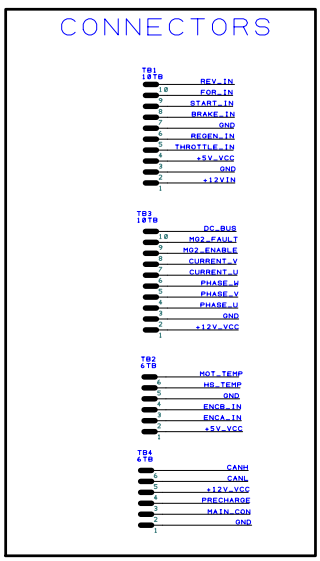
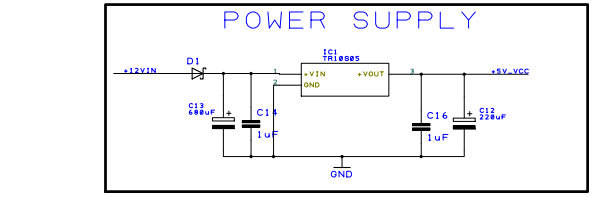
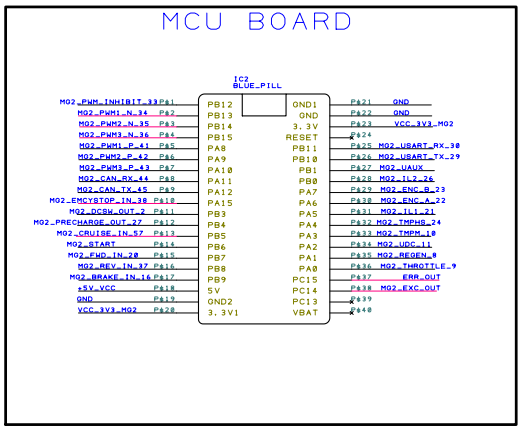
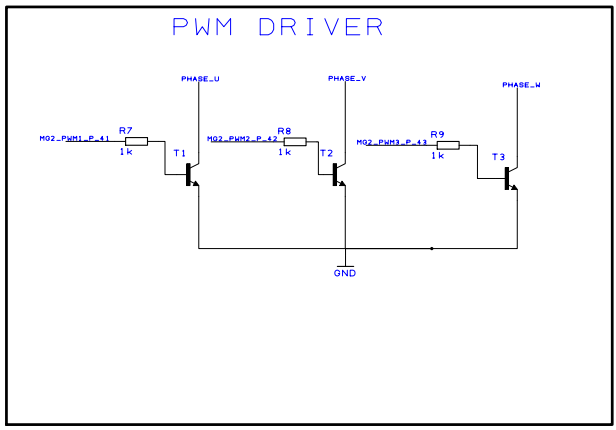
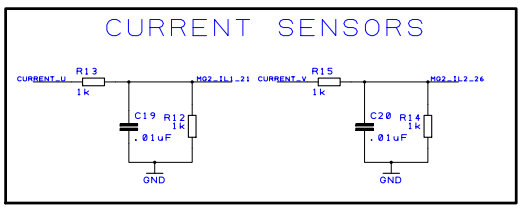
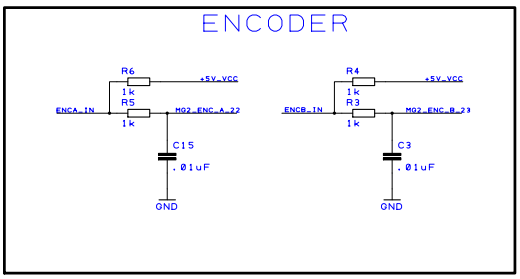

CONNECTORS
TB1
10TB
REV_IN
FOR_IN
START_IN
BRAKE_IN
GND
REGEN_IN
THROTTLE_IN
+5V_VCC
GND
+12VIN
TB3
10TB
DC_BUS
M02_FAULT
M02_ENABLE
CURRENT_W
CURRENT_U
PHASE_W
PHASE_V
PHASE_U
GND
+12V_VCC
TB2
6TB
MOT_TEMP
HS_TEMP
GND
ENCB_IN
ENCA_IN
+5V_VCC
TB4
6TB
CANH
CANL
+12V_VCC
PRECHARGE
MAIN_CON
GND

