

X Y
7 5
a z 4
c 0 b 2

STEPM1 PA6
STEPM2 PA4
STEPM3 PA2
STEPM4 PA0
STEPM5 PA1
STEPM6 PA3
STEPM7 PA5

DIRM1 PC1
DIRM2 PC5
DIRM3 PC3
DIRM4 PC7
DIRM5 PC6
DIRM6 PC4
DIRM7 PC2

ENABLE PG1

SOPT01 PL7
SOPT02 PL5
SOPT03 PL3
SOPT04 PL1
SOPT05 PL0
SOPT06 PL2

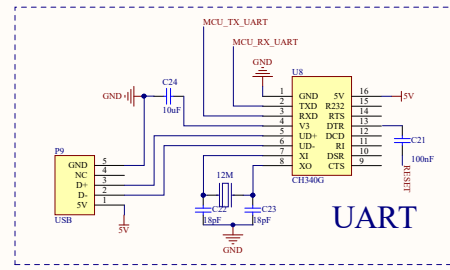
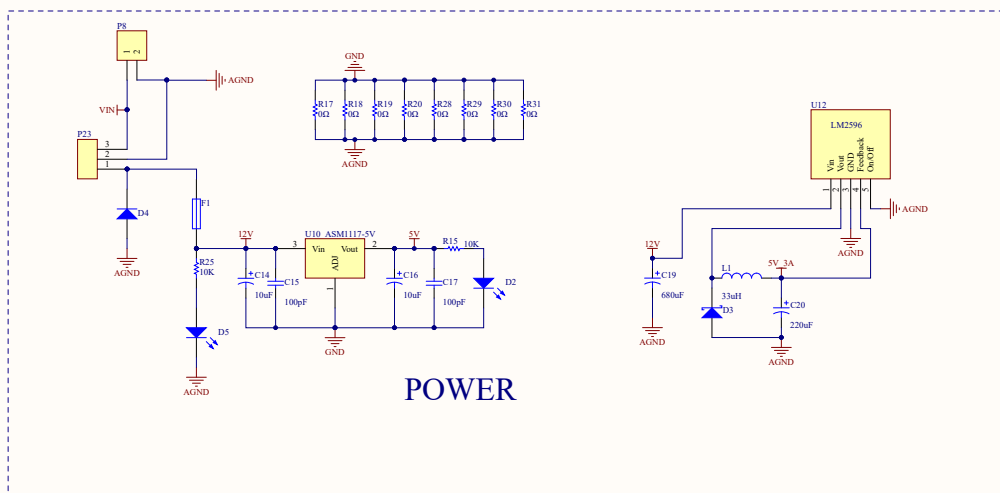
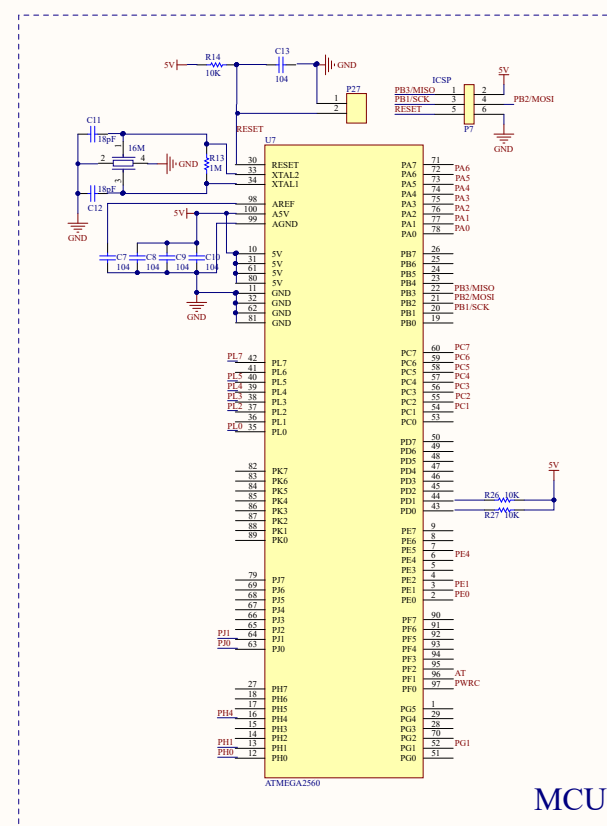
STOOL0 PE4
STOOL1 PH4

