

MuPix-HV-N -120V

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Checked by: Hartmann Ueli

Project: Mu3e

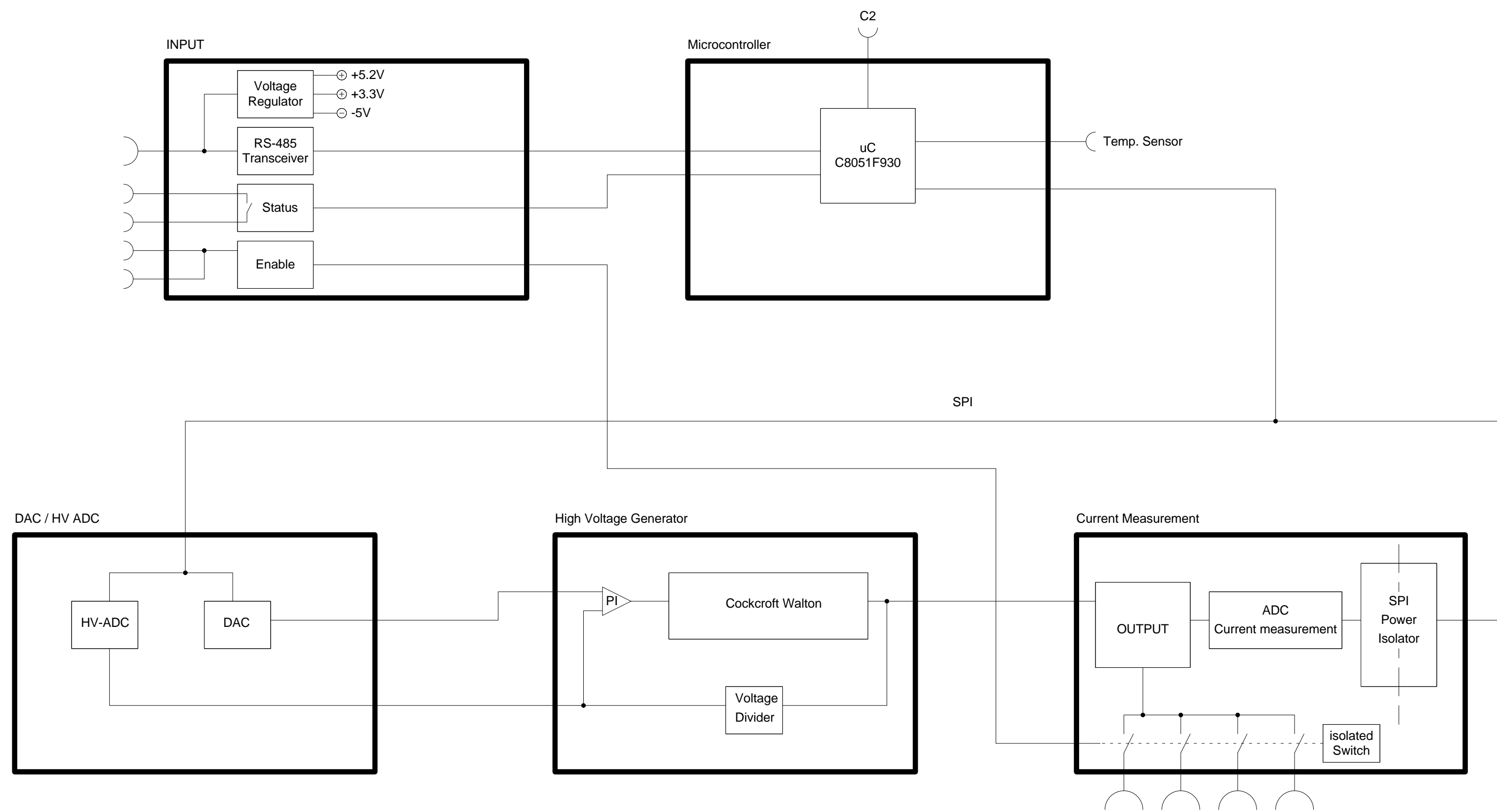
PCB No.: 78 / 173500D

Date: 16.04.2021

