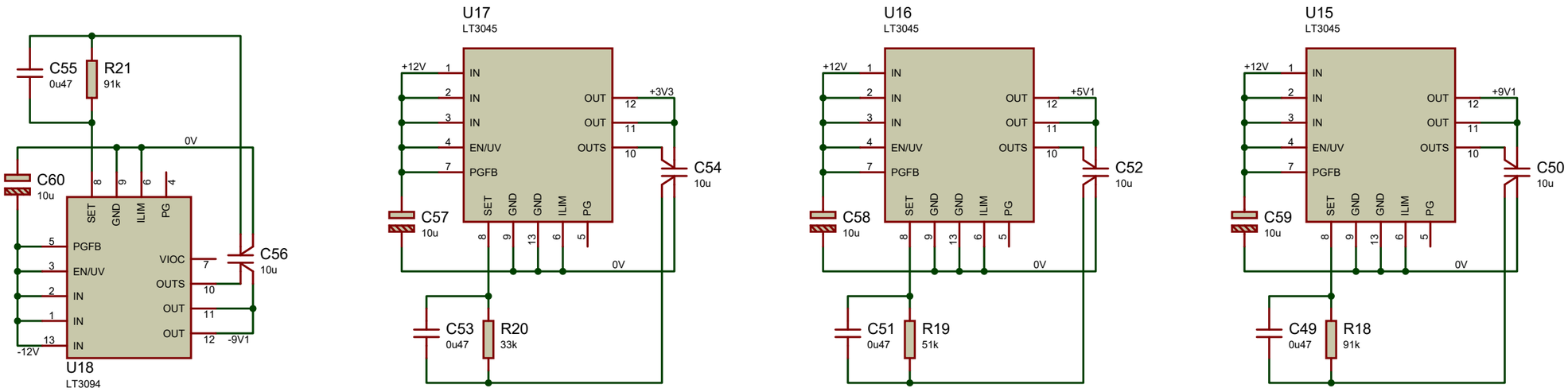
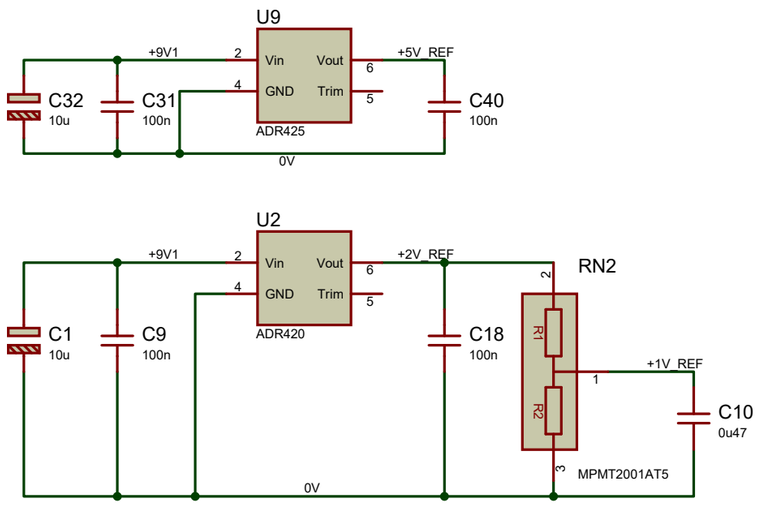
Power supplies and voltage references

