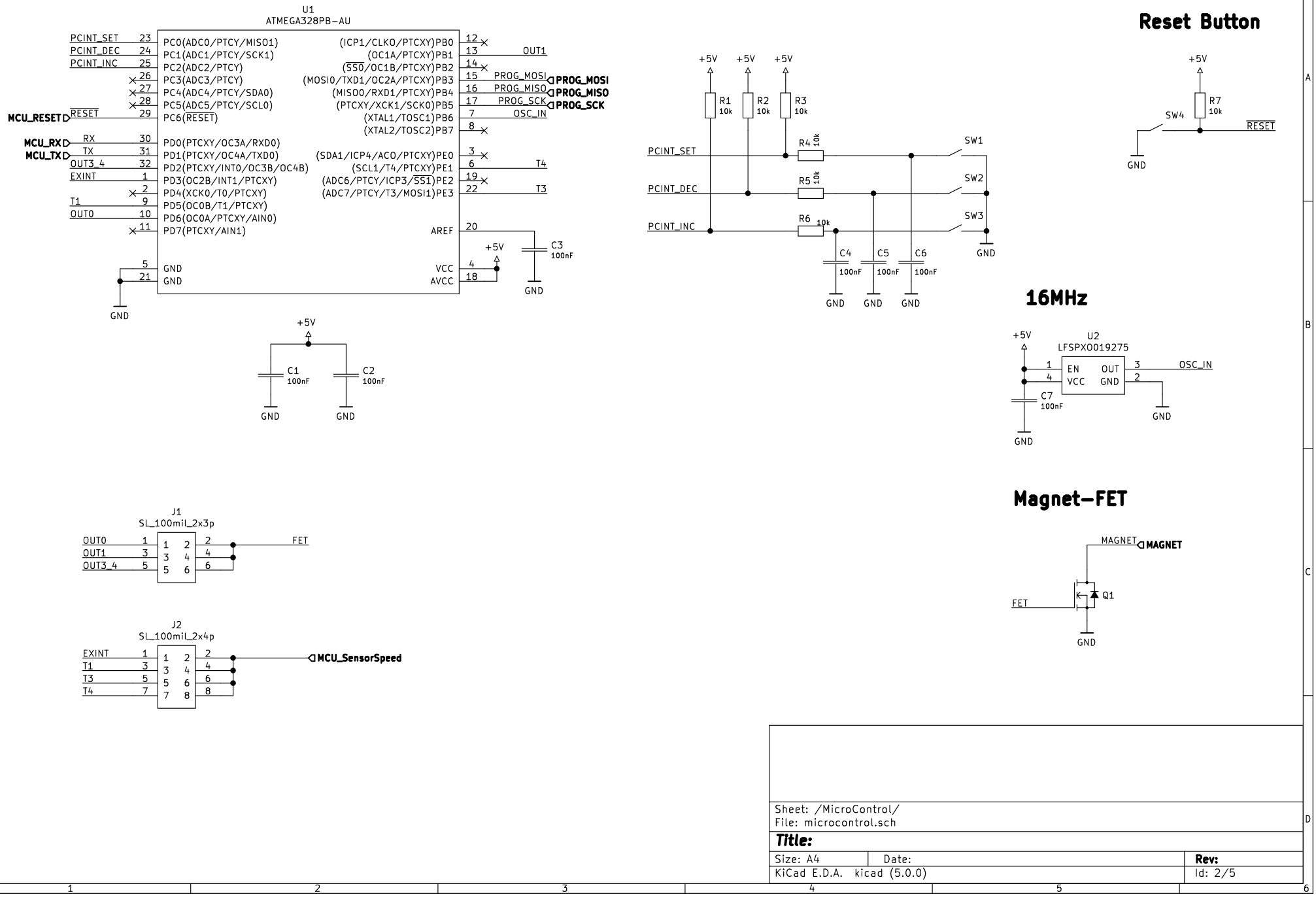
U1
ATMEGA328PB-AU
PCINT_SET 23
PCINT_DEC 24
PCINT_INC 25
RESET 29
MCU_RESET
RX 30
TX 31
MCU_RX
MCU_TX
OUT3_4 32
EXINT 1
T1 9
OUT0 10
PC0(ADC0/PTCY/MISO1)
PC1(ADC1/PTCY/SCK1)
PC2(ADC2/PTCY)
PC3(ADC3/PTCY)
PC4(ADC4/PTCY/SDA0)
PC5(ADC5/PTCY/SCL0)
PC6(RESET)
PD0(PTCXY/OC3A/RXD0)
PD1(PTCXY/OC4A/TXD0)
PD2(PTCXY/INT0/OC3B/OC4B)
PD3(OC2B/INT1/PTCXY)
PD4(XCK0/T0/PTCXY)
PD5(OC0B/T1/PTCXY)
PD6(OC0A/PTCXY/AIN0)
PD7(PTCXY/AIN1)
5 GND
21 GND
(ICP1/CLKO/PTCXY)PB0 12
(OC1A/PTCXY)PB1 13 OUT1
(SS0/OC1B/PTCXY)PB2 14
(MOSI0/TXD1/OC2A/PTCXY)PB3 15 PROG_MOSI
(MISO0/RXD1/PTCXY)PB4 16 PROG_MISO
(PTCXY/XCK1/SCK0)PB5 17 PROG_SCK
(XTAL1/TOSC1)PB6 7 OSC_IN
(XTAL2/TOSC2)PB7 8
(SDA1/ICP4/ACO/PTCXY)PE0 3
(SCL1/T4/PTCXY)PE1 6 T4
(ADC6/PTCY/ICP3/SS1)PE2 19
(ADC7/PTCY/T3/MOSI1)PE3 22 T3
AREF 20
VCC 4
AVCC 18
PROG_MOSI
PROG_MISO
PROG_SCK
+5V
C3 100nF
GND
C1 100nF
C2 100nF
R1 10k
R2 10k
R3 10k
R4 10k
R5 10k
R6 10k
SW1
SW2
SW3
C4 100nF
C5 100nF
C6 100nF
Reset Button
SW4
R7 10k
16MHz
U2
LFSPX0019275
EN
VCC
OUT
GND
OSC_IN
C7 100nF
Magnet-FET
MAGNET
FET
Q1
J1
SL_100mil_2x3p
J2
SL_100mil_2x4p
MCU_SensorSpeed
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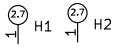
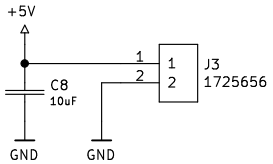
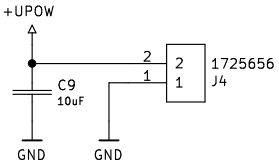


