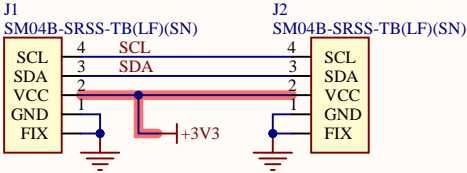
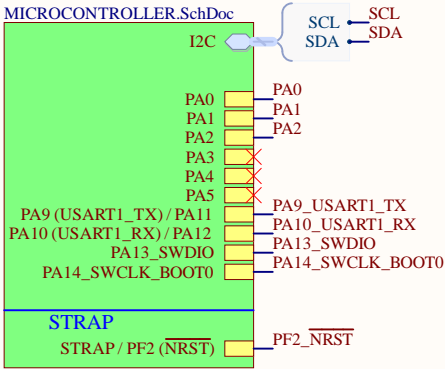


I2C CONNECTORS

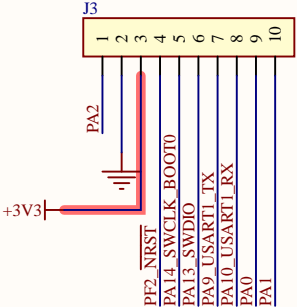
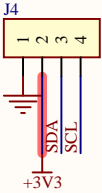
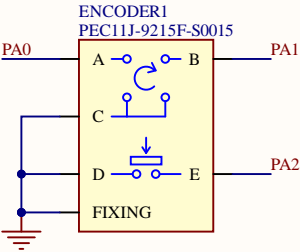


MICROCONTROLLER

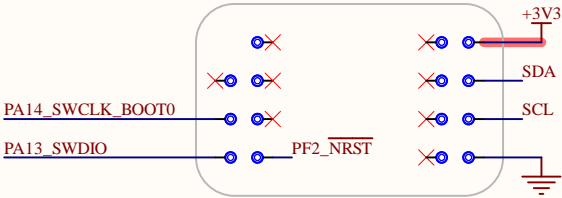


ENCODER

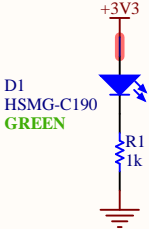
PULLUPS NOTE: Internal microcontroller pullups are enabled for encoder pin A, encoder pin B and encoder switch pin E



TEST POINTS
BOTTOM VIEW



POWER LED



QR1
QR CODE 4x4mm



Fiducial_1
Fiducial mark 1mm

Fiducial_2
Fiducial mark 1mm

Fiducial_3
Fiducial mark 1mm

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Title: TOP

ID: ABX00107

Date: 27/06/2024 Time: 16:18:59

File: TOP.SchDoc

Version: V0.3

Sheet 1 of 2

Author: Silvio Navaretti

RevAuthor: Silvio Navaretti



Column	Symbol	Definition
Pin name	Terminal name corresponds to its by-default function at reset, unless otherwise specified parenthesis under the pin name.	
Pin type	S	Supply pin
	I	Input only pin
	I/O	Input / output pin
	FT	5 V tolerant I/O
I/O structure	RST	Bidirectional reset pin with embedded weak pull-up resistor
	Options for FT I/Os	
	_f	I/O, Fm+ capable
	_a	I/O, with analog switch function

