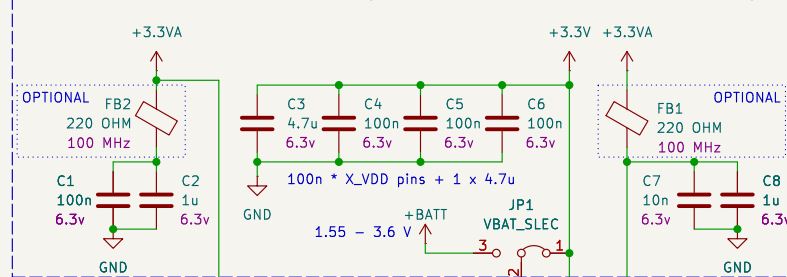


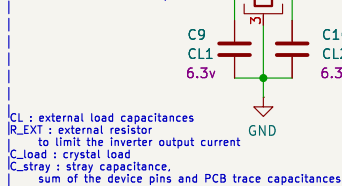
DECOUPLING CAPS

stm32g431cb-1 datasheet 5.1.6 Power supply scheme p.g. 68



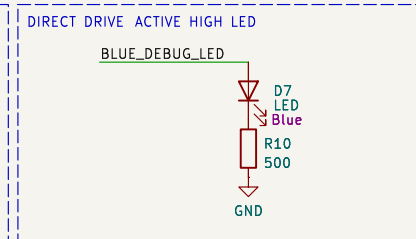
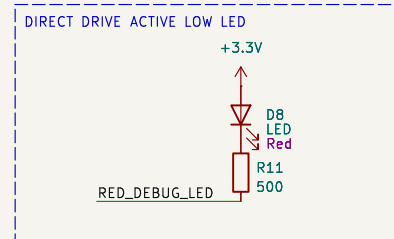
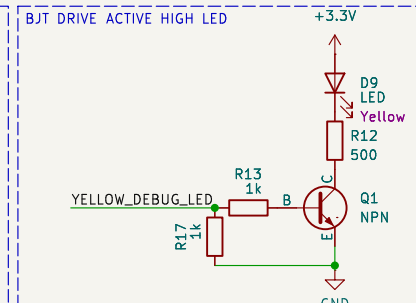
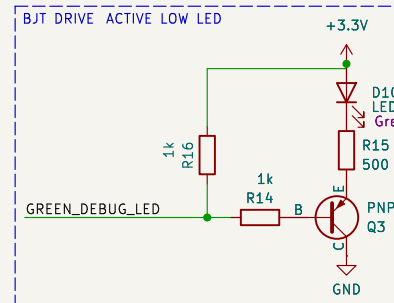
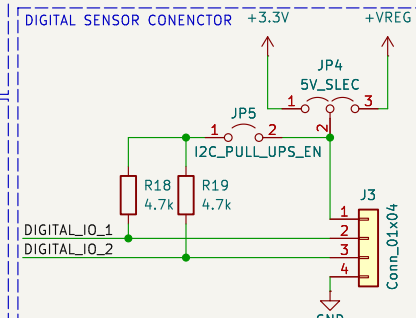
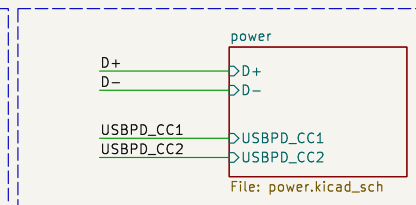
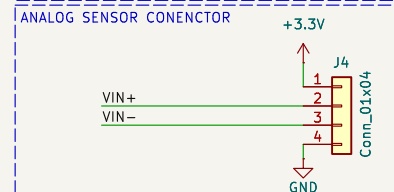
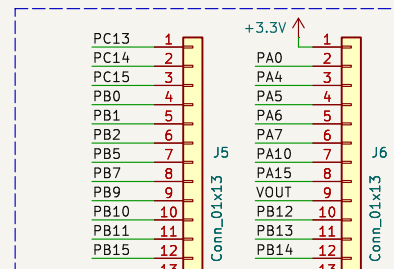
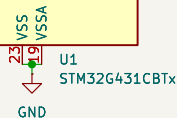
CRYSTAL OSCILLATOR