Logic Power



Magnet Power



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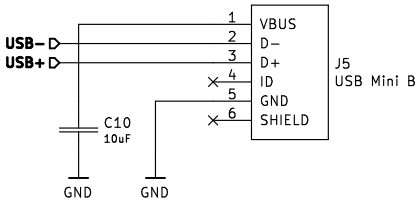
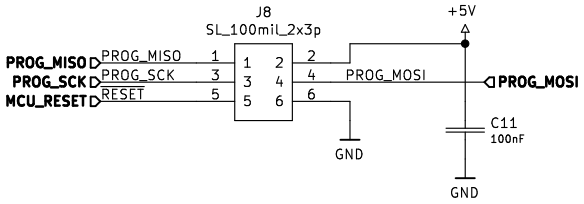
USB Connector

The USB connection is used to exchange data between the MCU and the PC.Data, such as the desired speed, can be set.



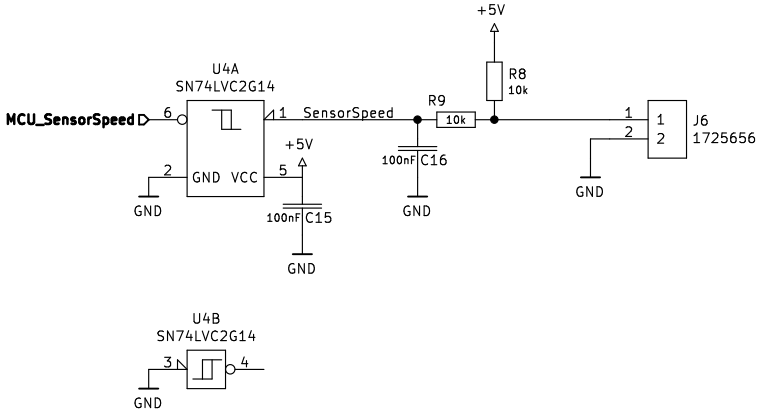
ISP Connector

Used to programm the microcontroller



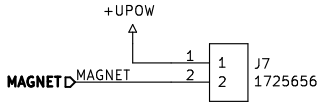
Speedsensor Connector

The Speedsensor is used for calculating the wheel speed.



Magnet−Connector

The magnet is used to decrease the speed by creating eddy current on the brake sheet



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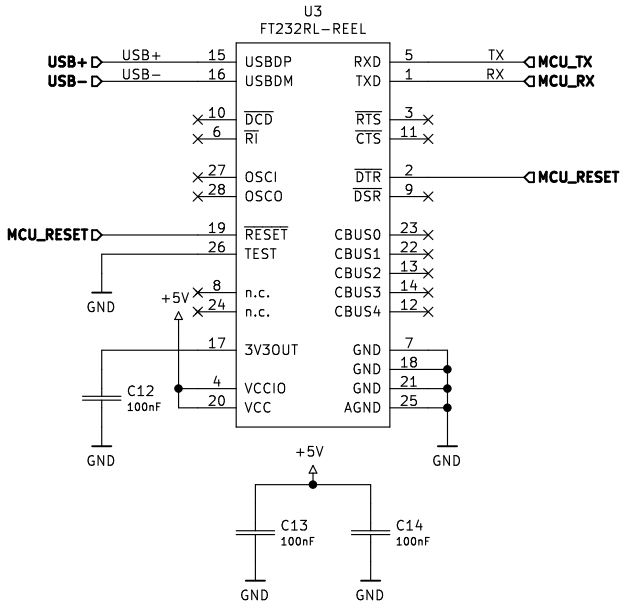

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