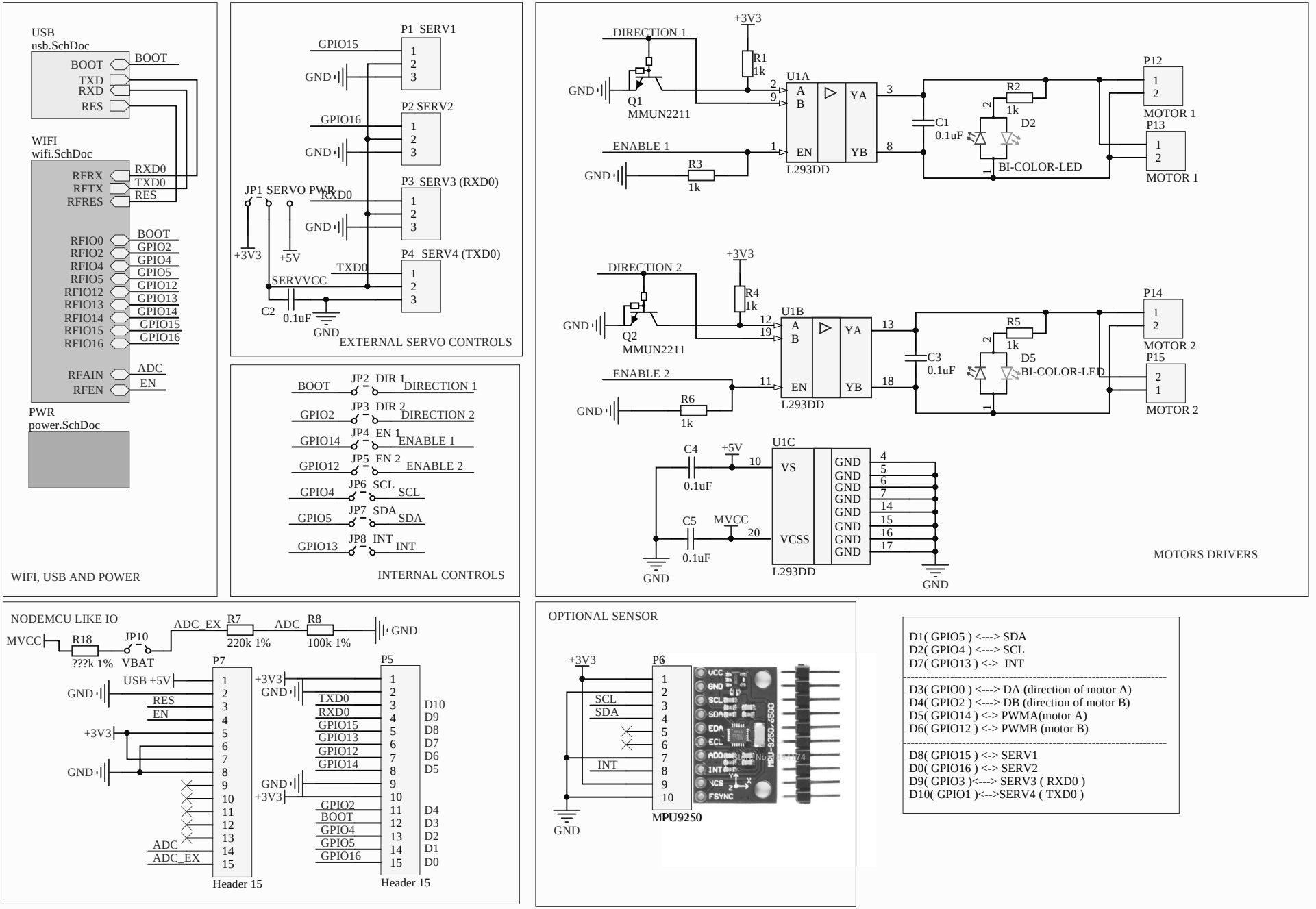
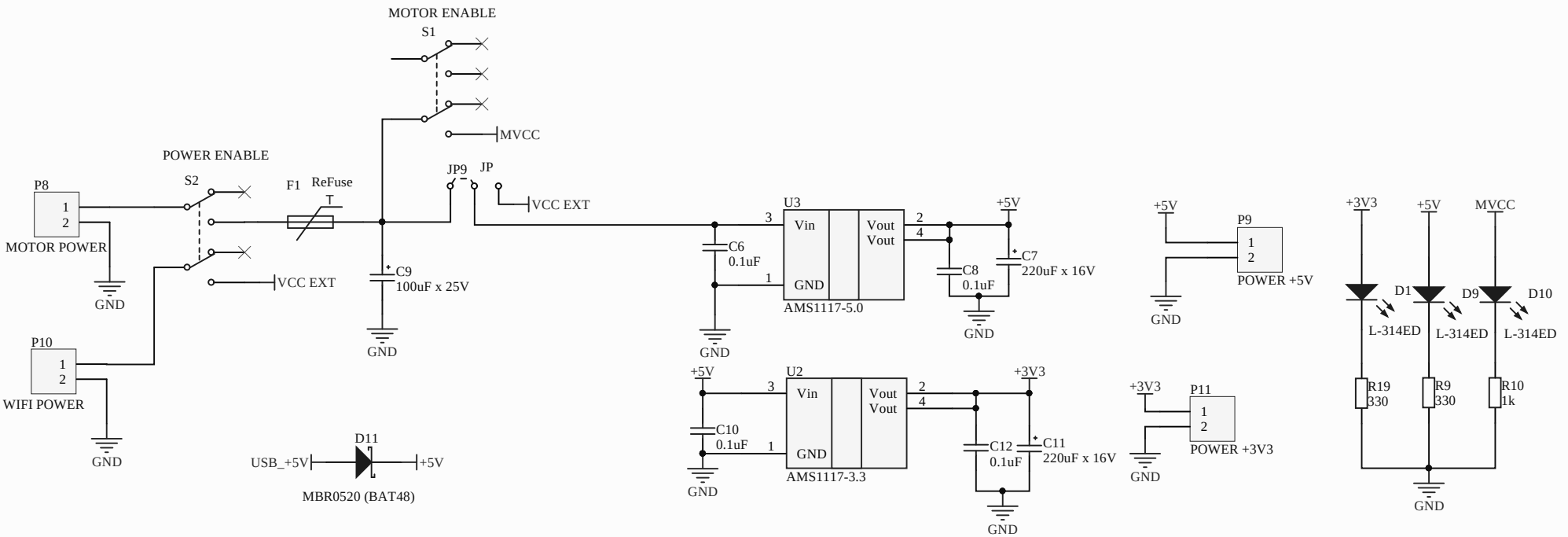
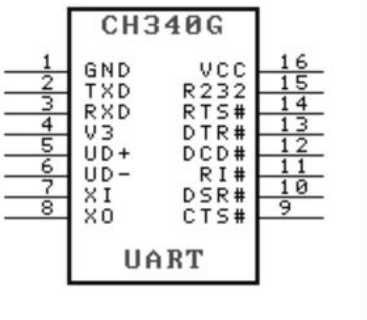