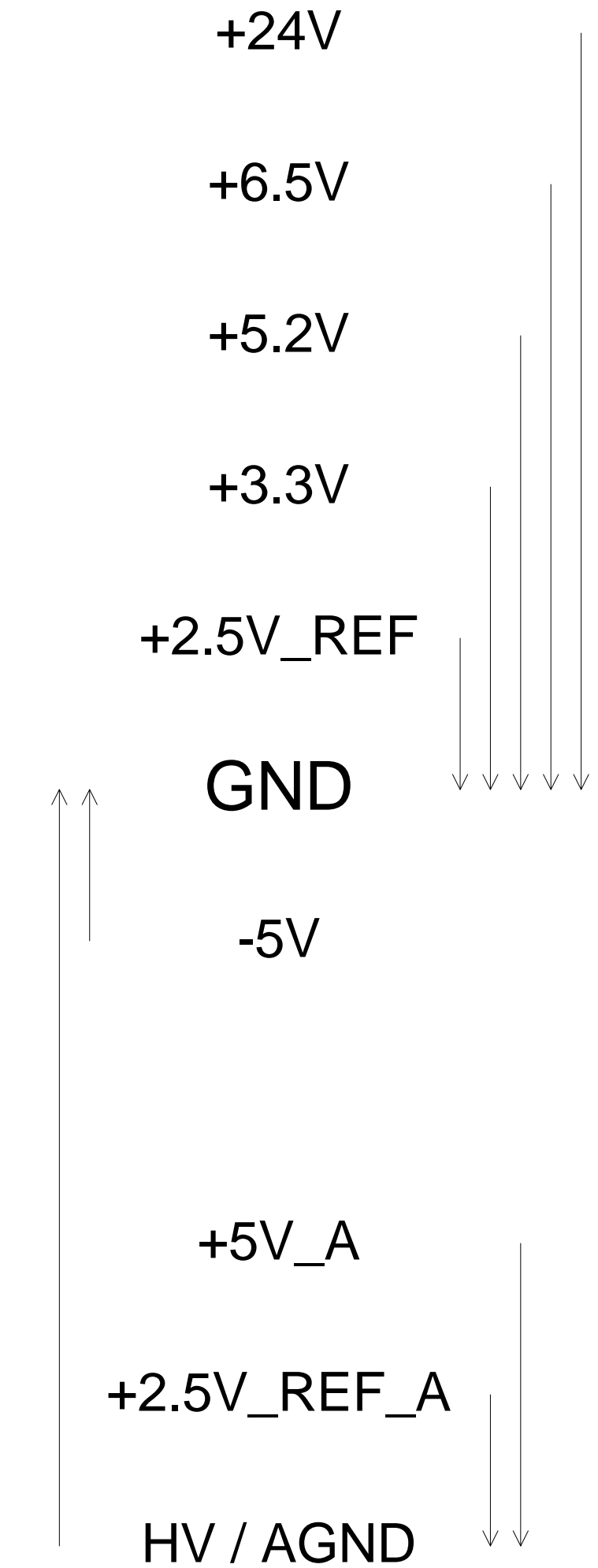
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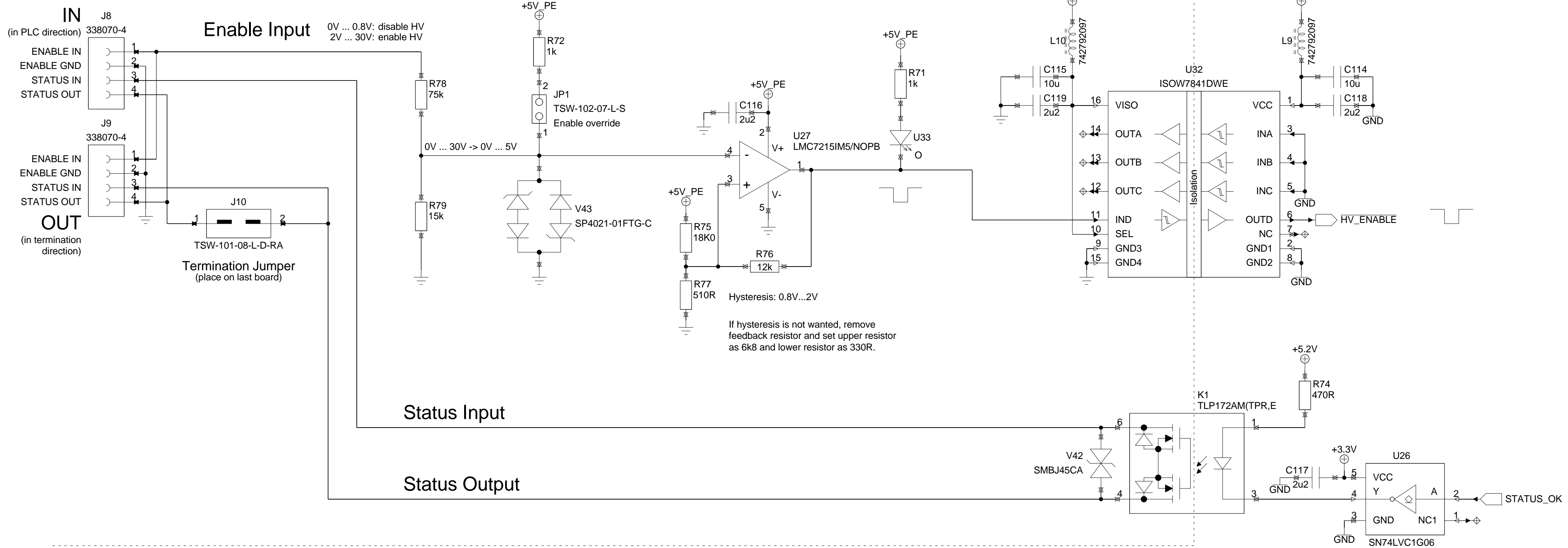
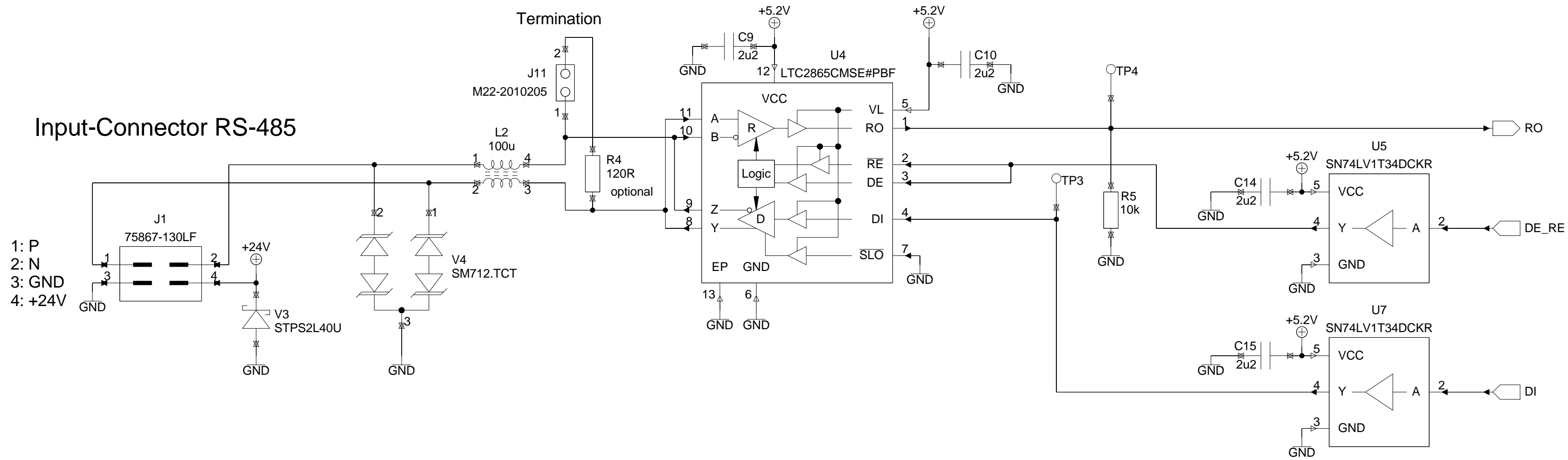
Block diagram