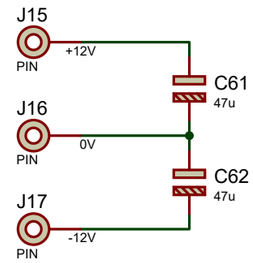


Power supplies: +9V1, +5V1, +3V3, -9V1 @500mA each

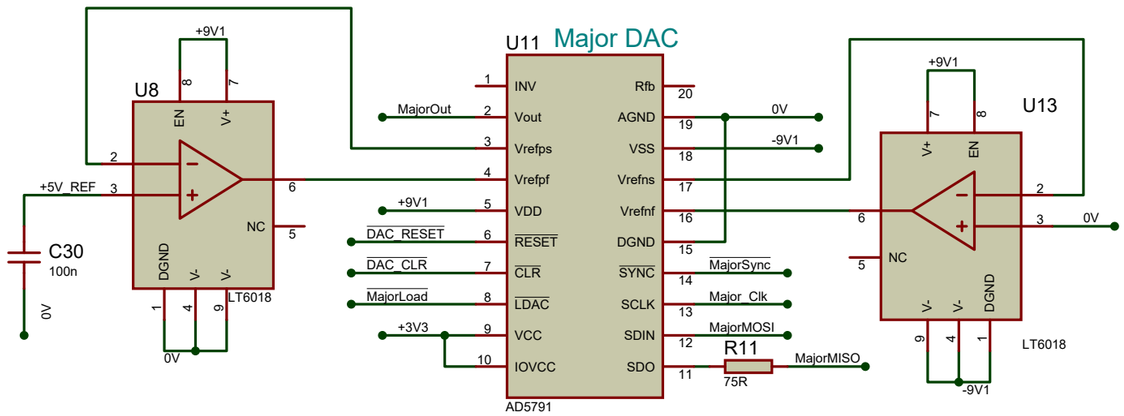
Reference voltages for ADC/DAC: 5V, 2V, 1V

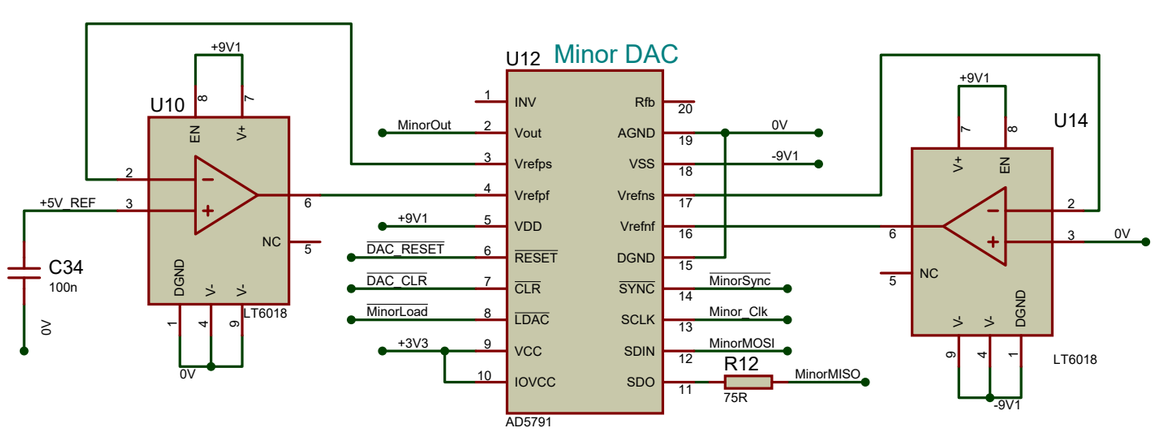


Supply pins (via 2x chassis-mounted, filtered, pass-through pins)