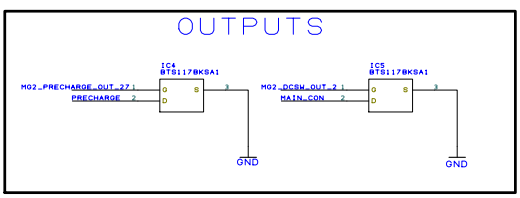

POWER SUPPLY
+12VIN
D1
IC1
TRI0805
+VIN
GND
+VOUT
+5V_VCC
C13
680uF
C14
1uF
C16
1uF
C12
220uF
GND

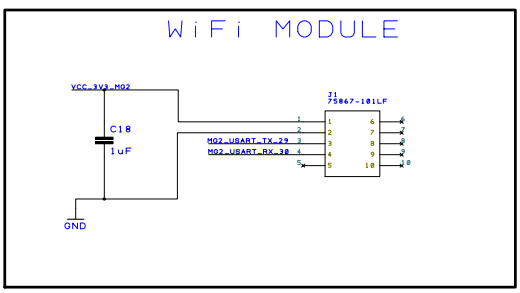

MCU BOARD
IC2
BLUE_PILL
M02_PWM_INHIBIT_33
M02_PWM1_N_34
M02_PWM2_N_35
M02_PWM3_N_36
M02_PWM1_P_41
M02_PWM2_P_42
M02_PWM3_P_43
M02_CAN_RX_44
M02_CAN_TX_45
M02_EMCYSTOP_IN_38
M02_DCSW_OUT_2
M02_PRECHARGE_OUT_27
M02_CRUISE_IN_57
M02_START
M02_FWD_IN_28
M02_REV_IN_37
M02_BRAKE_IN_16
+5V_VCC
GND
VCC_3V3_M02
PB12
PB13
PB14
PB15
PA8
PA9
PA10
PA11
PA12
PA15
PB3
PB4
PB5
PB6
PB7
PB8
PB9
5V
GND2
3.3V1
GND1
GND
3.3V
RESET
PB11
PB10
PB1
PB0
PA7
PA6
PA5
PA4
PA3
PA2
PA1
PA0
PC15
PC14
PC13
VBAT
GND
GND
VCC_3V3_M02
M02_USART_RX_30
M02_USART_TX_29
M02_UAUX
M02_IL2_26
M02_ENC_B_23
M02_ENC_A_22
M02_IL1_21
M02_TMPHS_24
M02_TMPM_10
M02_UDC_11
M02_REGEN_8
M02_THROTTLE_9
ERR_OUT
M02_EXC_OUT

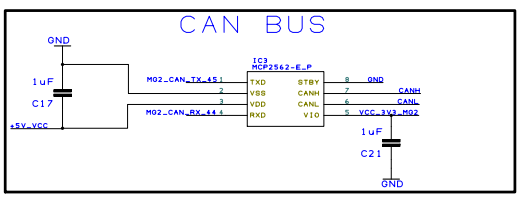

PWM DRIVER
PHASE_U
PHASE_V
PHASE_W
M02_PWM1_P_41
M02_PWM2_P_42
M02_PWM3_P_43
R7
1k
R8
1k
R9
1k
T1
T2
T3
GND

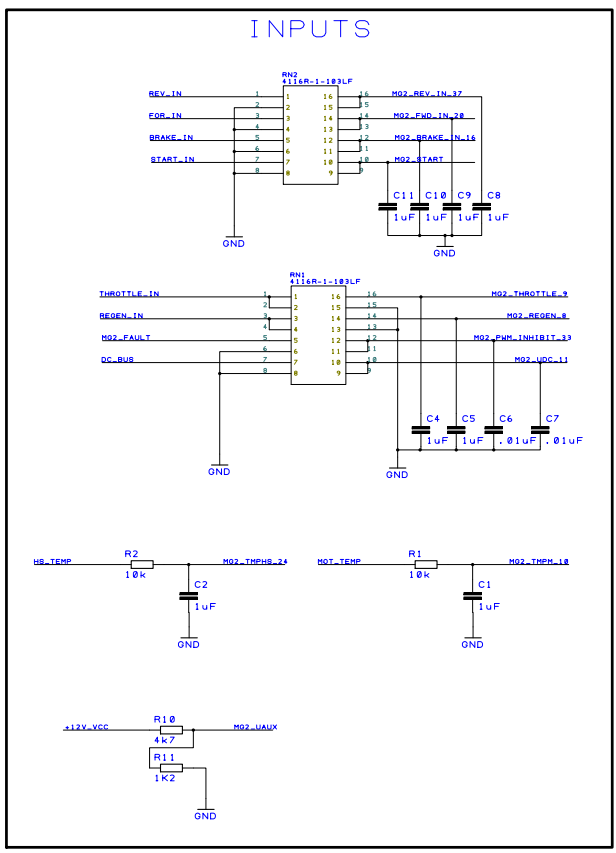

CURRENT SENSORS
CURRENT_U
R13
1k
M02_IL1_21
CURRENT_V
R15
1k
M02_IL2_26
C19
.01uF
R12
1k
C20
.01uF
R14
1k
GND
GND


ENCODER
R6
1k
+5V_VCC
ENCA_IN
R5
1k
M02_ENC_A_22
C15
.01uF
GND
R4
1k
+5V_VCC
ENCB_IN
R3
1k
M02_ENC_B_23
C3
.01uF
GND


OUTPUTS
IC4
BTS117BKSA1
M02_PRECHARGE_OUT_27
PRECHARGE
IC5
BTS117BKSA1
M02_DCSW_OUT_2
MAIN_CON
GND
GND


WiFi MODULE
VCC_3V3_M02
C18
1uF
J1
75867-101LF
M02_USART_TX_29
M02_USART_RX_30
GND


CAN BUS
GND
1uF
C17
+5V_VCC
M02_CAN_TX_45
M02_CAN_RX_44
IC3
MCP2562-E_P
TXD
VSS
VDD
RXD
STBY
CANH
CANL
VIO
GND
CANH
CANL
VCC_3V3_M02
1uF
C21
GND


INPUTS
RN2
4116R-1-103LF
REV_IN
FOR_IN
BRAKE_IN
START_IN
M02_REV_IN_37
M02_FWD_IN_28
M02_BRAKE_IN_16
M02_START
C11
1uF
C10
1uF
C9
1uF
C8
1uF
GND
GND
RN1
4116R-1-103LF
THROTTLE_IN
REGEN_IN
M02_FAULT
DC_BUS
M02_THROTTLE_9
M02_REGEN_8
M02_PWM_INHIBIT_33
M02_UDC_11
C4
1uF
C5
1uF
C6
.01uF
C7
.01uF
GND
GND
HS_TEMP
R2
10k
M02_TMPHS_24
C2
1uF
GND
MOT_TEMP
R1
10k
M02_TMPM_10
C1
1uF
GND
+12V_VCC
R10
4k7
M02_UAUX
R11
1K2
GND