

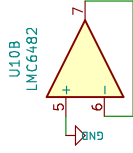
"High" side:
Hazardous voltage
Negative voltage up to -6 kV

"Low" side:
ground / touch / interface potential

Sheet: /	
File: uScope.sch	
Title:	
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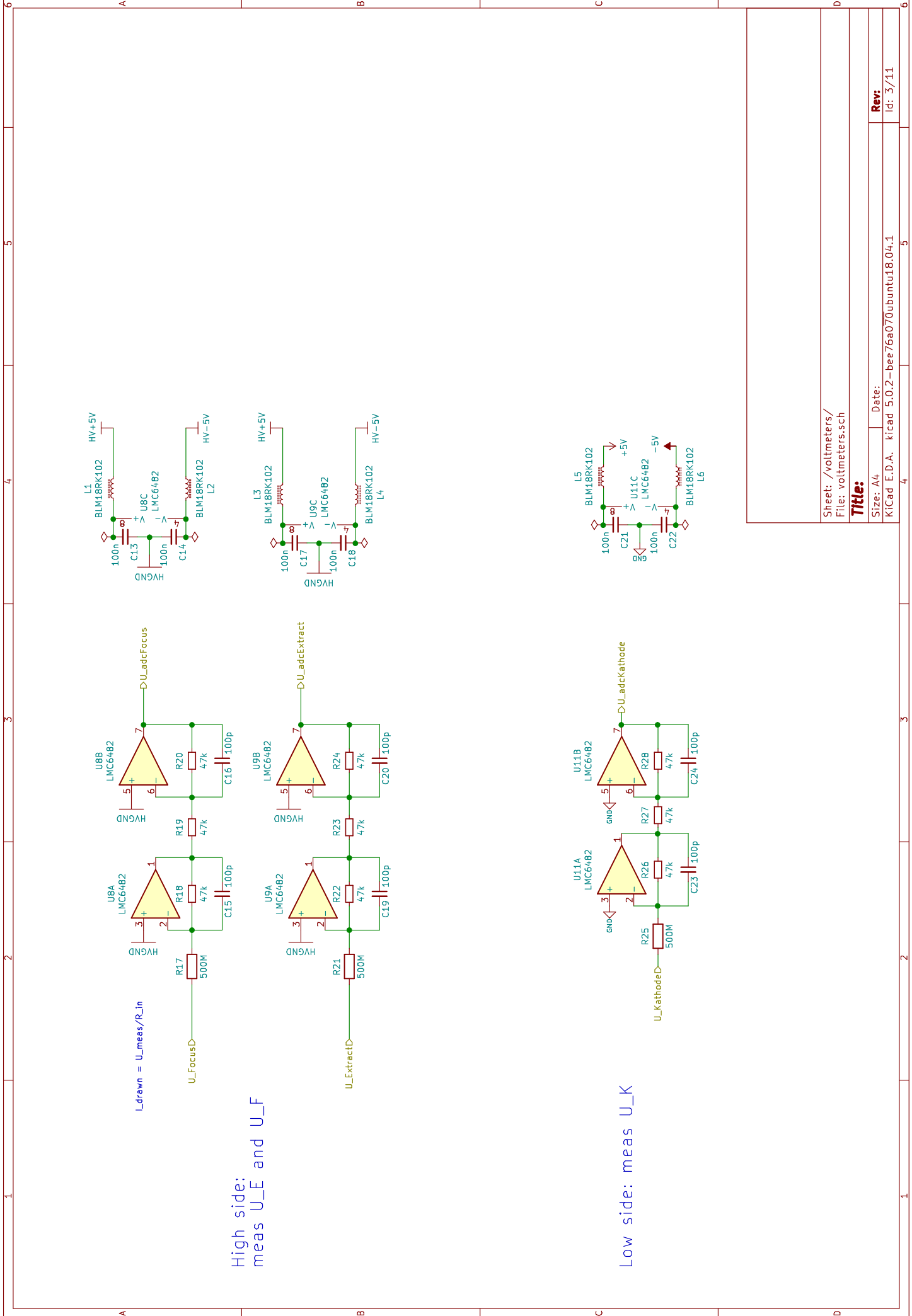
Sheet: rippleMeas
Separate circuit.
Not part of the project,
but useful at testing.