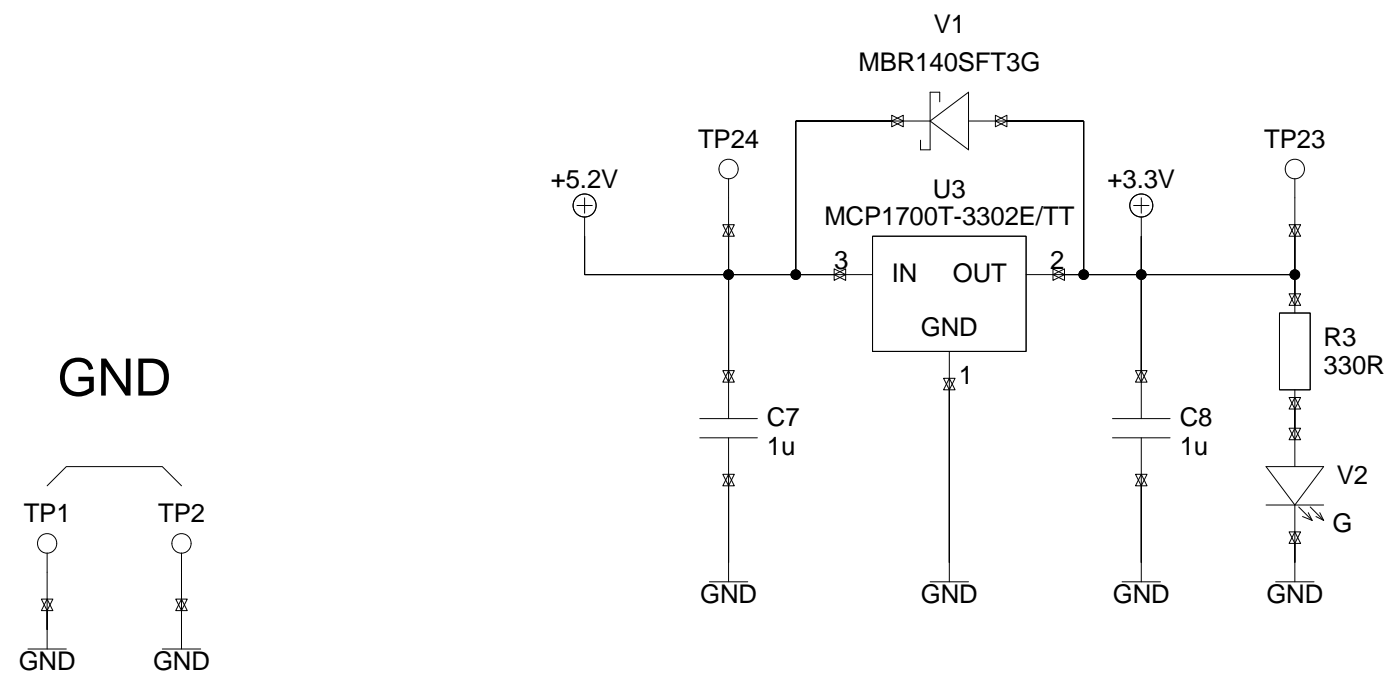
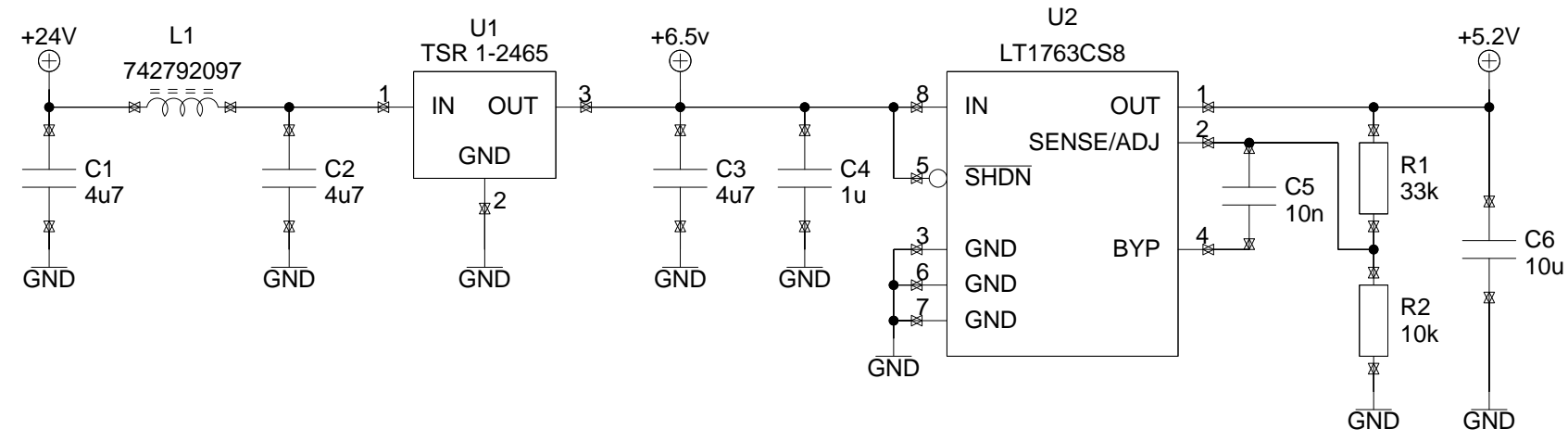
Voltage relations



