5V Power Supply

Blue Ground LEDs

6V Motor Supply

Stromversorgung

Speedy V2

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ATMega644P TQFP
64kb Flash 4kb RAM

Status LED

Serial Interface
HC-06
Bluetooth Modul
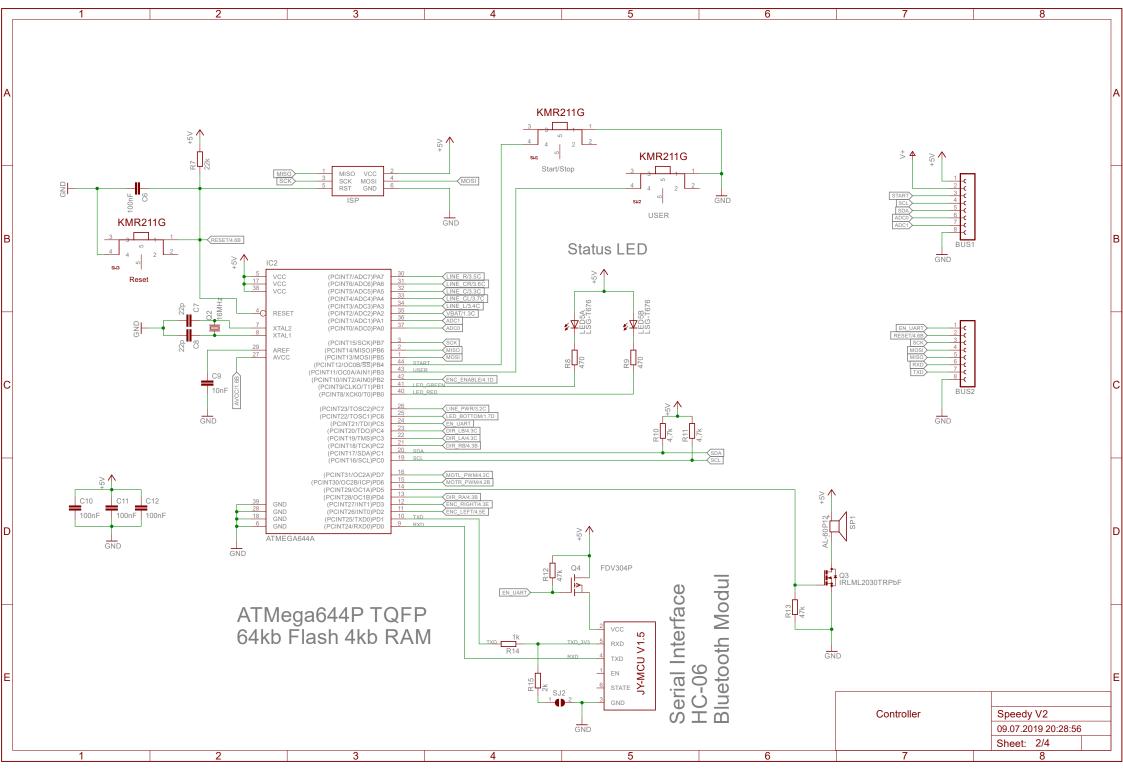
Controller

Speedy V2

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QR1113 Reflective Sensors

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DRV8833PWPR Motor Controller

VPP

C13 10µF   C14 100n

GND1

VPP

C15 10nF

DRV8833

MOTR_PWM/2.4D

DIR_RA/2.4D

DIR_RB/2.4C

R27 22k

GND

IC8A 74HC08D

IC8B 74HC08D

16	AIN1	NSLEEP	1	RESET/2.7C
15	AIN2	AOUT1	2	
14	VINT	AISEN	3	
13	GND	AOUT2	4	
12	VM	BOUT2	5	
11	VCP	BISEN	6	
10	BIN2	BOUT1	7	
9	BIN1	NFAULT	8	

TH_PAD 17

DRV8833

MOTL_PWM/2.4D

DIR_LB/2.4C

R28 22k

GND

IC8D 74HC08D

IC8C 74HC08D

DIR_LA/2.4C

C16 2,2µF

GND1

R29 620   MOT_FLT

VPP   GND1

R_MOTOR_A
R_MOTOR_B

L_MOTOR_A
L_MOTOR_B

Pololu 6V HPCB 10x12mm
DC Getriebe Motor
330 rpm 1:100
I_Stall 1,5A
I_free 0,1A
ca. 1,5m/s

+5V

R30 47k

Q6 FDV304P

ENC_ENABLE/2.4C

R31 180   R32 4,7k   TP3

20mA

IC9

CNY70_ENC

IC11B LM358D

TP4

ENC_RIGHT/2.4D

GND

+5V

20k R35

GND

R33 180   R34 4,7k   TP5

20mA

IC10

CNY70_ENC

IC11A LM358D

ENC_LEFT/2.4D

GND

+5V

20k R36

GND

+5V

8   C17 100nF   C18 100nF   14 VCC   IC8P

4   7 GND

GND

Motoren	Speedy V2
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