File: rippleMeas.sch

NOTE:
* ADS131M06 pin-to-pin compatible with: -M08

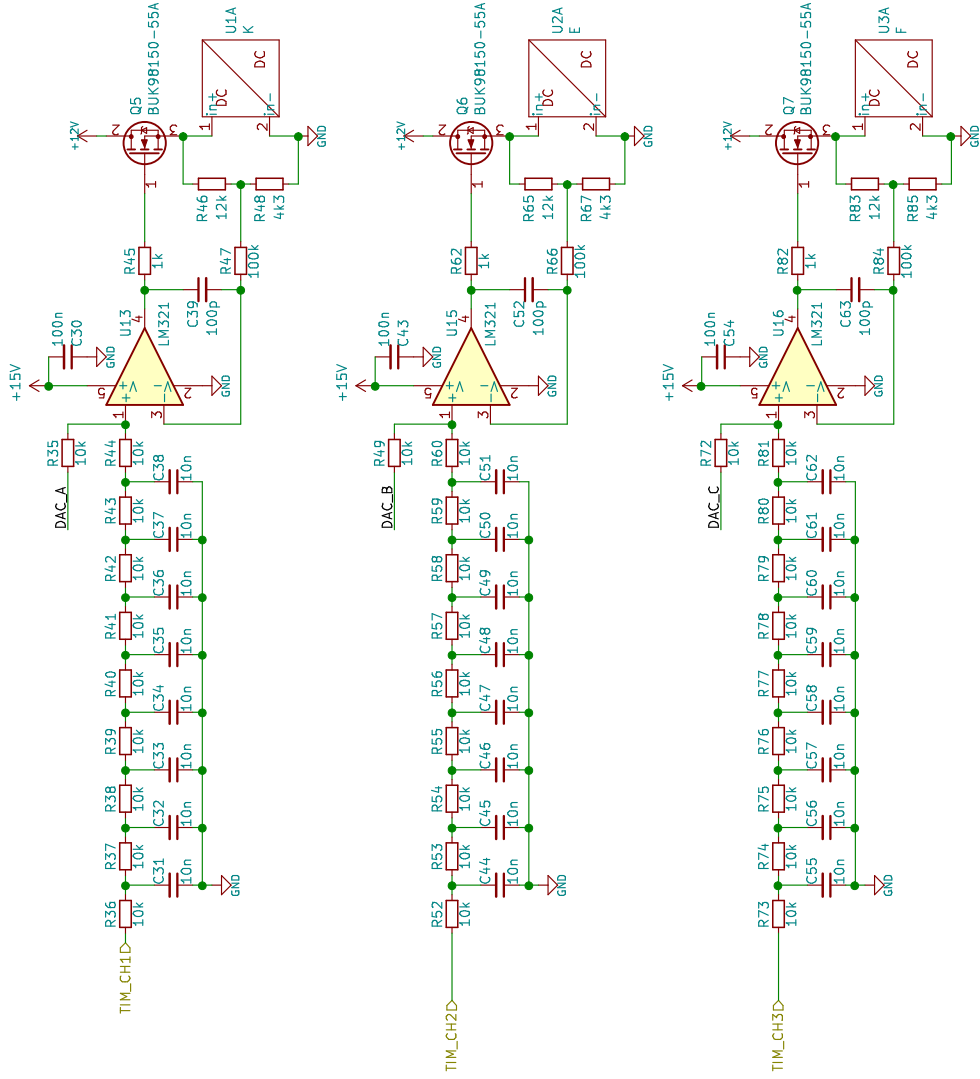
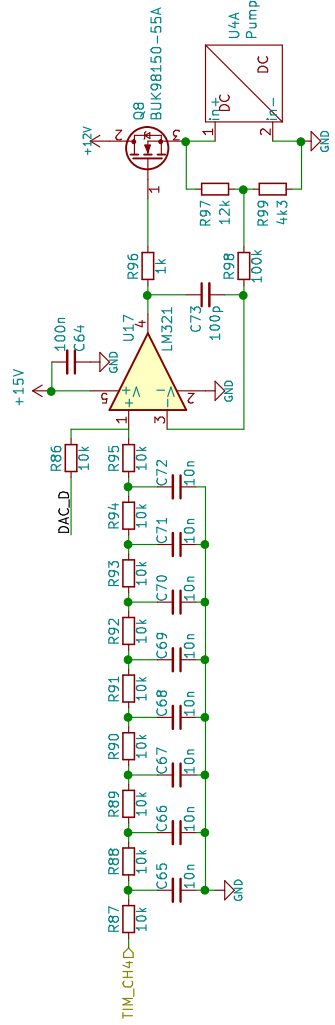
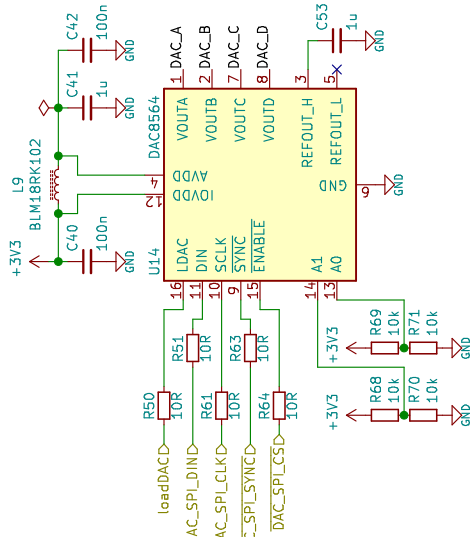


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LM321 (ONsemi):
 3 - 32 V supply
 bias typ. -10 nA max. -500 nA
 Z_{out} 1200 Ω