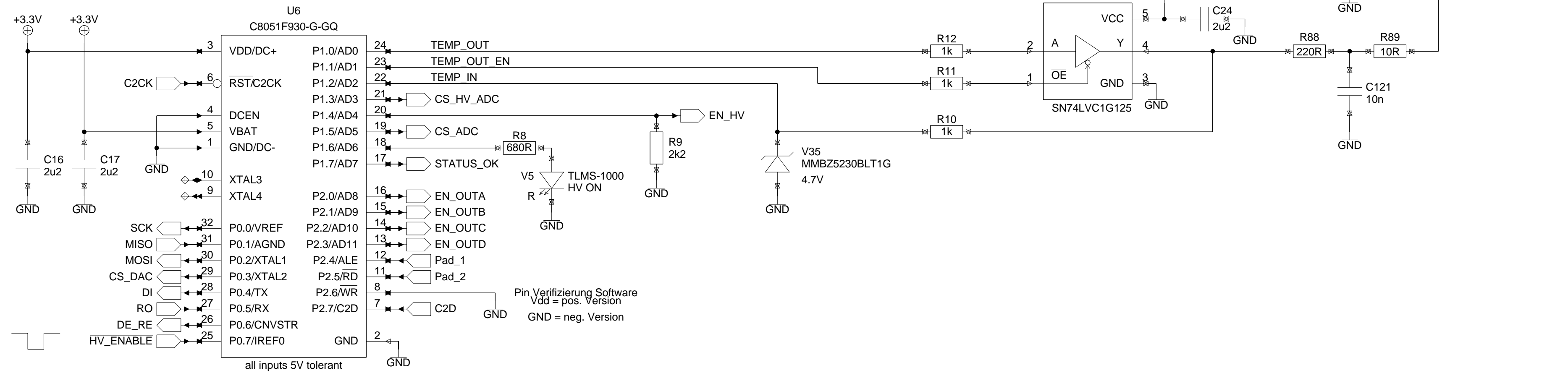
RS-485 Transceiver



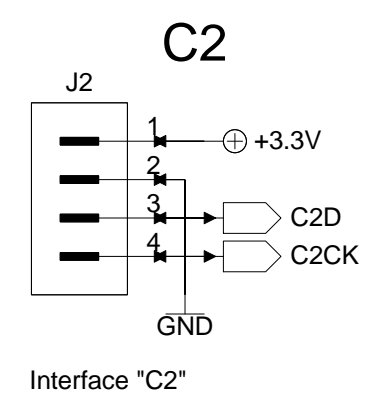
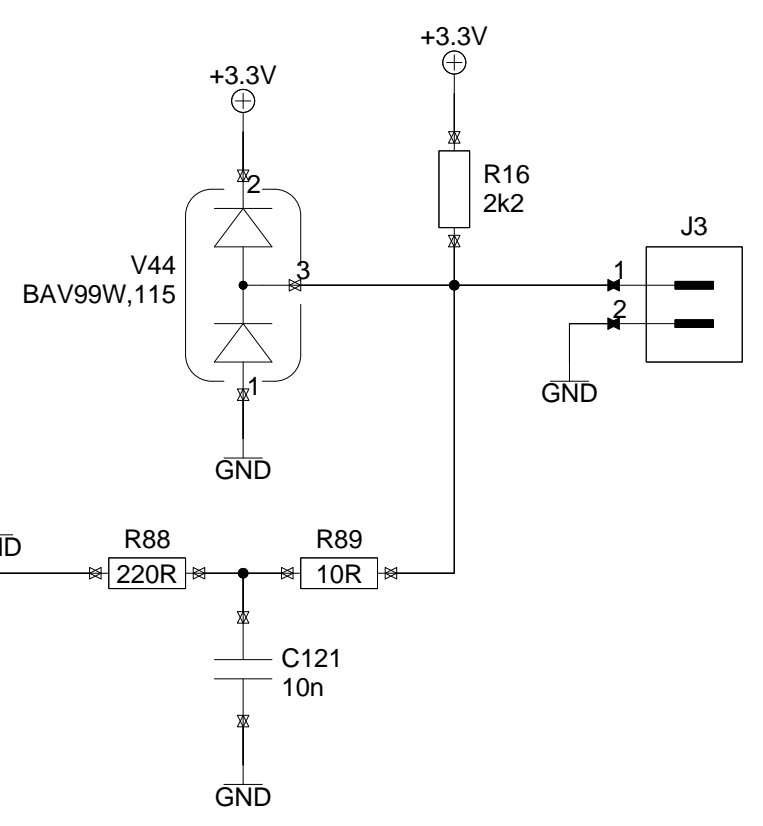
Voltage Regulators



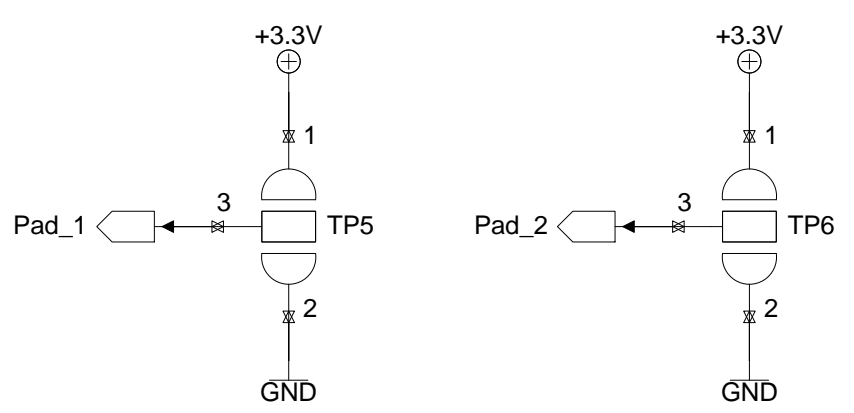
Microcontroller



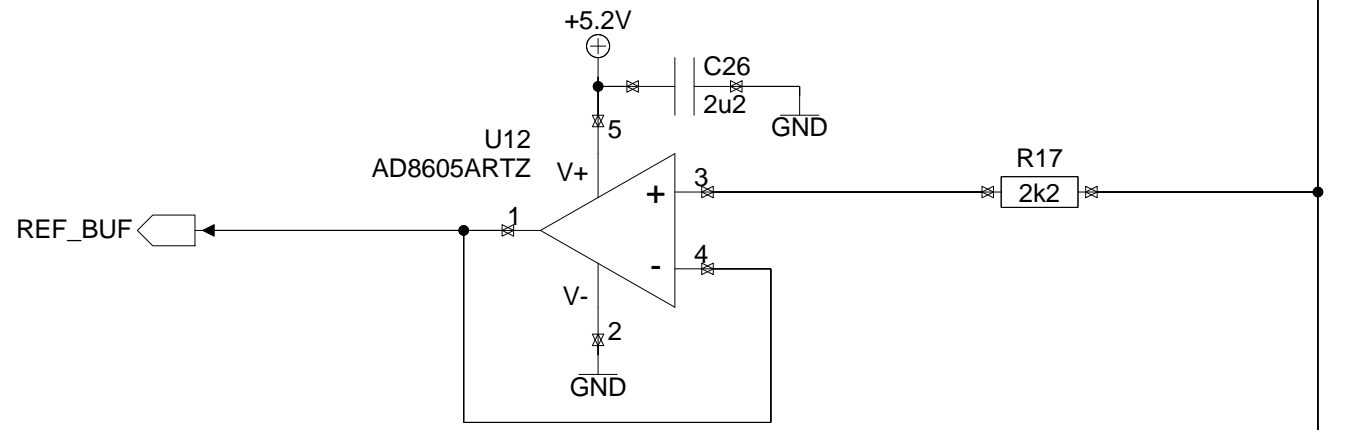
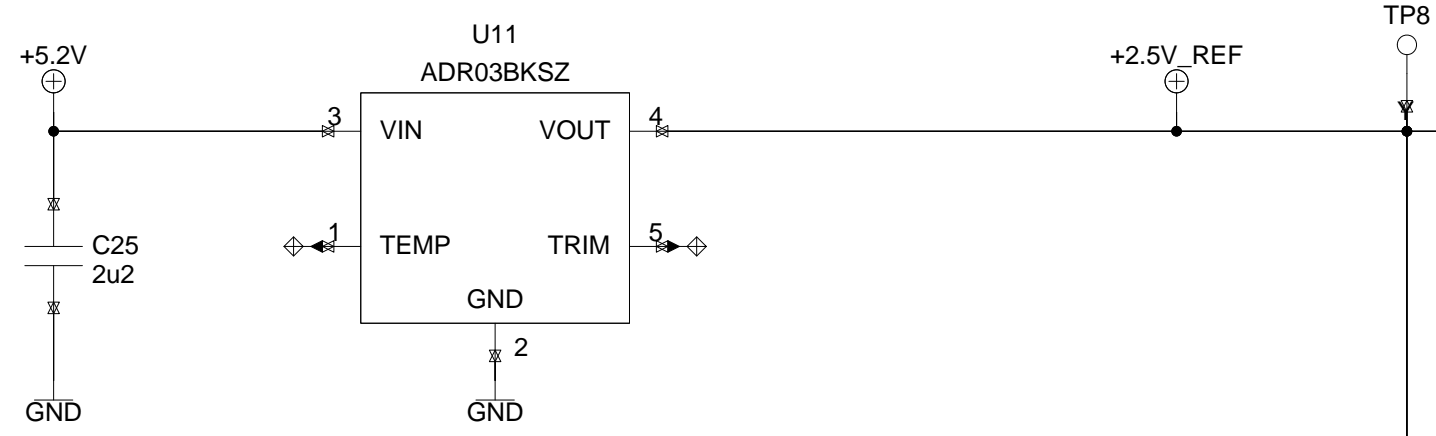
Temperature Sensor



