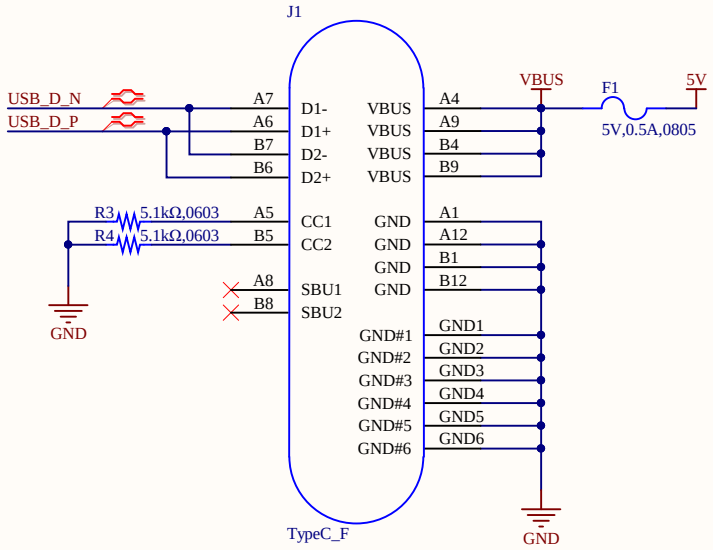
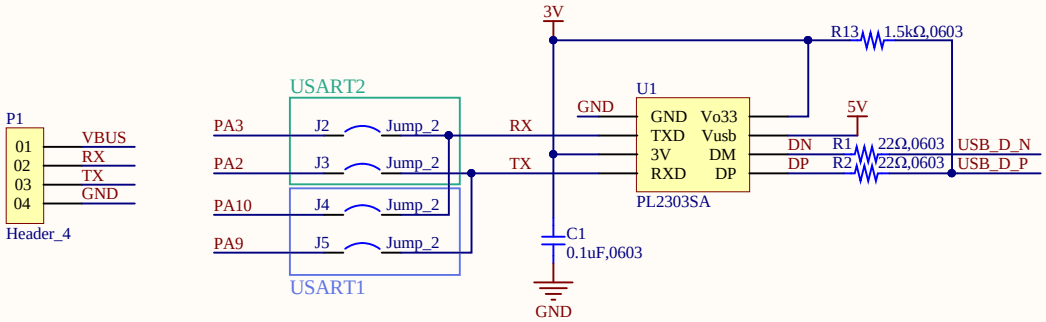
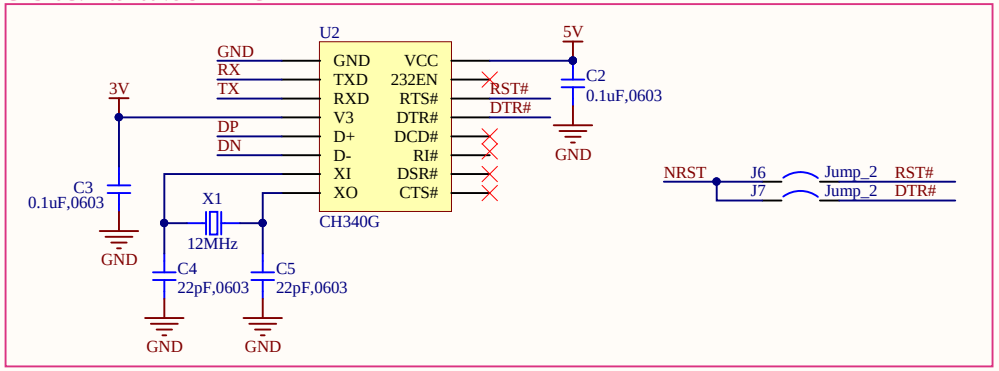
USB Type-C Connector