 Output current min. 10 mA
 GBWP 750 kHz
 SR 0.3 V/μs
 I_q typ. 0.25 mA max 0.5 mA
 stable with 1.5 nF load



Sheet: /drivers/
 File: drivers.sch

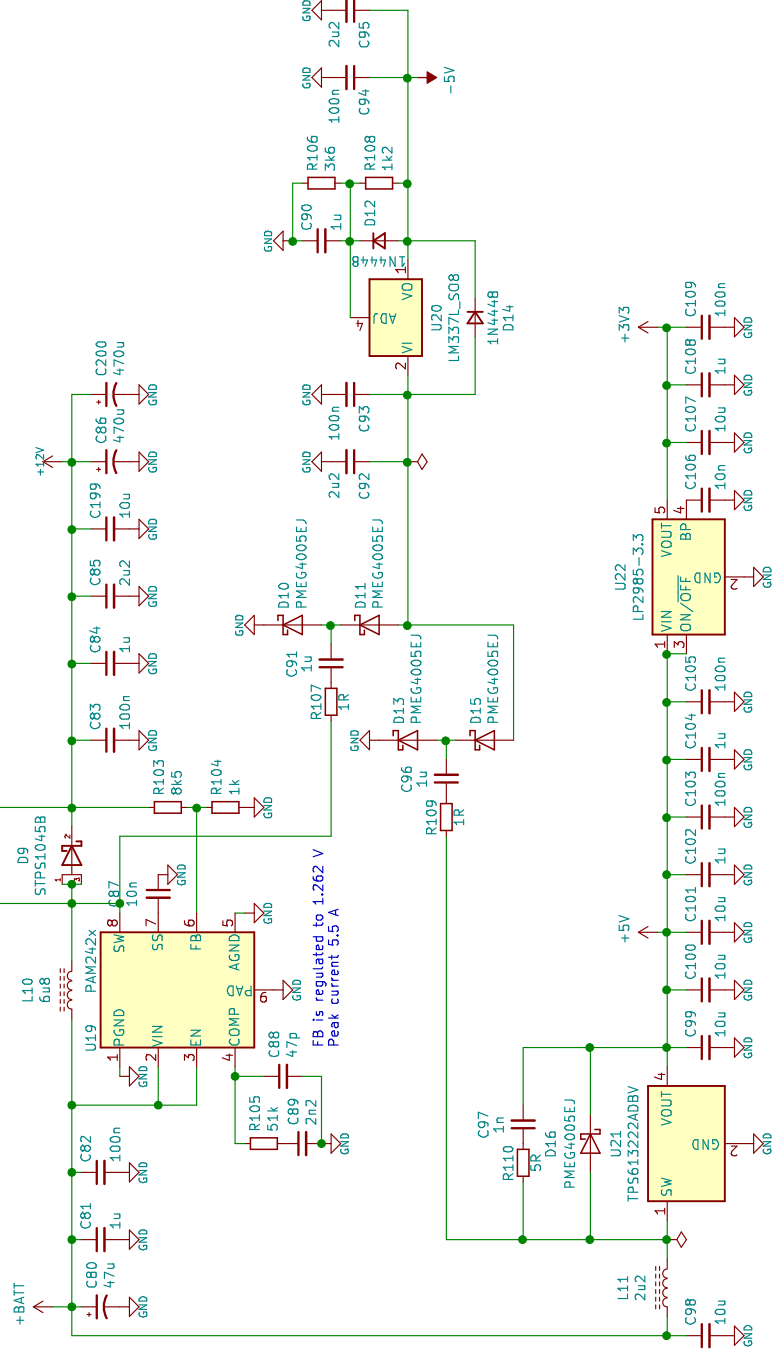
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PMEG4005 - Ir = 8 uA, surge 10 A
 Cd = 43 pF - that is, @12V 500 kHz -> W = 6.2nJ, P = 3 mW