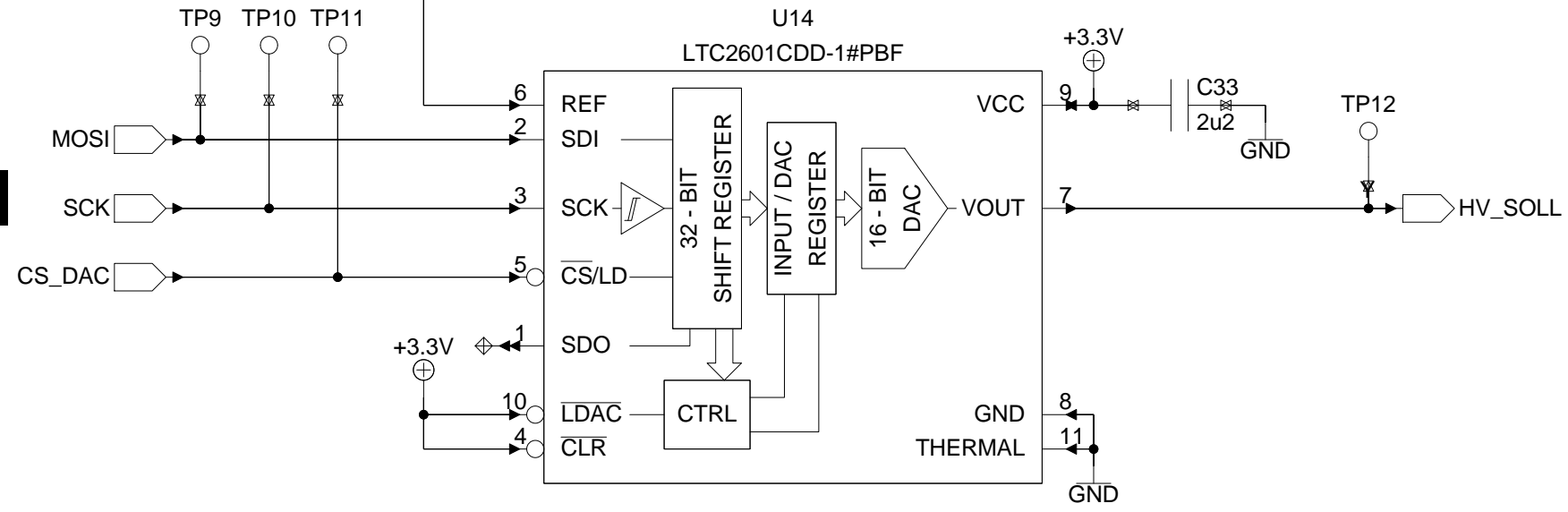
Soldering Pads uC



2.5V Ref.