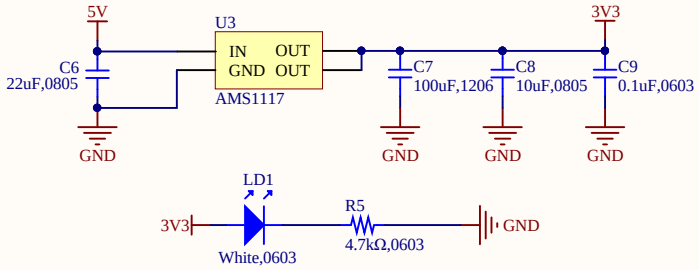
USB to UART

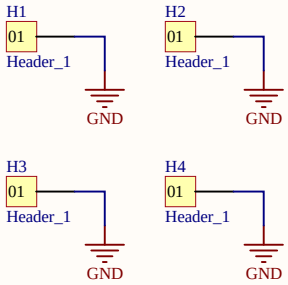


CH340G: Alternative UART IC



5V to 3.3V LDO





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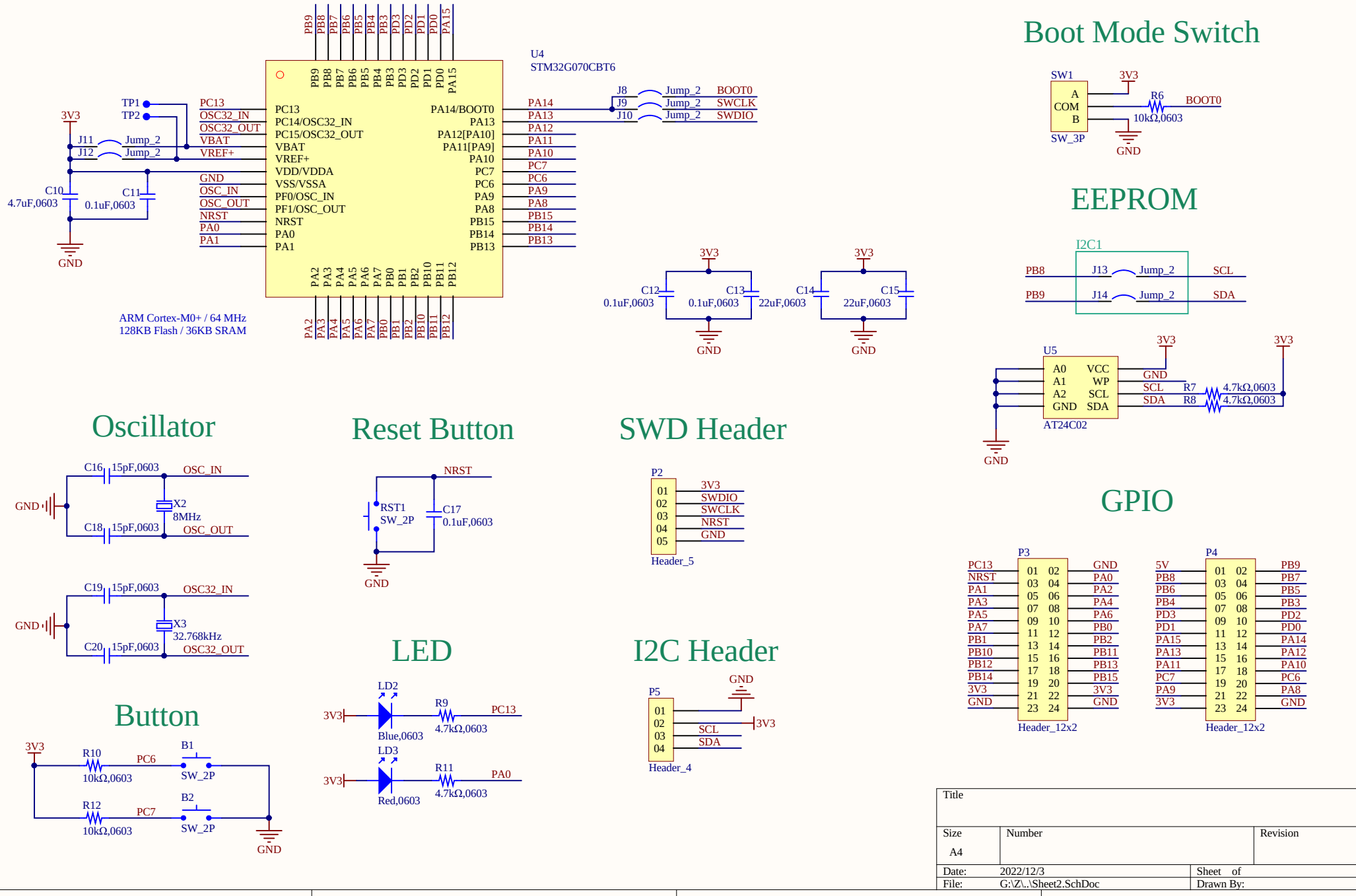
File: G:\Z\..\Sheet1.SchDoc		Drawn By:


Boot Mode Switch
SW1
3V3
A
COM
B
SW_3P
R6
BOOT0
10kΩ,0603
GND
EEPROM
I2C1
PB8
J13
Jump_2
SCL
PB9
J14
Jump_2
SDA
U5
A0
A1
A2
GND
VCC
WP
SCL
SDA
AT24C02
R7
R8
4.7kΩ,0603
4.7kΩ,0603
GPIO
P3
P4
Header_12x2
Header_12x2
U4
STM32G070CBT6
ARM Cortex-M0+ / 64 MHz
128KB Flash / 36KB SRAM
Oscillator
C16
15pF,0603
OSC_IN
X2
8MHz
C18
15pF,0603
OSC_OUT
C19
15pF,0603
OSC32_IN
X3
32.768kHz
C20
15pF,0603
OSC32_OUT
Reset Button
NRST
RST1
SW_2P
C17
0.1uF,0603
SWD Header
P2
3V3
SWDIO
SWCLK
NRST
GND
Header_5
LED
LD2
Blue,0603
R9
4.7kΩ,0603
PC13
LD3
Red,0603
R11
4.7kΩ,0603
PA0
I2C Header
P5
SCL
SDA
Header_4
Button
R10
10kΩ,0603
PC6
B1
SW_2P
R12
10kΩ,0603
PC7
B2
SW_2P
Title
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Revision
Date:
2022/12/3
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Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
SW_2P		B1, B2, RST1	SW_2P_3	SW_2P	3
0.1uF,0603		C1, C2, C3, C9, C11, C12, C13, C17	C0603	Cap	8
22pF,0603		C4, C5	C0603	Cap	2
22uF,0805		C6	C0805	Cap	1
100uF,1206		C7	C1206	Cap	1
10uF,0805		C8	C0805	Cap	1
4.7uF,0603		C10	C0603	Cap	1
22uF,0603		C14, C15	C0603	Cap	2
15pF,0603		C16, C18, C19, C20	C0603	Cap	4
5V,0.5A,0805		F1	F0805	Fuse	1
Header_1		H1, H2, H3, H4	Header_1_GND	Header_1	4
TypeC_F	Female SMD Connector	J1	Type-C_16P_F_0.5_BOTH	Type-C_16P_F_0.5	1
Jump_2		J2, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14	Jp_small	Jump_2	13
White,0603		LD1	LED0603	Diode - LED	1
Blue,0603		LD2	LED0603	Diode - LED	1
Red,0603		LD3	LED0603	Diode - LED	1
Header_4		P1, P5	Header_4	Header_4	2
Header_5		P2	Header_5	Header_5	1
Header_12x2		P3, P4	Header_12x2_s	Header_12x2	2
22Ω,0603		R1, R2	R0603	Res	2
5.1kΩ,0603		R3, R4	R0603	Res	2
4.7kΩ,0603		R5, R7, R8, R9, R11	R0603	Res	5
10kΩ,0603		R6, R10, R12	R0603	Res	3
1.5kΩ,0603		R13	R0603	Res	1
SW_3P		SW1	SW	SW_3P	1
TP		TP1, TP2	TP_1.5x1.5mm	TP	2
PL2303SA		U1	SOP8	PL2303SA	1
CH340G		U2	SOP16	CH340G	1
AMS1117		U3	SOT-223	AMS1117	1
STM32G070CBT6		U4	LQFP_48	STM32G070CBT6	1
AT24C02		U5	SOP8	AT24C02	1
12MHz		X1	XTAL_SMD_3225	XTAL	1
8MHz		X2	XTAL_SMD_3225	XTAL	1
32.768kHz		X3	XTAL_32.768KHz	XTAL	1