PE0 R23 MCU_RX
4.7K

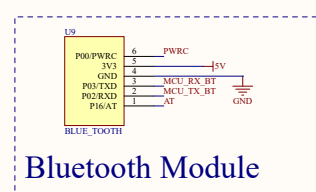
PE1 R24 MCU_TX
4.7K

USART2_RX PH0
USART2_TX PH1

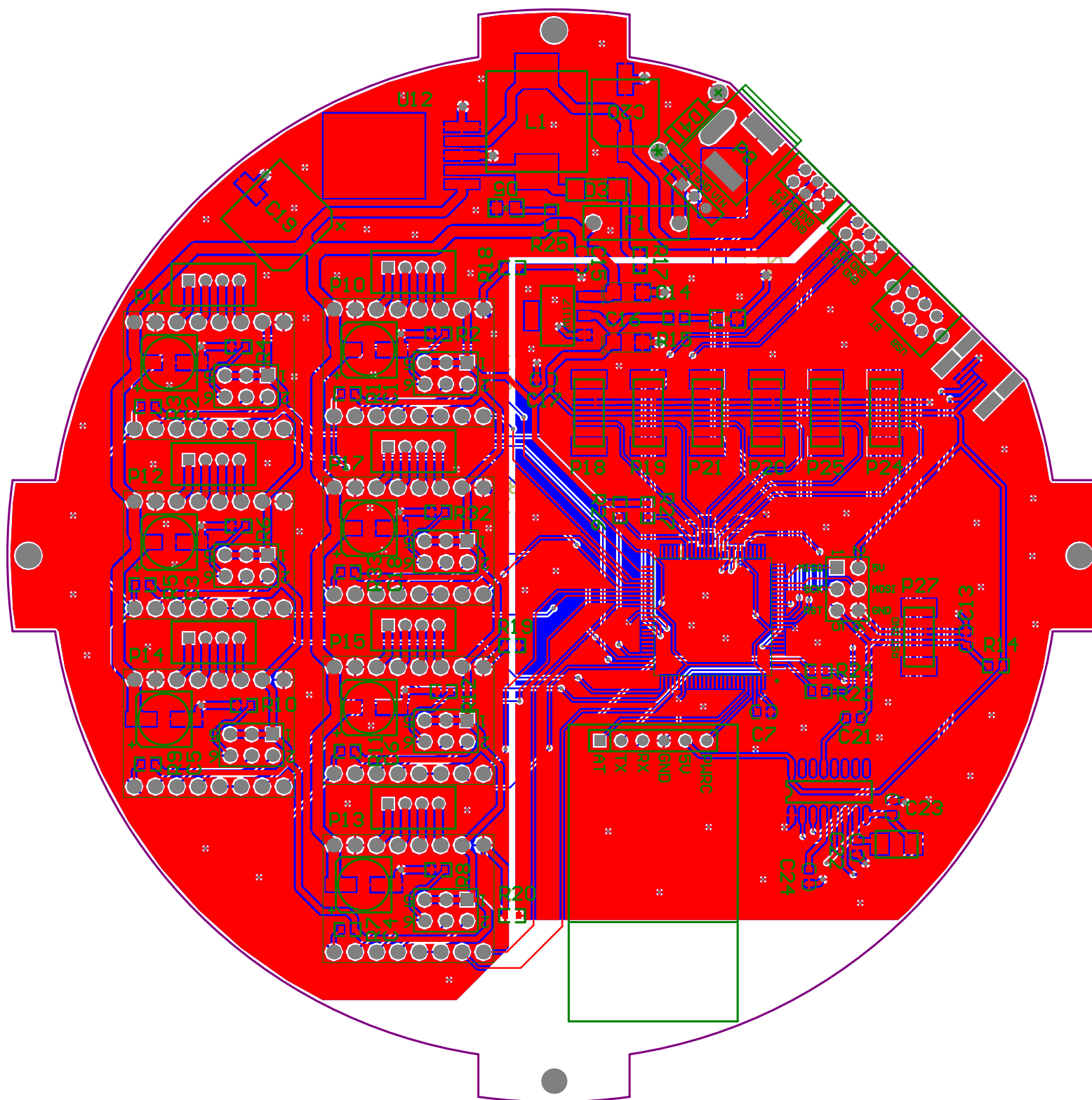
USART3_RX P30
USART3_TX P31



MCU_RX 2 S3 1 MCU_RX_BT
MCU_TX 5 S3 4 MCU_TX_BT
MCU_TX 5 S3 6 MCU_TX_UART



Title		
Size	Number	Revision
A2		
Date:	2019/4/6	Sheet of
File:	D:\PCB\manipulator_mega_2560\Sch13-Drawn By:	