 PMEG4005EJ - 5 Aavg
 5 V line current: ca. 100-150 mA
 LM317/LM337 was used instead fixed LDO's beacause of lower Iq (bias) current.



Recommended 3x GRM188R60J106MEB4D
 0603 10 uF 6.3V X5R 20% MLCC
 Snubber: C must be >3x diode capacitance

Sheet: /supply/
 File: supply.sch

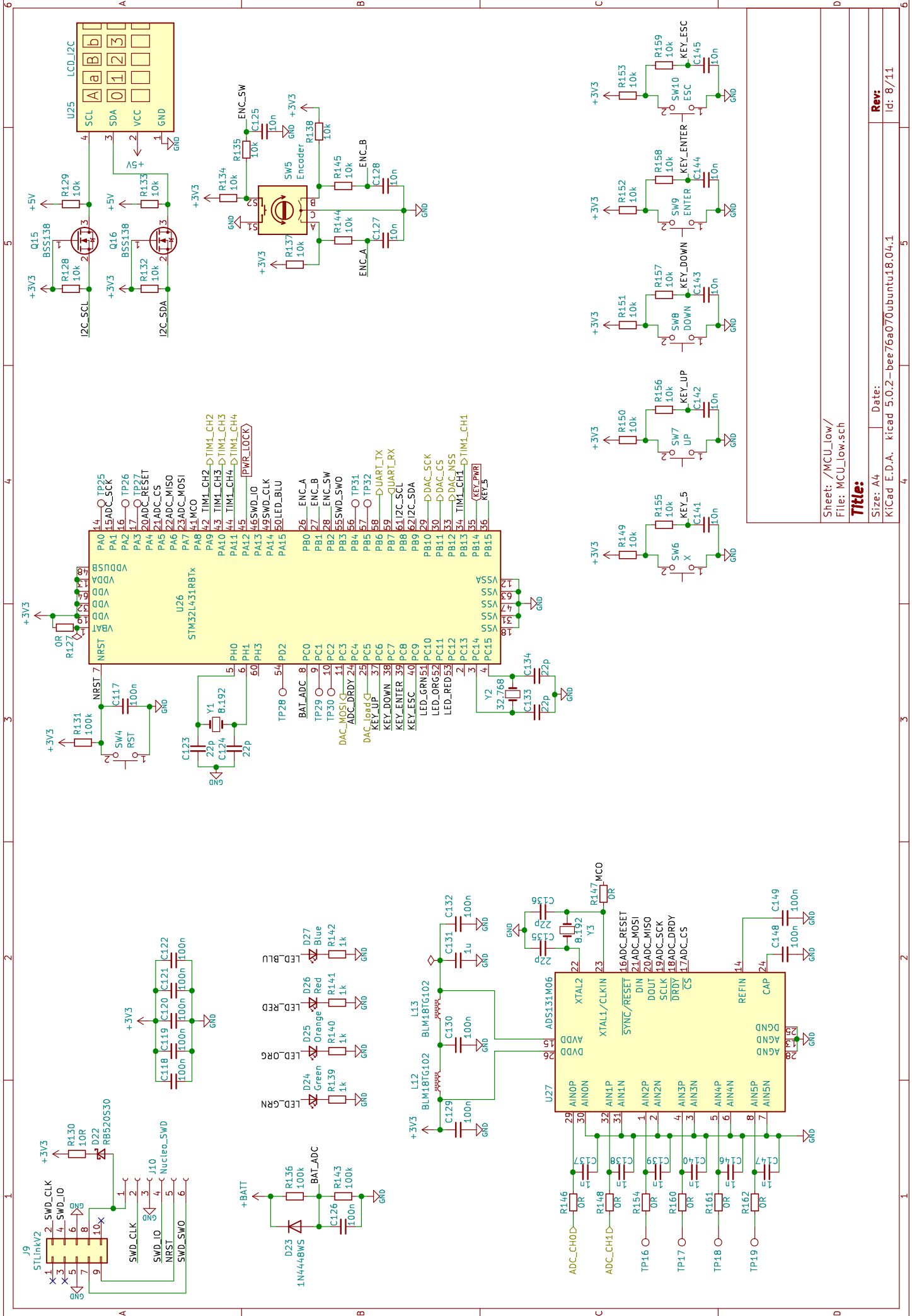