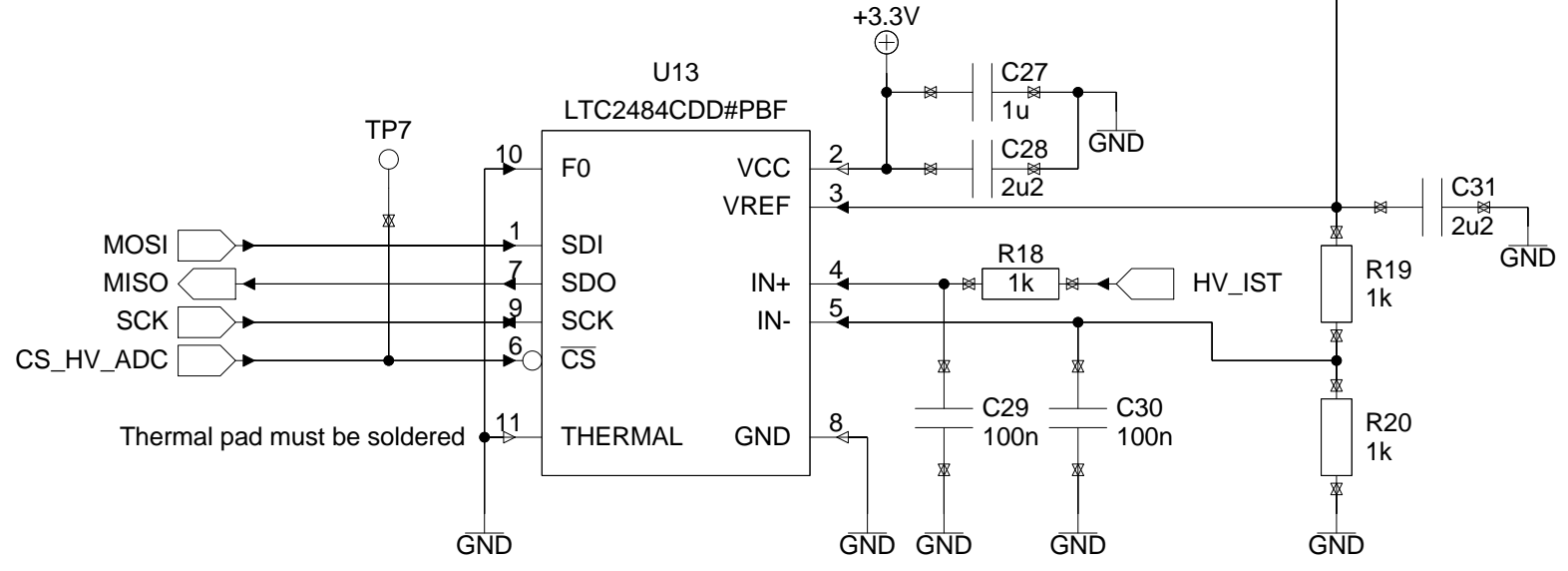


SPI



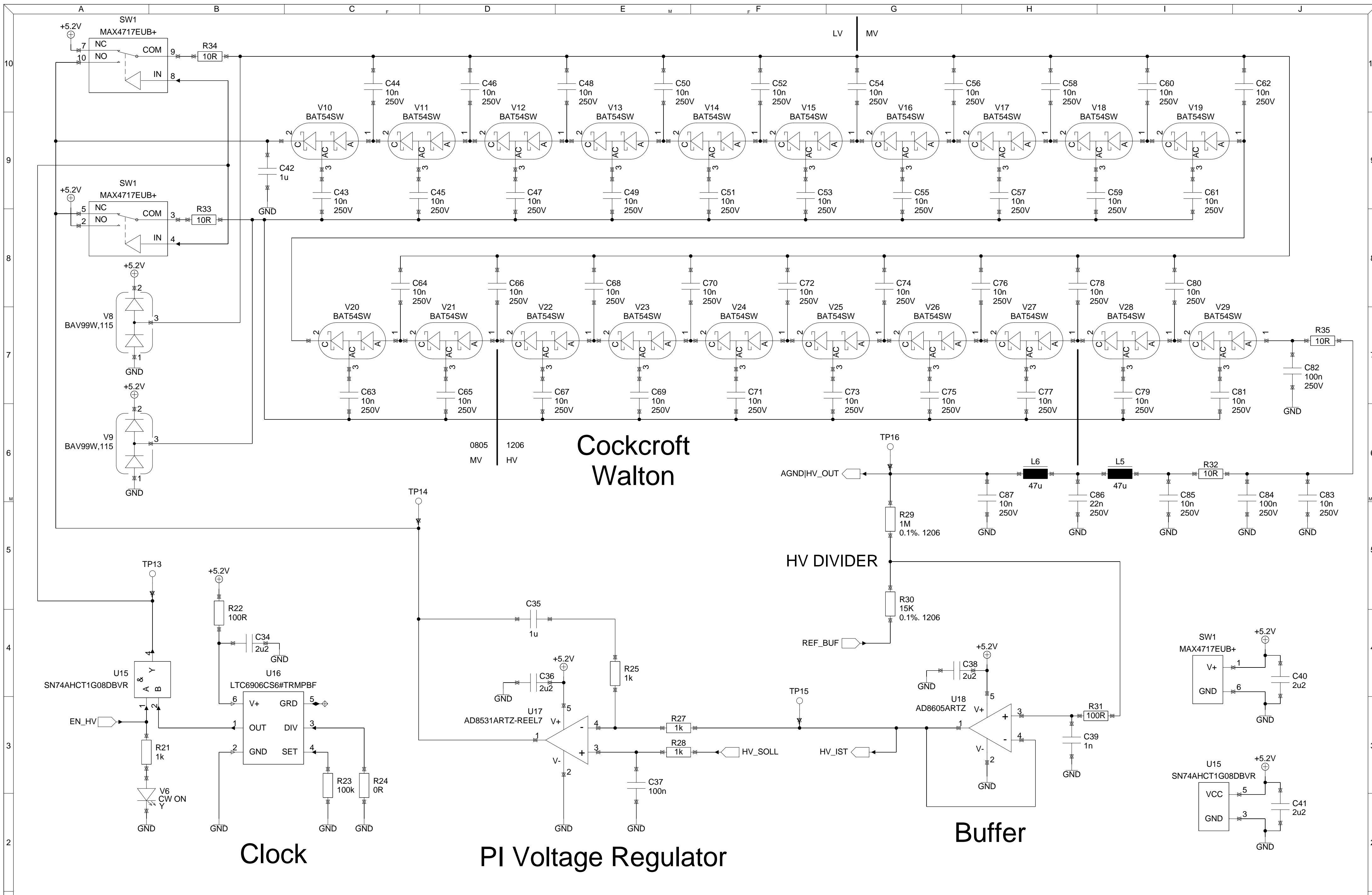
16-Bit DAC

SPI



HV ADC

Voltage Measurement



