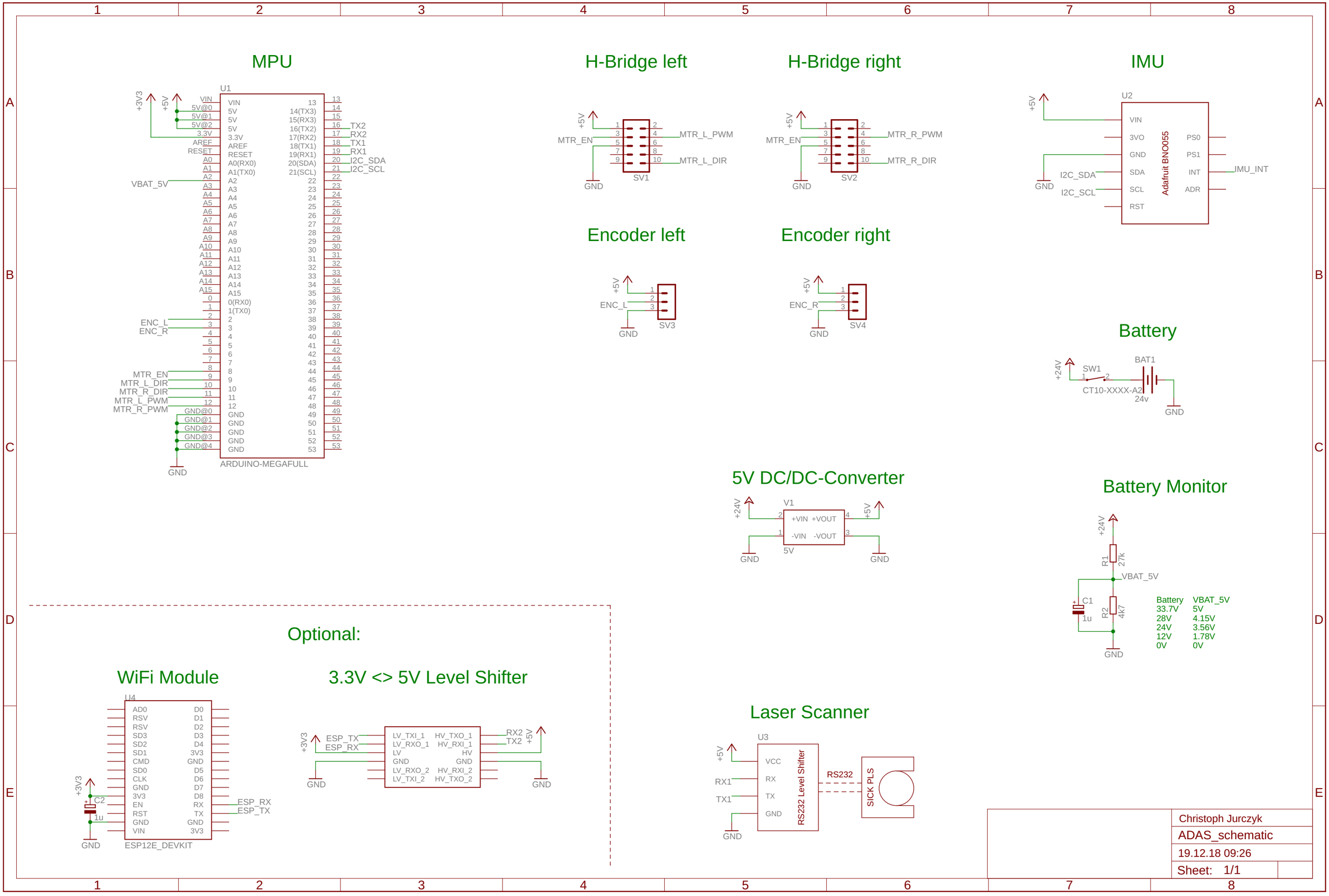
MPU
U1
ARDUINO-MEGAFULL
+3V3
+5V
VIN
5V@0
5V@1
5V@2
3.3V
AREF
RESET
VBAT_5V
ENC_L
ENC_R
MTR_EN
MTR_L_DIR
MTR_R_DIR
MTR_L_PWM
MTR_R_PWM
GND@0
GND@1
GND@2
GND@3
GND@4
GND
TX2
RX2
TX1
RX1
I2C_SDA
I2C_SCL
H-Bridge left
SV1
MTR_EN
MTR_L_PWM
MTR_L_DIR
H-Bridge right
SV2
MTR_EN
MTR_R_PWM
MTR_R_DIR
IMU
U2
Adafruit BNO055
VIN
3VO
GND
SDA
SCL
RST
PS0
PS1
INT
ADR
I2C_SDA
I2C_SCL
IMU_INT
Encoder left
SV3
ENC_L
Encoder right
SV4
ENC_R
Battery
BAT1
SW1
CT10-XXXX-A2
24v
+24V
5V DC/DC-Converter
V1
+VIN +VOUT
-VIN -VOUT
5V
Battery Monitor
R1 27k
R2 4k7
C1 1u
VBAT_5V
Battery VBAT_5V
33.7V 5V
28V 4.15V
24V 3.56V
12V 1.78V
0V 0V
Optional:
WiFi Module
U4
ESP12E_DEVKIT
C2 1u
ESP_RX
ESP_TX
3.3V <> 5V Level Shifter
LV_TXI_1 HV_TXO_1
LV_RXO_1 HV_RXI_1
LV HV
GND GND
LV_RXO_2 HV_RXI_2
LV_TXI_2 HV_TXO_2
Laser Scanner
U3
RS232 Level Shifter
VCC
RX
TX
GND
RS232
SICK PLS
Christoph Jurczyk
ADAS_schematic
19.12.18 09:26
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