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Sheet: /MCU_low/
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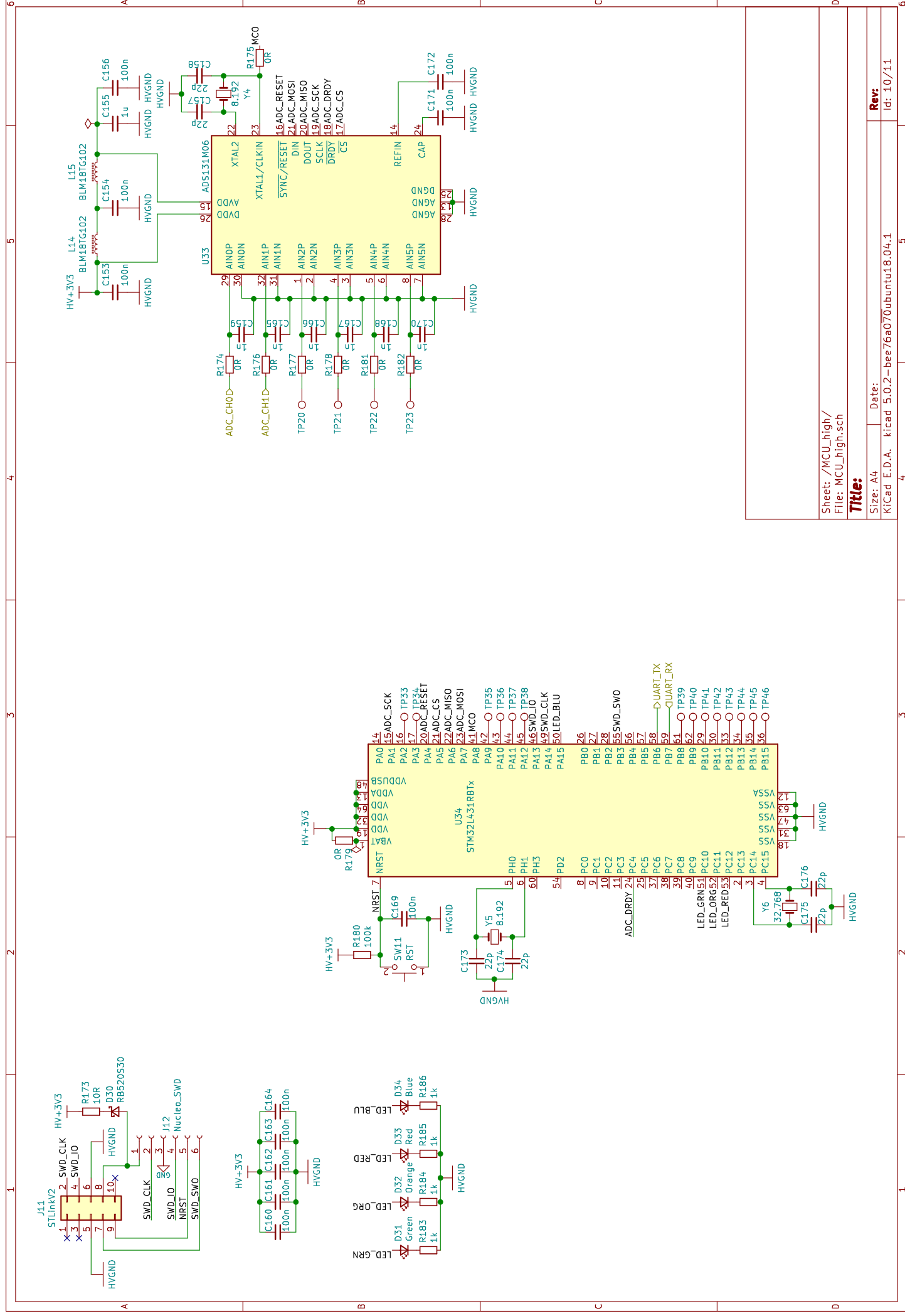
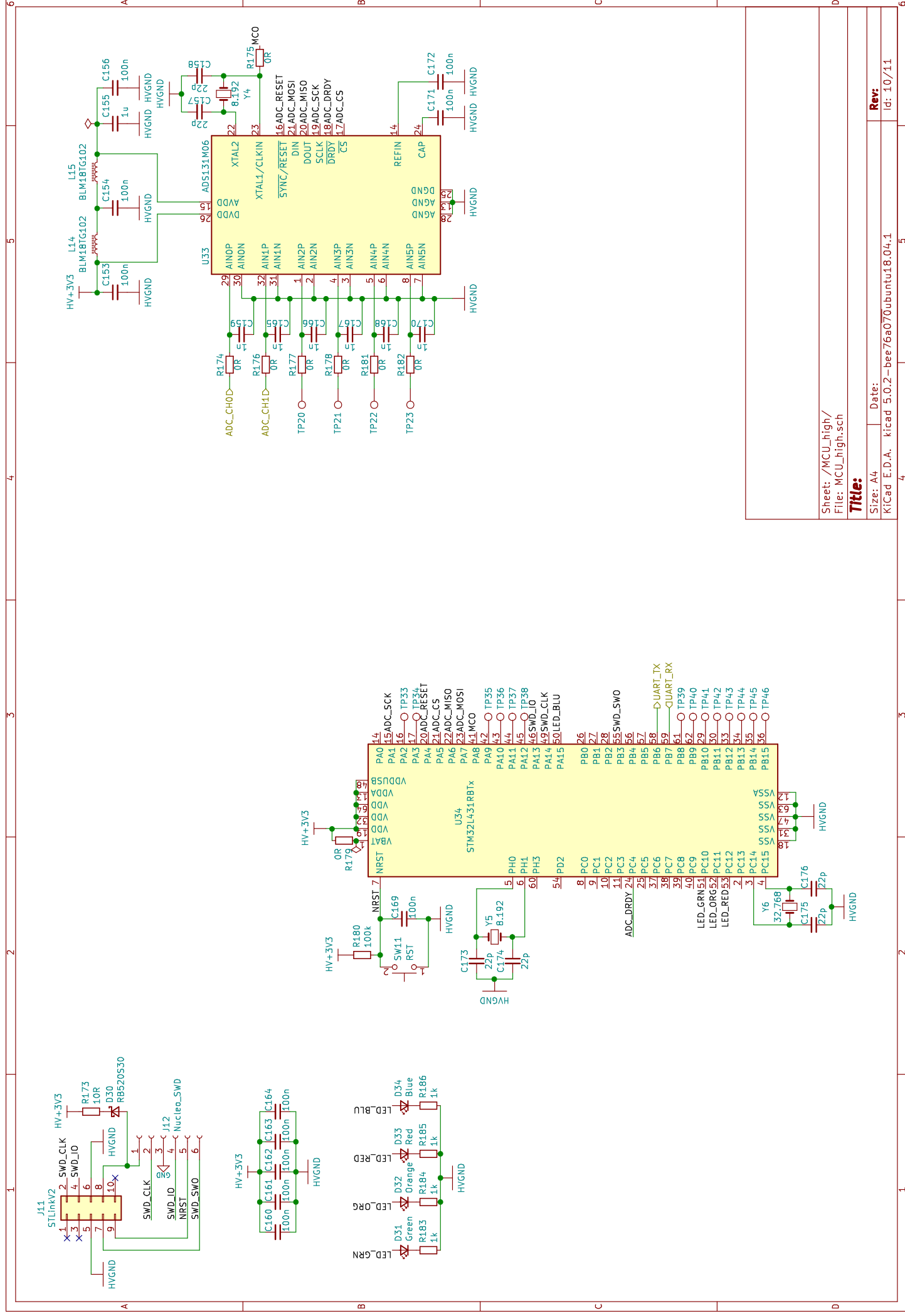
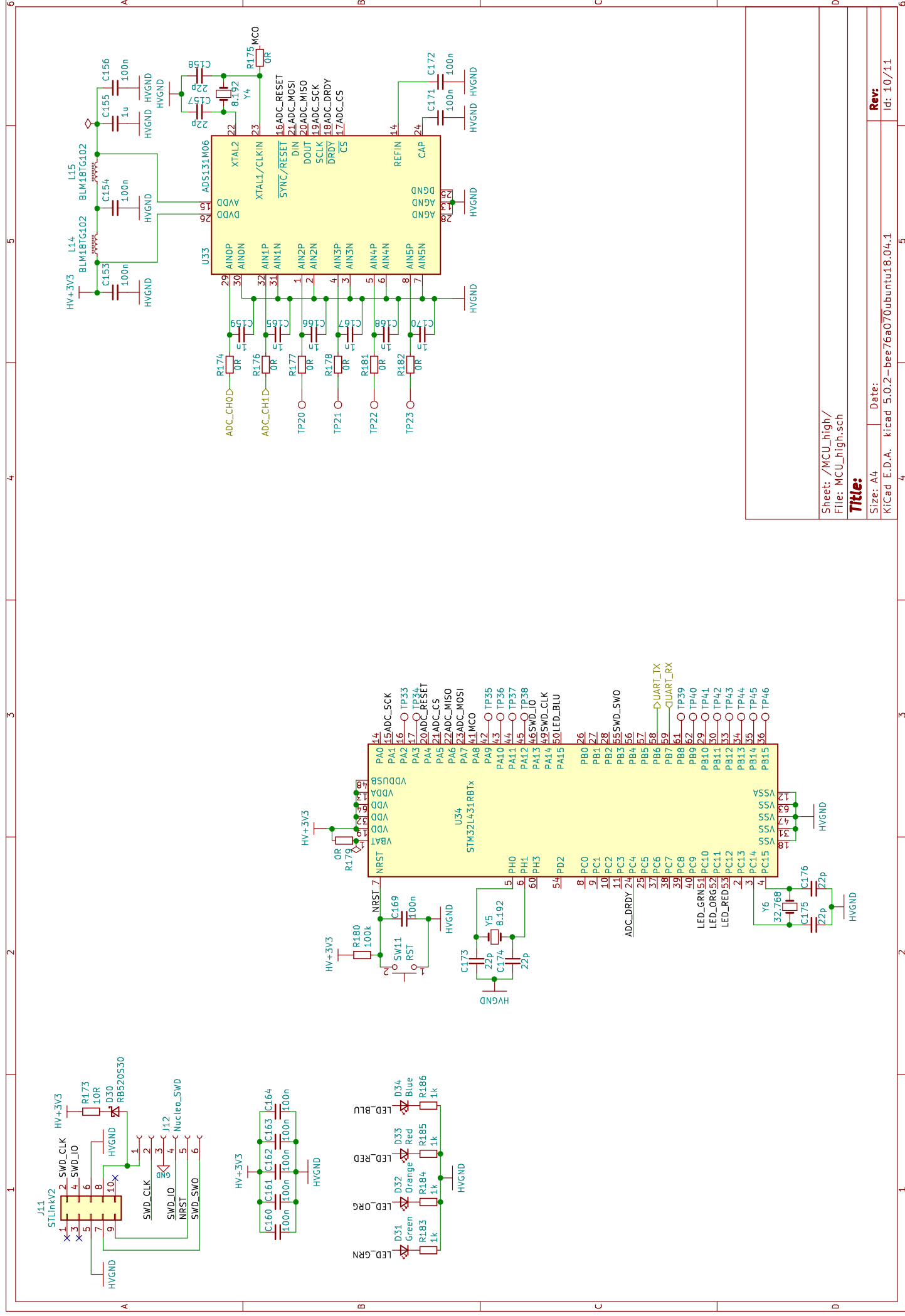
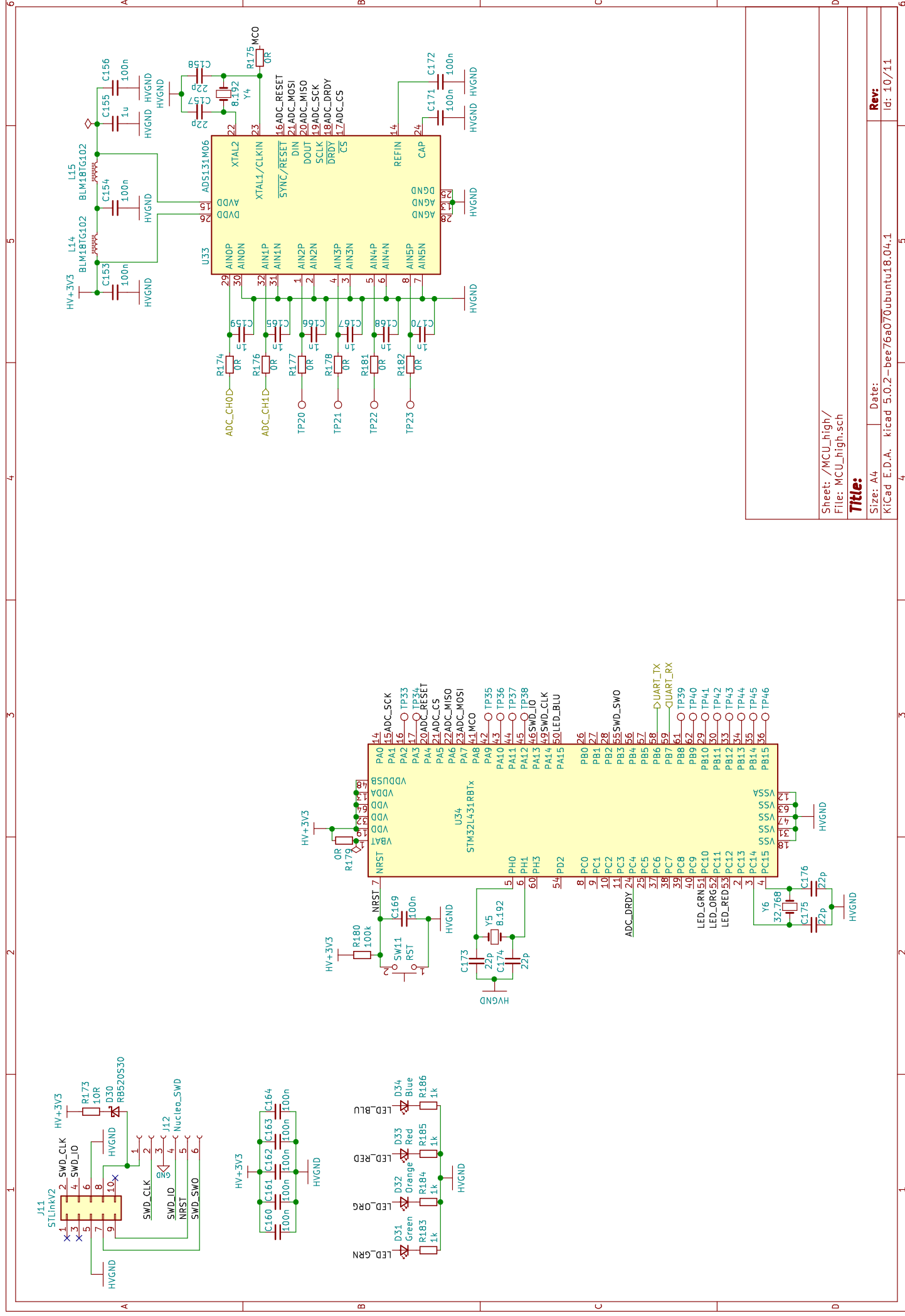
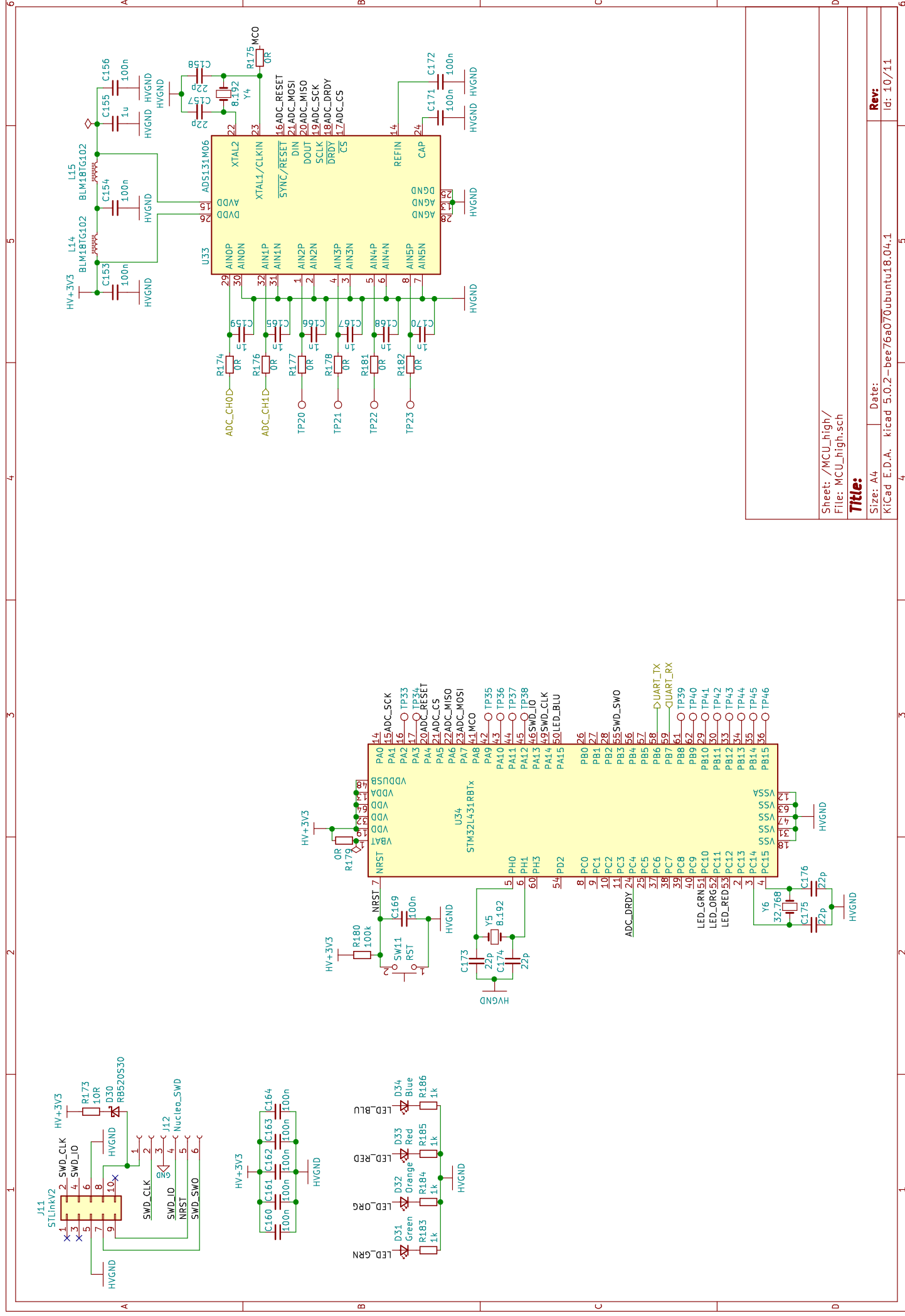