CL = 2 * (C_{load} - C_{stray})
C_{stray} = -5pf
APP NOTE : AN2867
Crystal_GND23
XMHz, C_{load}

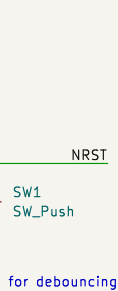


CL : external load capacitances
R_{EXT} : external resistor
to limit the inverter output current
C_{load} : crystal load
C_{stray} : stray capacitance,
sum of the device pins and PCB trace capacitances

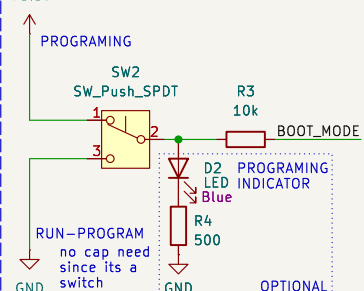
PC13	2	PC13	2	PA0	8	PA0	8
PC14	3	PC14	3	PA1	9	VIN+	9
PC15	4	PC15	4	PA2	10	VOUT	10
				PA3	11	VIN-	11
				PA4	12	PA4	12
				PA5	13	PA5	13
				PA6	14	PA6	14
				PA7	15	PA7	15
				PA8	30	DIGITAL_IO_1	30
				PA9	31	DIGITAL_IO_2	31
				PA10	32	PA10	32
				PA11	33	D-	33
				PA12	34	D+	34
				PA13	37	SW_CLK	37
				PA14	38	SW_DIO	38
				PA15	39	PA15	39
PB0	16	PB0	16				
PB1	17	PB1	17				
PB2	18	PB2	18				
SW0	40	PB3	19				
USBPD_CC1	41	PB4	20				
PB5	42	PB5	21				
USBPD_CC2	43	PB6	22				
PB7	44	PB7	23				
BOOT_MODE	45	PB8	24				
PB9	46	PB9	25				
PB10	22	PB10	26				
PB11	25	PB11	27				
PB12	26	PB12	28				
PB13	27	PB13	29				
PB14	28	PB14	30				
PB15	29	PB15	31				



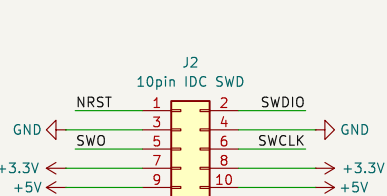
RESET SWITCH



BOOT MODE SWITCH



SWD PROGRAMMING HEADER



designers:
sirililpanda

CAN source

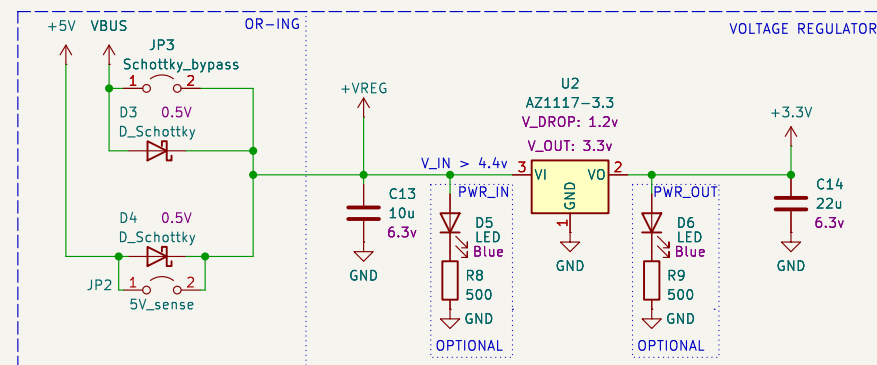
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Title:

Size: A4
KiCad E.D.A. 8.0.9

Date: 2025-03-19

Rev: A
Id: 1/2



or-ing allows both the swd header and usb to be used at the same time, since neither will back feed into eachother. although a jumper has been added since some swd programmers use this voltage rail as a sense pin

Rev:
Id: 2/2