Cockcroft Walton

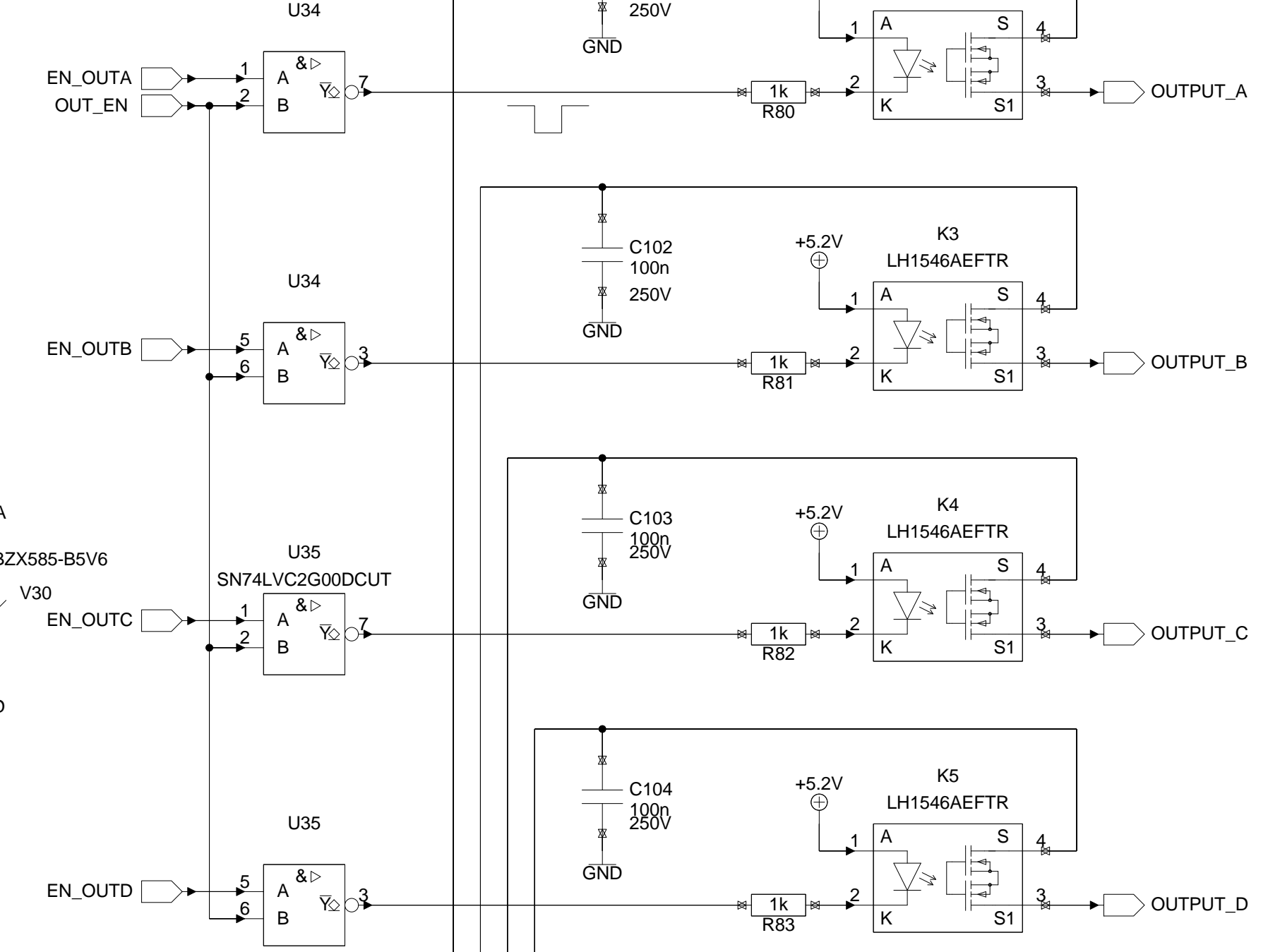
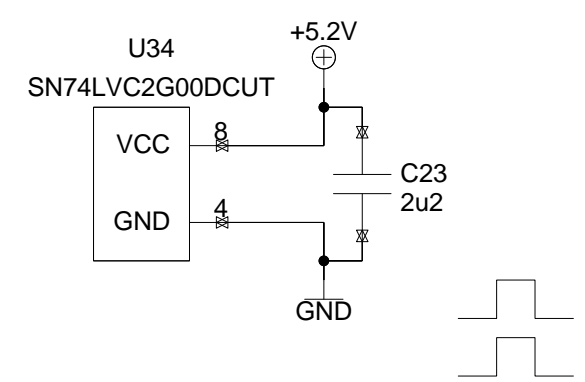
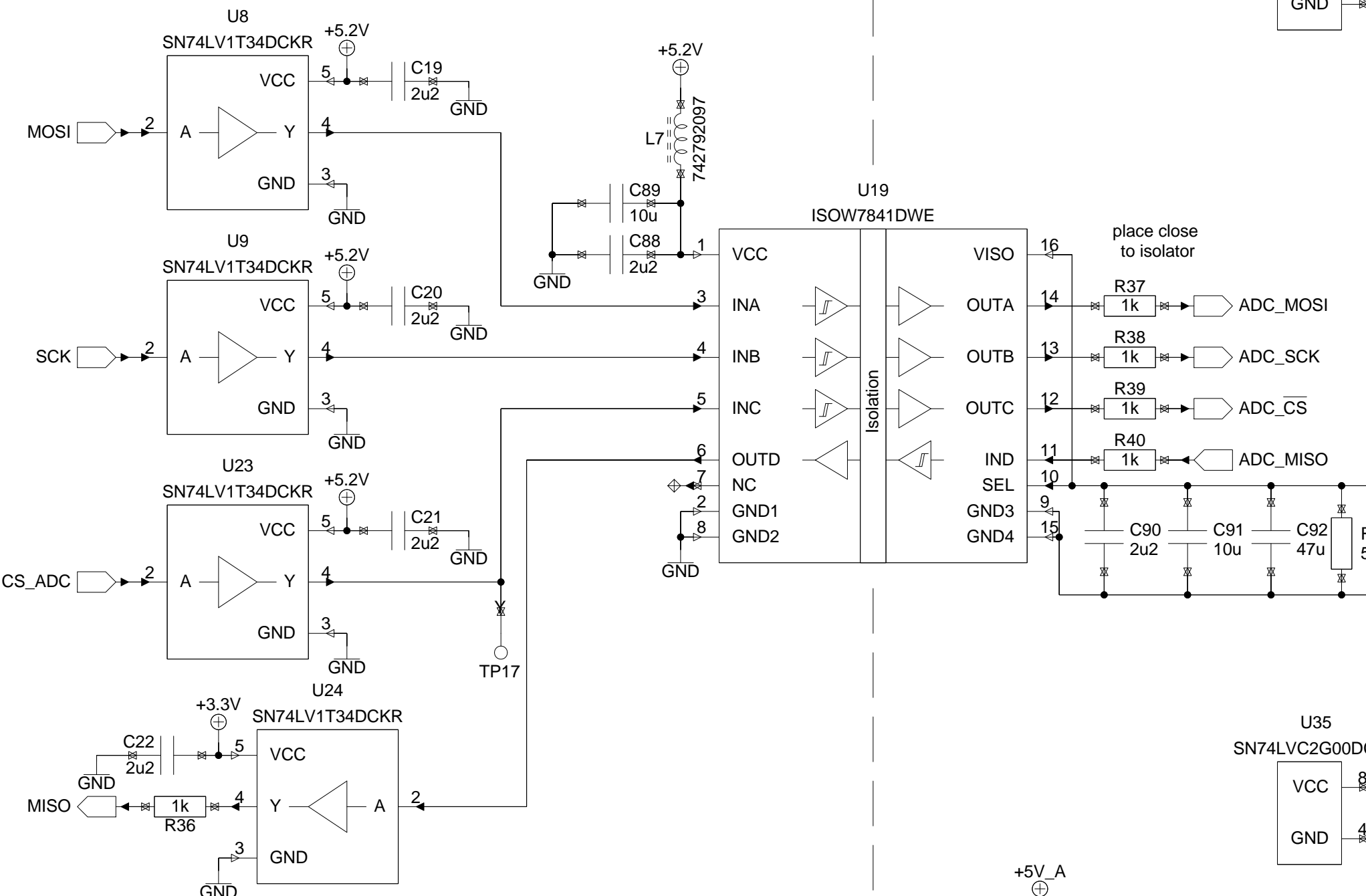
Clock

