

Takes the VCC line, and increases the voltage to +32.5V.
This HV line is used to provide the reverse bias to the SiPM. The SiPM sees 30V difference, as virtual ground is 2.5V



This creates the 5V supply that we use for the reference for the TIA



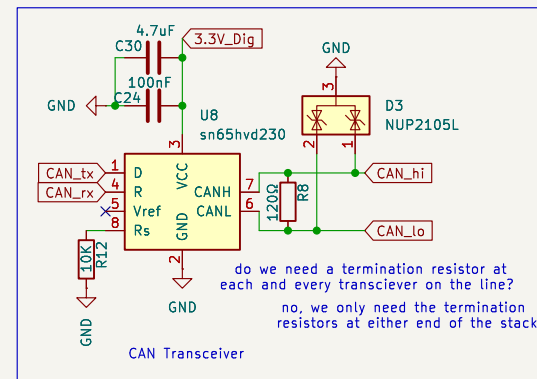
Amplifies, detects and registers the current pulse from the SiPM



The diagram shows a voltage divider circuit for the MCP4921-E/5N. A 5V supply is connected to a 100nF capacitor (C19) and a 10uF capacitor (C20) in series. The junction between the capacitors is connected to the VDD pin (pin 1) of the MCP4921-E/5N. The other end of the 10uF capacitor (C20) is connected to GND. The MCP4921-E/5N is shown with its pins: VDD (1), *CS (2), SCK (3), SDI (4), VOUTA (8), AVSS (7), VREFA (6), and *LDAC (5). The VOUTA pin is connected to DAC_out, and the AVSS pin is connected to GND. The VREFA pin is connected to 5V, and the *LDAC pin is connected to GND. The text "check these again what to vrefa?" is written next to the VREFA pin.

Pin	Signal	Connection
1	VDD	5V
2	*CS	GND
3	SCK	GND
4	SDI	GND
5	*LDAC	GND
6	VREFA	5V
7	AVSS	GND
8	VOUTA	DAC_out

STM32 mcu, nand flash, can transciever, together operate the sensor, catch the pulses and log the data



read it again