Pin		Pin name (function upon reset)	Pin type	IO structure	Note	Alternate functions	Additional functions
	UFCPFA20						
20		PC14-OSCX_IN (PC14)	I/O	FT	-	USART1_TX, TIM1_ETR, TIM1_BKIN2, IR_OUT, USART2_RTS_DE, CK, TIM17_CH1, TIM3_CH2, I2C1_SDA, EVENTOUT	OSCX_IN
1		PC15-OSCX_OUT (PC15)	I/O	FT	-	OSC32_EN, OSC_EN, TIM1_ETR, TIM3_CH3	OSCX_OUT
2		VDD/VDDA	S	-	-	-	-
3		VSS/VSSA	S	-	-	-	-
4		PF2-NRST	I/O	-	-	MC0, TIM1_CH4	NRST
5		PA0	I/O	FT	-	USART2_CTS, TIM16_CH1, USART1_TX, TIM1_CH1	ADC_IN0, WKUP1
6		PA1	I/O	FT	-	SP1_SCK/I2S1_CK, USART2_RTS_DE, CK, TIM17_CH1, USART1_RX, TIM1_CH2, I2C1_SMB, EVENTOUT	ADC_IN1
7		PA2	I/O	FT	-	SP1_MOSI/I2S1_SD, USART2_TX, TIM16_CH1N, TIM3_ETR, TIM1_CH3	ADC_IN2, WKUP4, LSCO
8		PA3	I/O	FT	-	USART2_RX, TIM1_CH1N, TIM1_CH4, EVENTOUT	ADC_IN3
9		PA4	I/O	FT	-	SP1_NSS/I2S1_WS, USART2_TX, TIM1_CH2N, TIM14_CH1, TIM17_CH1N, EVENTOUT	ADC_IN4, RTC_TCS, RTC_OUT1, WKUP2
10		PA5	I/O	FT	-	SP1_SCK/I2S1_CK, USART2_RX, TIM1_CH3N, TIM1_CH1, EVENTOUT	ADC_IN5
11		PA6	I/O	FT	-	SP1_MISO/I2S1_MCK, TIM3_CH1, TIM1_BKIN, TIM16_CH1	ADC_IN6
12		PA7	I/O	FT	-	SP1_MOSI/I2S1_SD, TIM3_CH2, TIM1_CH1N, TIM14_CH1, TIM17_CH1	ADC_IN7
13		PA8	I/O	FT	-	MC0, USART2_TX, TIM1_CH1, EVENTOUT, SP1_NSS/I2S1_WS, TIM1_CH2N, TIM1_CH3N, TIM3_CH3, TIM3_CH4, TIM14_CH1, USART1_RX, MC02	ADC_IN8
-		PA9	I/O	FT	(1)	MC0, USART1_TX, TIM1_CH2, TIM3_ETR, I2C1_SCL, EVENTOUT	-
-		PA10	I/O	FT	(1)	USART1_RX, TIM1_CH3, MC02, TIM17_BKIN, I2C1_SDA, EVENTOUT	-
14		PA11 [PA9]	I/O	FT	(1)	SP11_MISO/I2S1_MCK, USART1_CTS, TIM1_CH4, TIM1_BKIN2	ADC_IN11
15		PA12 [PA10]	I/O	FT	(1)	SP11_MOSI/I2S1_SD, USART1_RTS_DE, CK, TIM1_ETR, I2S_CKIN	ADC_IN12
16		PA13	I/O	FT	(2)	SWDIO, IR_OUT, TIM3_ETR, USART2_RX, EVENTOUT	ADC_IN13
17		PA14-BOOT0	I/O	FT	(2)	SWCLK, USART2_TX, EVENTOUT, SP1_NSS/I2S1_WS, USART2_RX, TIM1_CH1, MC02, USART1_RTS_DE, CK	ADC_IN14, BOOT0
18		PB6	I/O	FT	-	USART1_TX, TIM1_CH3, TIM16_CH1N, TIM3_CH3, USART1_RTS_DE, CK, USART1_CTS, I2C1_SCL, I2C1_SMB, SP11_MOSI/I2S1_SD, SP11_MISO/I2S1_MCK, SP1_SCK/I2S1_CK, TIM1_CH2, TIM3_CH1, TIM3_CH2, TIM16_BKIN, TIM17_BKIN	WKUP3
19		PB7	I/O	FT	-	USART1_RX, TIM1_CH4, TIM17_CH1N, TIM3_CH4, I2C1_SDA, EVENTOUT, USART2_CTS, TIM16_CH1, TIM3_CH1, I2C1_SCL	RTC_REFIN