PI Voltage Regulator

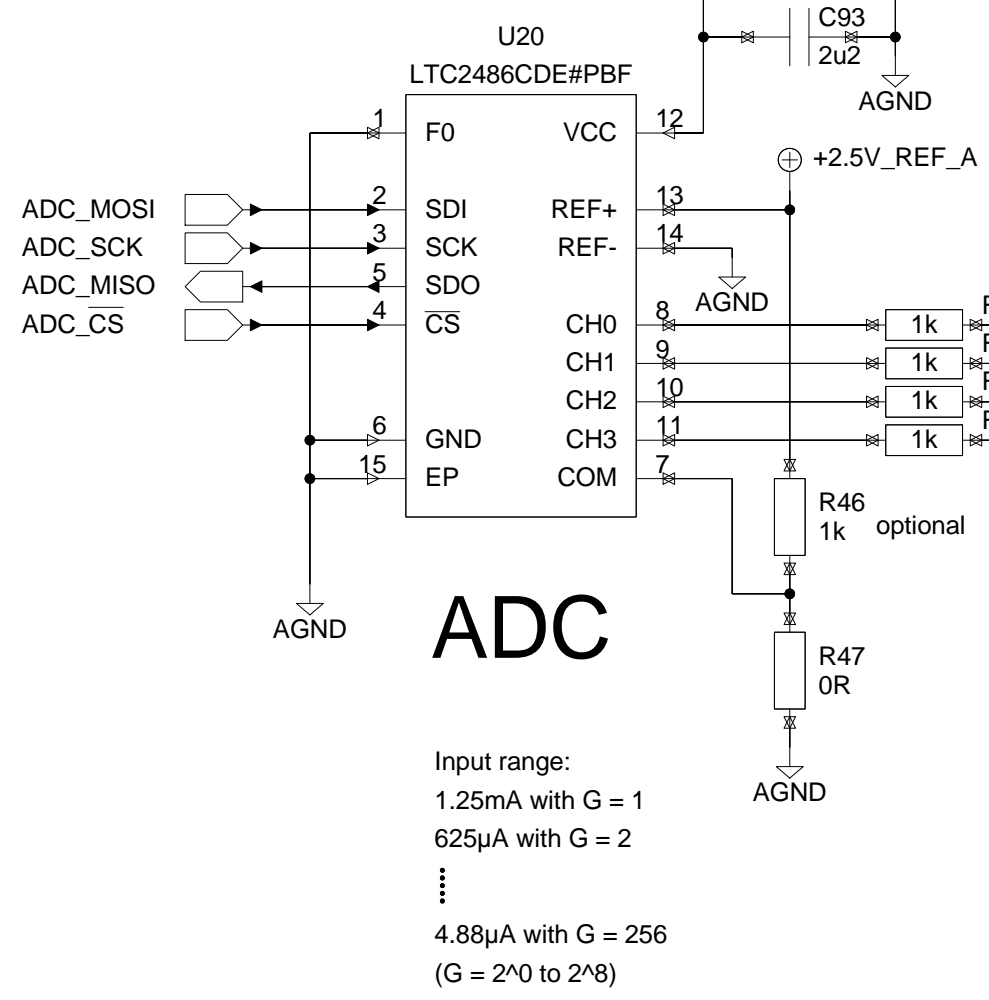
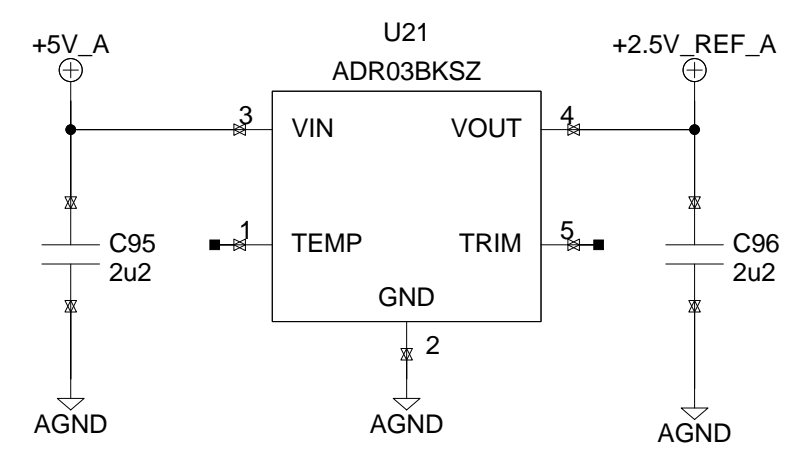
Buffer

HV DIVIDER

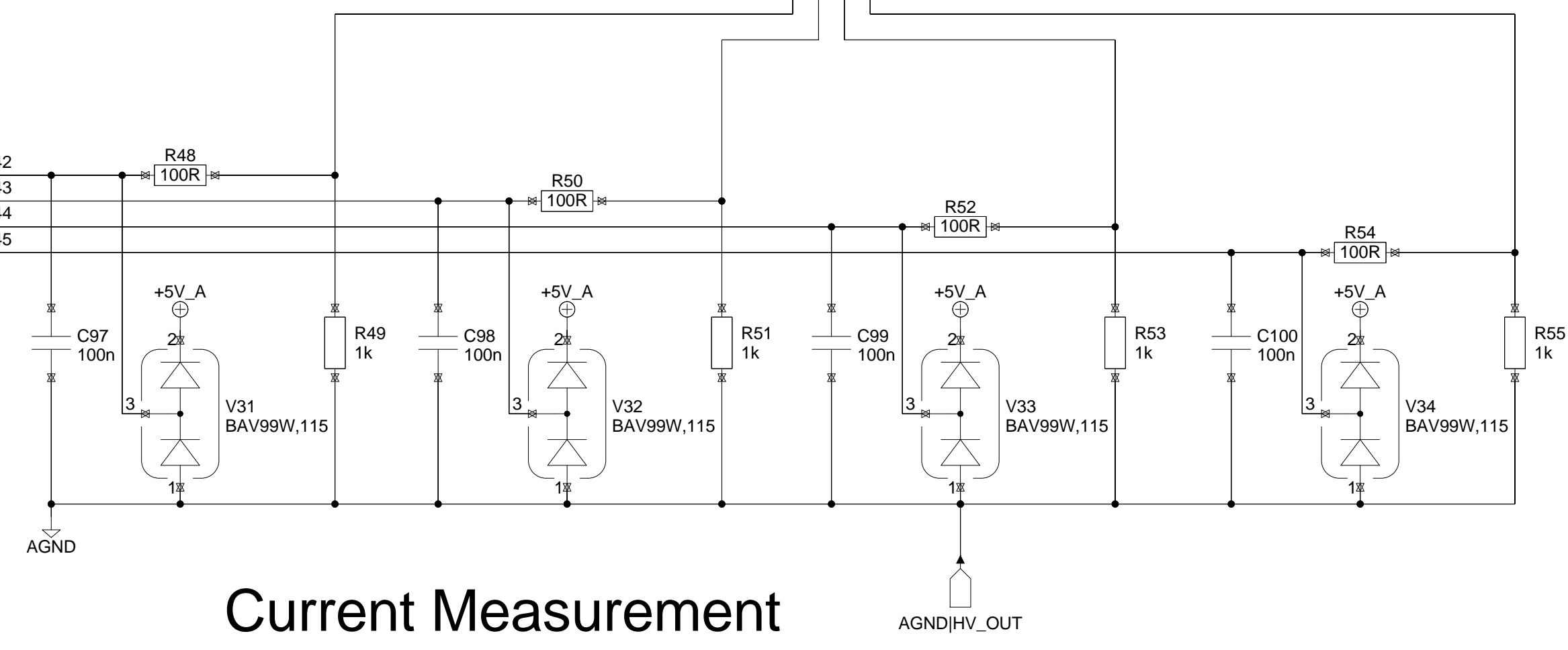
SPI-Power Isolator



2.5V Ref.



Current Measurement



Outputs with discharge switch