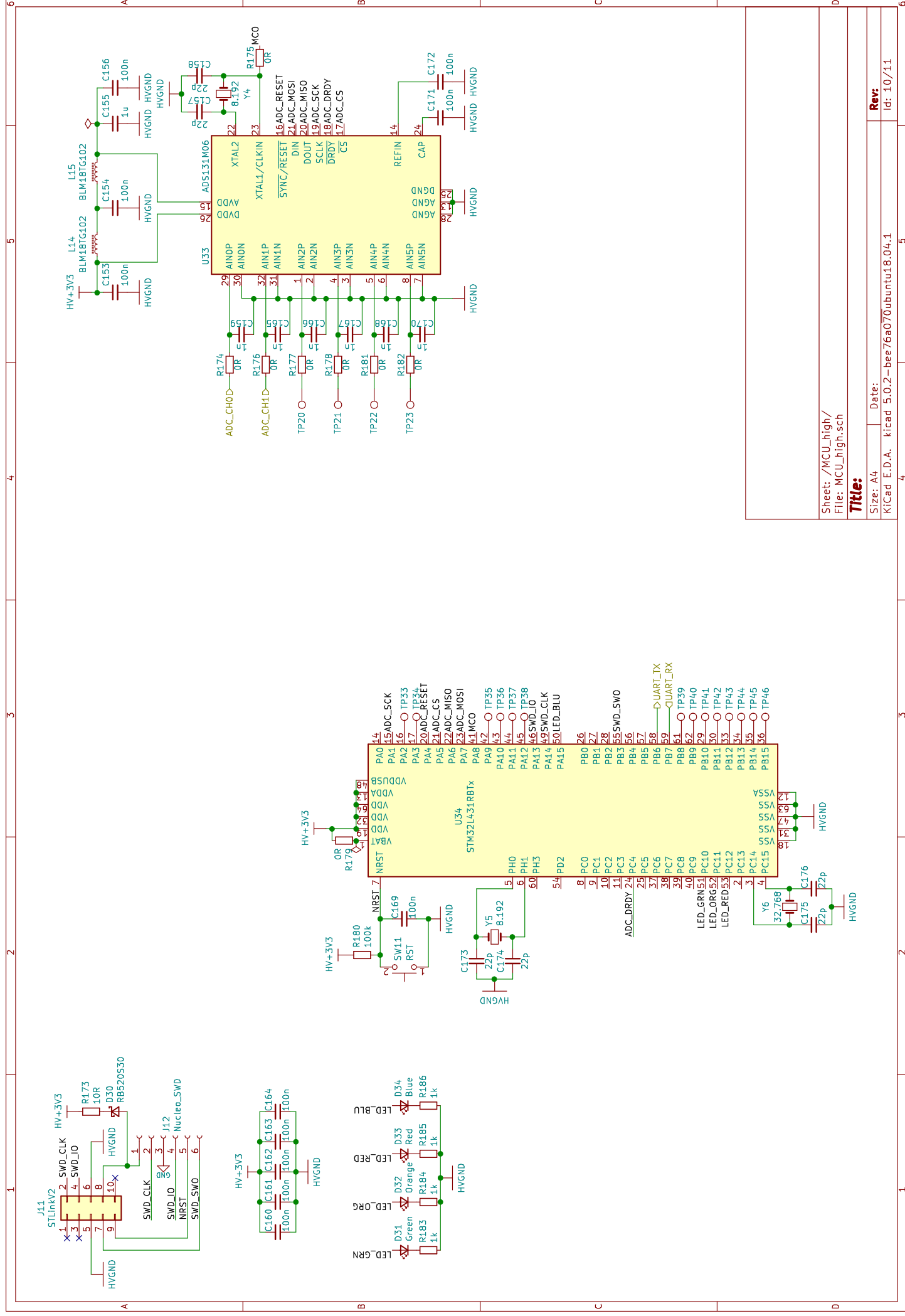
OPT1128
If typ. 7.5 mA If max 1.5 V
Open collector output
Output supply 5V +/- 0.5V

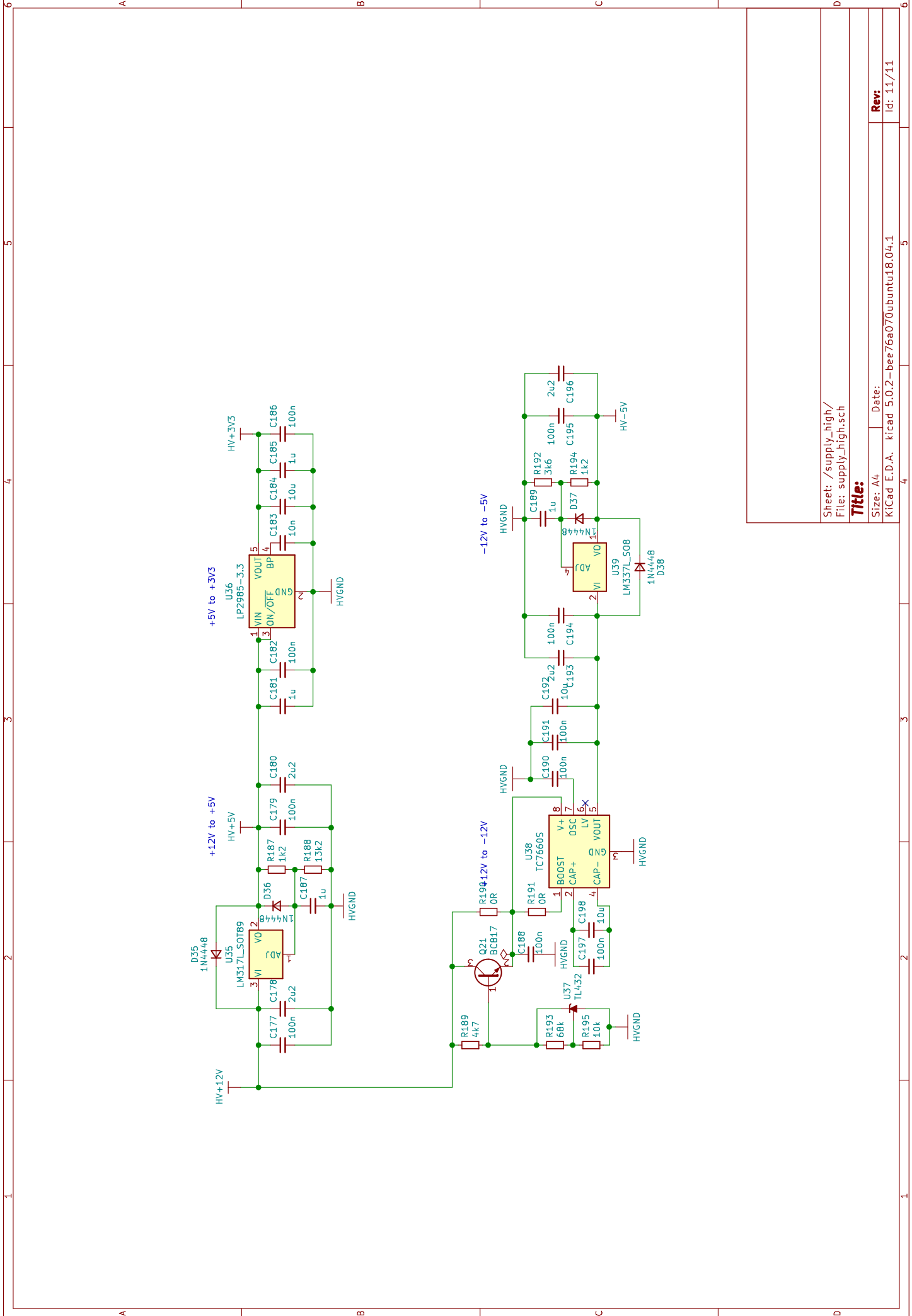
The diagram illustrates a bidirectional UART interface using two OPT1128 optocouplers. The circuit is powered by HV+5V, HV+3V3, and HVGND rails. The HV+5V rail is connected to the TXD and RXD pins of the optocouplers. The HV+3V3 rail is connected to the TX and RX pins of the optocouplers. The HVGND rail is connected to the TXD and RXD pins of the optocouplers. The TXD and RXD signals are connected to the TXD and RXD pins of the optocouplers. The TX and RX signals are connected to the TX and RX pins of the optocouplers. The TXD and RXD signals are connected to the TXD and RXD pins of the optocouplers. The TX and RX signals are connected to the TX and RX pins of the optocouplers.

Sheet: /communication/
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Sheet: /supply_high/
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