Comment	Description	Designator	Footprint	LibRef	Quantity
100uF	Polarized Capacitor (Radial)	C1, C2, C3, C4, C5, C6, C18	SLF7045	Cap Pol1	7
104	Capacitor	C7, C8, C9, C10, C13	C0603	Cap	5
18pF	Capacitor	C11, C12, C22, C23	C0603	Cap	4
10uF	Polarized Capacitor (Radial)	C14, C16	1206	Cap Pol1	2
100pF	Capacitor	C15	C0603	Cap	1
680uF	Polarized Capacitor (Radial)	C19	C680uF	Cap Pol1	1
220uF	Polarized Capacitor (Radial)	C20	C220uF	Cap Pol1	1
100nF	Capacitor	C21	C0603	Cap	1
10uF	Capacitor	C24	C0603	Cap	1
LED0	Typical INFRARED GaAs LED	D2, D5	D-0805	LED0	2
Diode 1N5824	Schottky Rectifier	D3	1N5824	Diode 11DQ03	1
Diode	Default Diode	D4	D-10	Diode	1
Fuse 1	Fuse	F1	D-4148	Fuse 1	1
33uH	Inductor	L1	Inductor	Inductor	1
Header_2_3		P1, P2, P3, P4, P5, P6, P16	HDR2X3	Header_2_3	7
ICSP		P7	HDR2X3	Header_2_3	1
MHDR1X2	Header, 2-Pin	P8	12V	MHDR1X2	1
USB		P9	micro_usb_2	Header_1_5	1
PM1	Header, 4-Pin	P10	SIP4-2.0	Header 4	1
PM2	Header, 4-Pin	P11	SIP4-2.0	Header 4	1
PM3	Header, 4-Pin	P12	SIP4-2.0	Header 4	1
PM4	Header, 4-Pin	P13	SIP4-2.0	Header 4	1
PM5	Header, 4-Pin	P14	SIP4-2.0	Header 4	1
PM6	Header, 4-Pin	P15	SIP4-2.0	Header 4	1
PM7	Header, 4-Pin	P17	SIP4-2.0	Header 4	1
PS1		P18	HD-1.27-3	Header_1_3	1
PS2		P19	HD-1.27-3	Header_1_3	1
PS3		P20	HD-1.27-3	Header_1_3	1
PS4		P21	HD-1.27-3	Header_1_3	1
Header_2_3		P22, P26	SIP3x2-2.0-horizontal	Header_2_3	2
Header_1_3		P23	SIP3-2.0-horizontal	Header_1_3	1
PS5		P24	HD-1.27-3	Header_1_3	1
PS6		P25	HD-1.27-3	Header_1_3	1
Header_1_2		P27	HD-1.27-2	Header_1_2	1
10K	Resistor	R1, R3, R5, R7, R9, R11, R14, R15, R25, R26, R27, R33	R0603	Res1	12
100K	Resistor	R2, R4, R6, R8, R10, R12, R32	R0603	Res1	7
1M	Resistor	R13	R0603	Res1	1
0Ω	Resistor	R17, R18, R19, R20, R28, R29, R30, R31	R0603	Res1	8
4.7K	Resistor	R23, R24	R0603	Res1	2
SW-DPDT		S3	SW-DPDT	SW-DPDT	1
POLOLU_A4988		U1, U2, U3, U4, U5, U6, U11	POLOLU_A4988	POLOLU_A4988	7
ATMEGA2560		U7	SOP100A	ATMEGA2560	1
CH340G		U8	SO-16	CH340G	1
BLUE_TOOTH		U9	SIP6-2.54	BLUE_TOOTH	1
ASM1117-5V		U10	LM1117	ASM1117	1
LM2596		U12	TO263	LM2596	1
OSC-12M		X2	OSC-5032	OSC-12M	1
16M		Y1	OSC-16M	OSC-16M	1