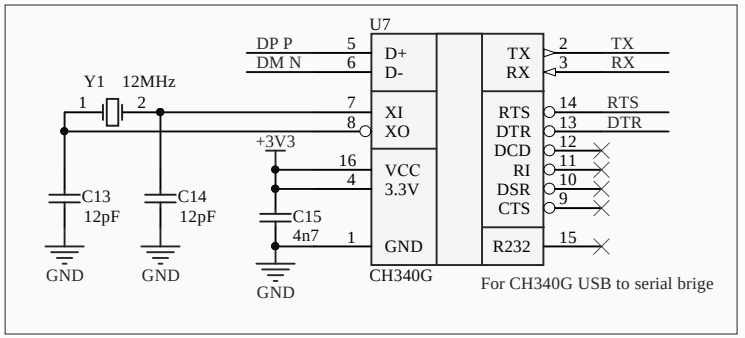
D1(GPIO5) <---> SDA
D2(GPIO4) <---> SCL
D7(GPIO13) <-> INT

D3(GPIO0) <---> DA (direction of motor A)
D4(GPIO2) <---> DB (direction of motor B)
D5(GPIO14) <-> PWMA(motor A)
D6(GPIO12) <-> PWMB (motor B)

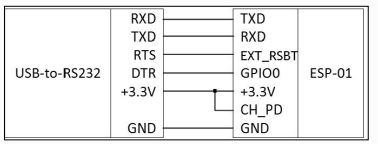
D8(GPIO15) <-> SERV1
D0(GPIO16) <-> SERV2
D9(GPIO3)<---> SERV3 (RXD0)
D10(GPIO1)<--->SERV4 (TXD0)


