Drive for better vision

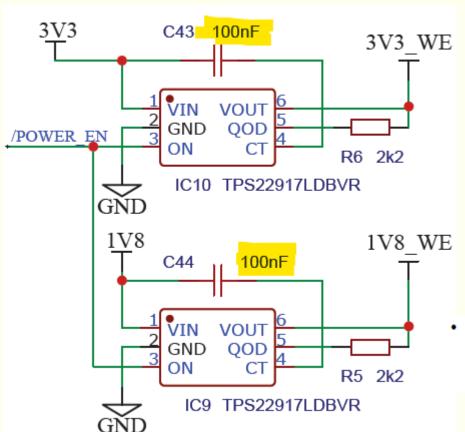


Wildlife.ai WW500 Circuit Modification

Feb 25, 2025

Load Switch C_T

- 1. DPD mode issue (1V8_WE/3V3_WE)
 - a. 1V8_WE/3V3_WE switch capacitor: C43, C44 -> 1nF



- Adjustable turn ON limits inrush current (t_{ON}):
- 5-V t_{ON} = 100 µs at 72 mV/µs (C_T = open)
- 5-V t_{ON} = 4000 µs at 2.3 mV/µs (C_T = 1000 pF)

CIS I2C Pull High

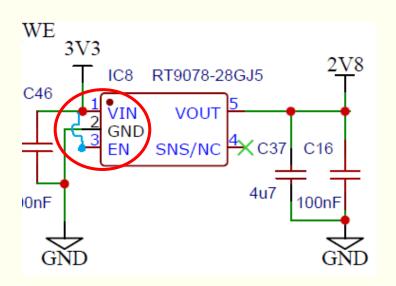
- 2. HM0360 I2C issue
 - a. HM0360 SEN_SCL/SEN_SDA need to add pull-up resistors

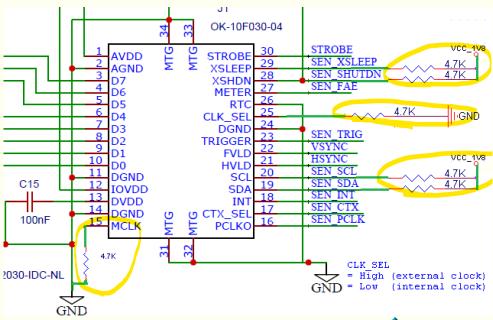
TRIGGER	23	VSYNC	
FVLD HVLD SCL SDA INT CTX_SEL	21	HSYNC	4.7K
	20	SEN_SCL	
	19	SEN_SDA	
	18	SEN_INT SEN_CTX	
	16	SEN PCLK	



HM0360 Always On Setting

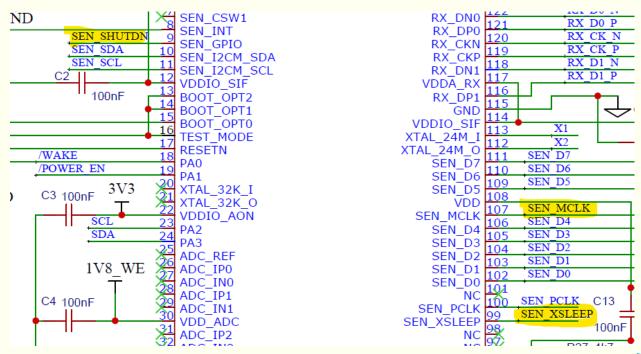
- 3. HM0360 should be always on
 - a. HM0360 2V8 always on
 - b. HM0360 XSLEEP/XSHDN should be pull-high (always on)
 - c. WE2 SEN_XSLEEP/SEN_GPIO should be NC
- 4. HM0360 should be set the oscillator mode
 - a. HM0360 CLK_SEL/MCLK connect to DGND (OSC mode)
 - b. WE2 SEN_MCLK should be NC





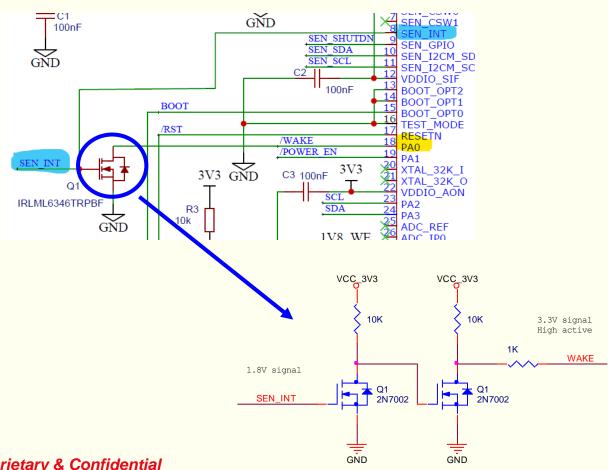
HM0360 Always On Setting @WE2

- 3. HM0360 should be always on
 - a. HM0360 2V8 always on
 - b. HM0360 XSLEEP/XSHDN should be pull-high (always on)
 - c. WE2 SEN_XSLEEP/SEN_GPIO should be NC
- 4. HM0360 should be set the oscillator mode
 - a. HM0360 CLK_SEL/MCLK connect to DGND (OSC mode)
 - b. WE2 SEN_MCLK should be NC



SEN_INT Signal State

- 5. HM0360 interrupt to WE2 issue
 - a. Add level shift circuit (1.8V to 3.3V) between HM0360 INT(1.8V) and WE2 PA0(3.3V)







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