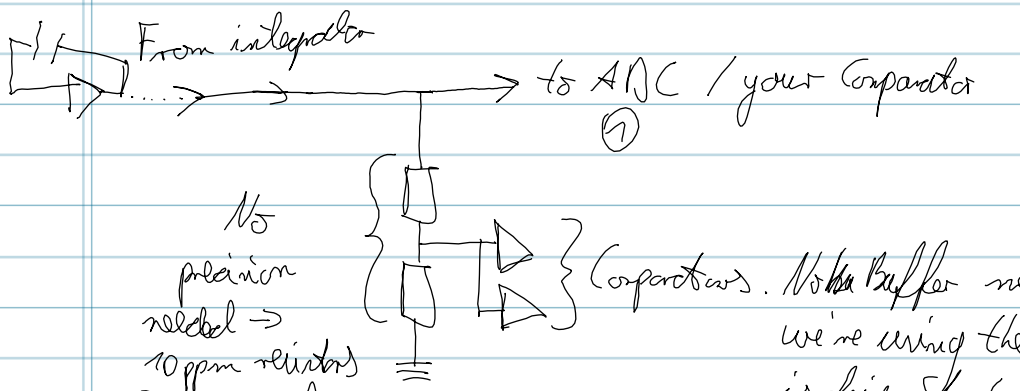
2nd proposal (integrator omitted)



Note: Buffer needed since we're using the LMV762/761 which is designed to work without a buffer (pA input current)

① ADC input:

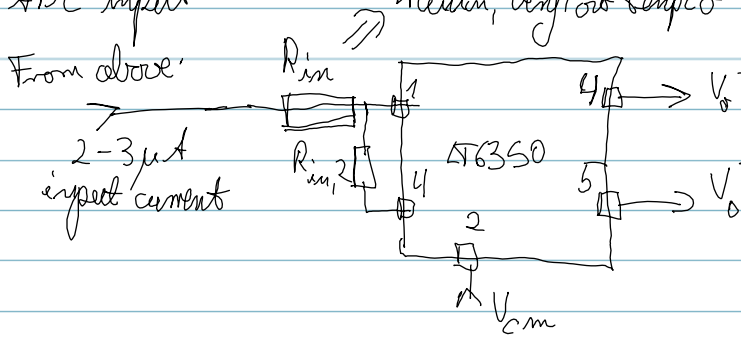
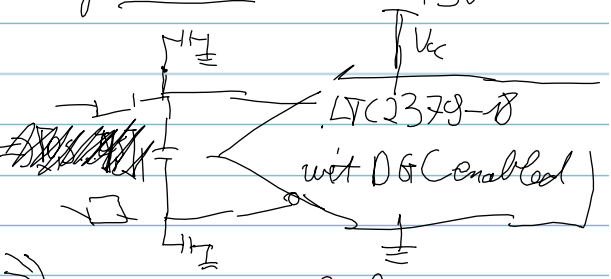


Figure 9a LT3379 datasheet



⇒ 0,5 .. 4,5V diff for DGC
⇒ only a single +5V supply for the ADC needed

Make R_{in} / $R_{in,2}$ such that we can accept the ±12V from the integrator directly!

⇒ Convert ±12V to ±4V (plus the 0,5V offset, but that's done by the external offset at the LT6350, see figure 9a)

From the LT6350 datasheet: $V_{out,diff} = 4V = -2 \cdot \frac{V_{in}}{12V} \cdot \frac{R_{in2}(R_F)}{R_{in}(R_G)}$

⇒ $0,16 = \frac{R_F}{R_G}$ ⇒ $R_F = 3,01k$, $R_G = 18k$!