MOTOR ENABLE
S1
MVCC
POWER ENABLE
S2
F1
ReFuse
T
JP9
JP
VCC EXT
P8
1
2
MOTOR POWER
GND
VCC EXT
C9
100uF x 25V
GND
P10
1
2
WIFI POWER
GND
D11
USB_+5V
+5V
MBR0520 (BAT48)
U3
3
Vin
GND
1
Vout
Vout
2
4
AMS1117-5.0
C6
0.1uF
GND
+5V
C8
0.1uF
C7
220uF x 16V
GND
+5V
U2
3
Vin
GND
1
Vout
Vout
2
4
AMS1117-3.3
C10
0.1uF
GND
+3V3
C12
0.1uF
C11
220uF x 16V
GND
+5V
P9
1
2
POWER +5V
GND
+3V3
P11
1
2
POWER +3V3
GND
+3V3
+5V
MVCC
D1
D9
D10
L-314ED
L-314ED
L-314ED
R19
330
R9
330
R10
1k
GND

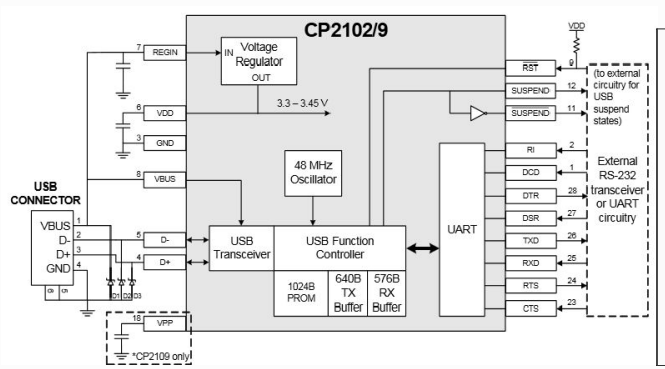


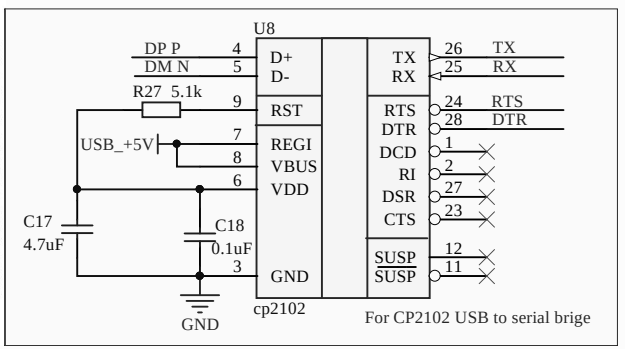


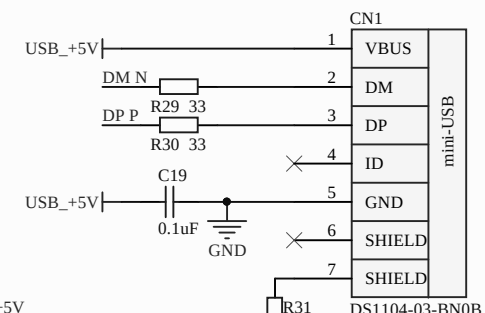
GPIO15	GPIO0	GPIO2	
1	X	X	SDIO / SPI
0	0	1	Uart Download
0	1	1	Flash Boot

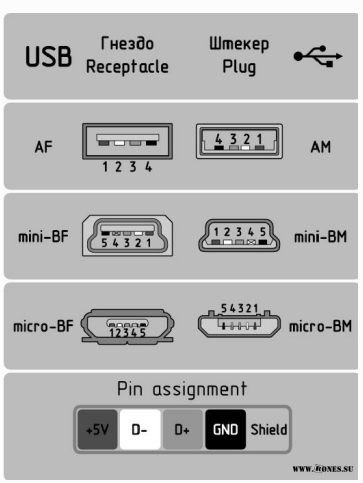


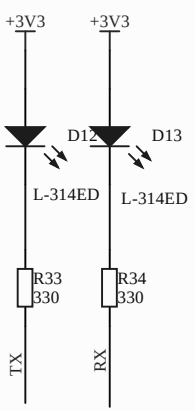
Auto program circuit			
DTR	RTS	RST	GPIO0
1	1	1	1
0	0	1	1
1	0	0	1
0	1	1	0

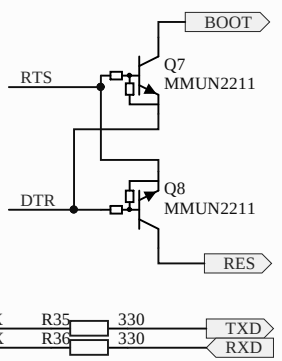


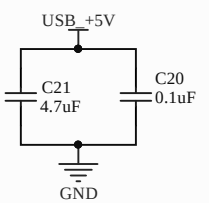


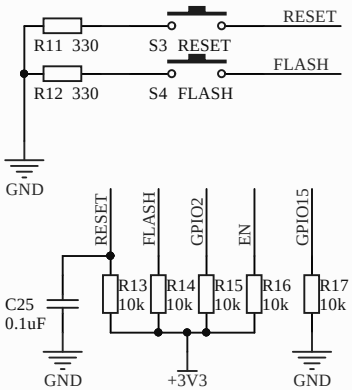


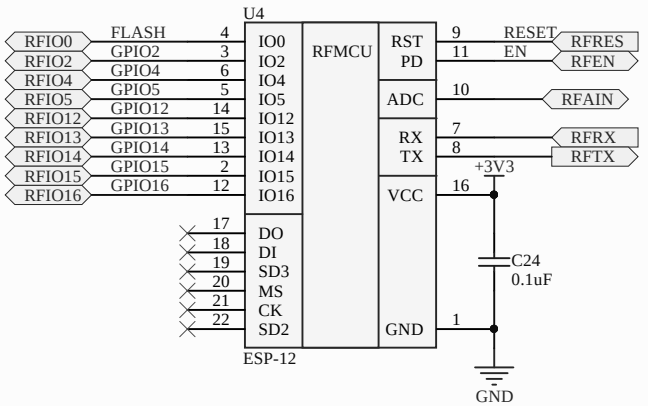












GPIO15	GPIO0	GPIO2	
1	X	X	SDIO / SPI
0	0	1	Uart Download
0	1	1	Flash Boot

GPIO	Inst Name	Function 0	Function 1	Function 2	Function 3	Function 4	At Reset	After Reset	Sleep
0	GPIO0_U	**GPIO0**	SPICS2			CLK_OUT	oe=0, wpu	wpu	oe=0
1	U0TXD_U	**U0TXD**	SPICS1		**GPIO1**	CLK_RTC	oe=0, wpu	wpu	oe=0
2	GPIO2_U	**GPIO2**	I2SO_WS	**U1TXD**		U0TXD	oe=0, wpu	wpu	oe=0
3	U0RXD_U	**U0RXD**	I2SO_DATA		**GPIO3**	CLK_XTAL	oe=0, wpu	wpu	oe=0
4	GPIO4_U	**GPIO4**	CLK_XTAL				oe=0		oe=0
5	GPIO5_U	**GPIO5**	CLK_RTC				oe=0		oe=0
6	*SD_CLK_U*	*SD_CLK*	*SPICLK*		*GPIO6*	*U1CTS*	*oe=0*		*oe=0*
7	*SD_DATA0_U*	*SD_DATA0*	*SPIQ*		*GPIO7*	*U1TXD*	*oe=0*		*oe=0*
8	*SD_DATA1_U*	*SD_DATA1*	*SPID*		*GPIO8*	*U1RXD*	*oe=0*		*oe=0*
9	*SD_DATA2_U*	*SD_DATA2*	*SPIHD*		*GPIO9*	*HSPIHD*	*oe=0*		*oe=0*
10	*SD_DATA3_U*	*SD_DATA3*	*SPIWP*		*GPIO10*	*HSPIWP*	*oe=0*		*oe=0*
11	*SD_CMD_U*	*SD_CMD*	*SPICS0*		*GPIO11*	*U1RTS*	*oe=0*		*oe=0*
12	MTDI_U	MTDI	I2SI_DATA	**HSPIQ** MISO	**GPIO12**	U0DTR	oe=0, wpu	wpu	oe=0
13	MTCK_U	MTCK	I2SI_BCK	**HSPID** MOSI	**GPIO13**	U0CTS	oe=0, wpu	wpu	oe=0
14	MTMS_U	MTMS	I2SI_WS	**HSPICLK**	**GPIO14**	U0DSR	oe=0, wpu	wpu	oe=0
15	MTDO_U	MTDO	I2SO_BCK	**HSPICS**	**GPIO15**	U0RTS	oe=0, wpu	wpu	oe=0
16	XPD_DCDC	XPD_DCDC	**RTC_GPIO0**	EXT_WAKEUP	DEEPSLEEP	BT_XTAL_EN	oe=1,wpd	oe=1,wpd	oe=1