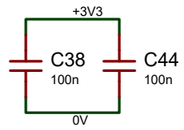


Major-minor DAC

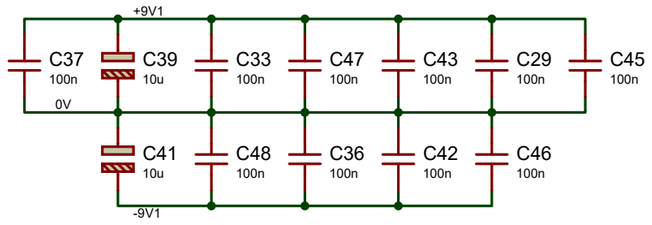




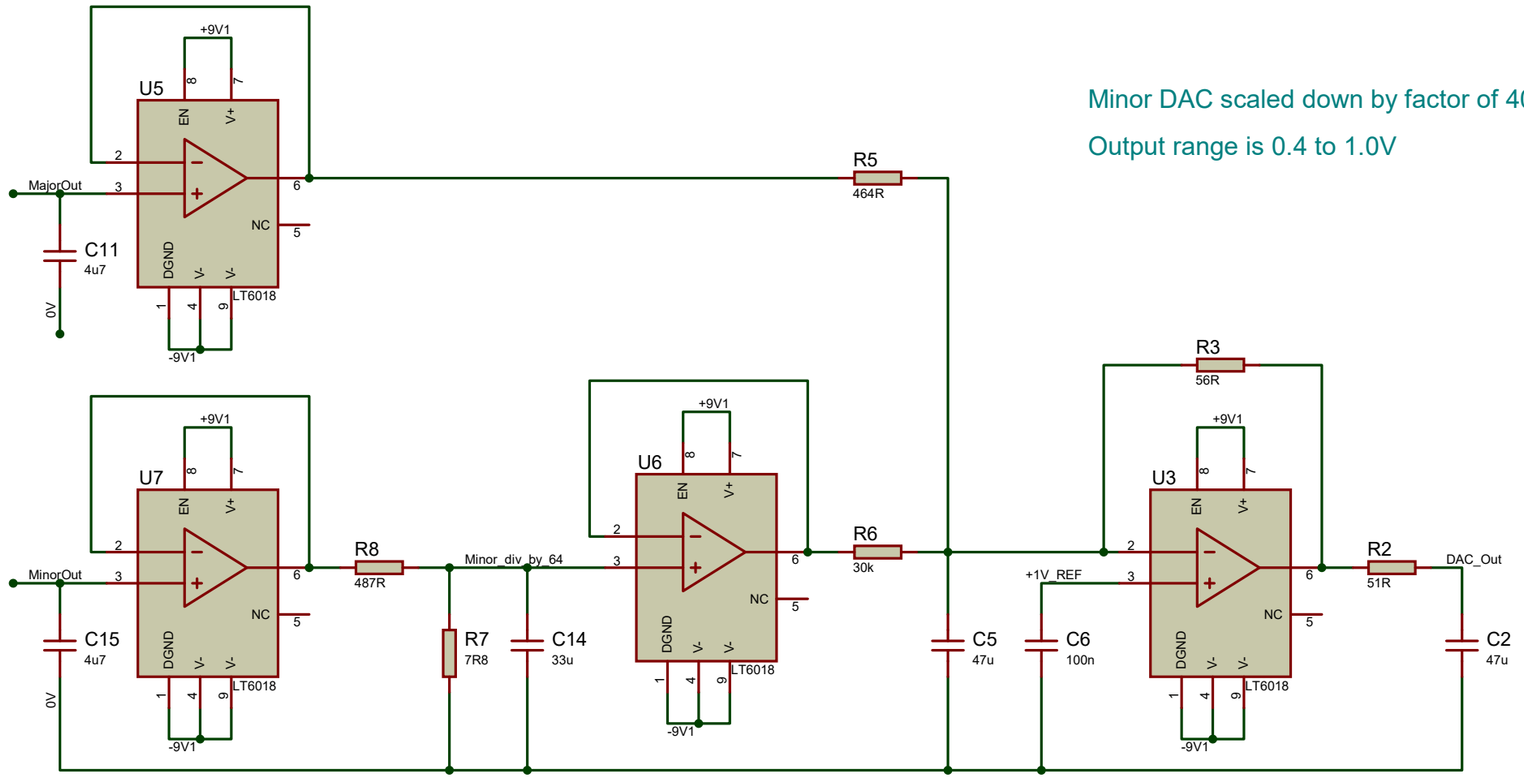
Decoupling



100nF close to each DAC and amp (both +ve and -ve supplies)



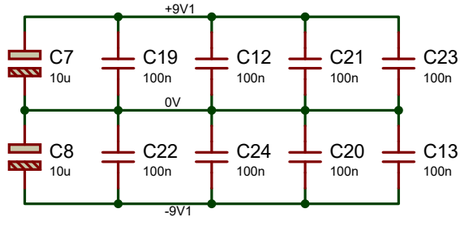
Summation amplifier



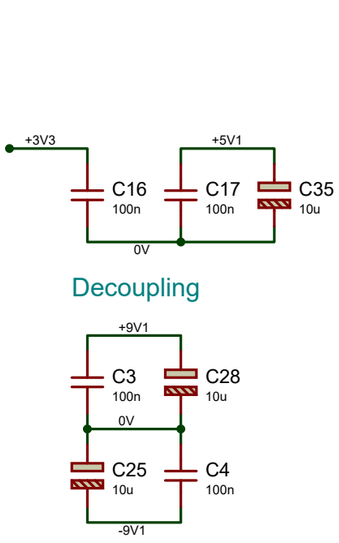
Minor DAC scaled down by factor of 4096

Output range is 0.4 to 1.0V

100nF close to each amp (both +ve and -ve supplies)

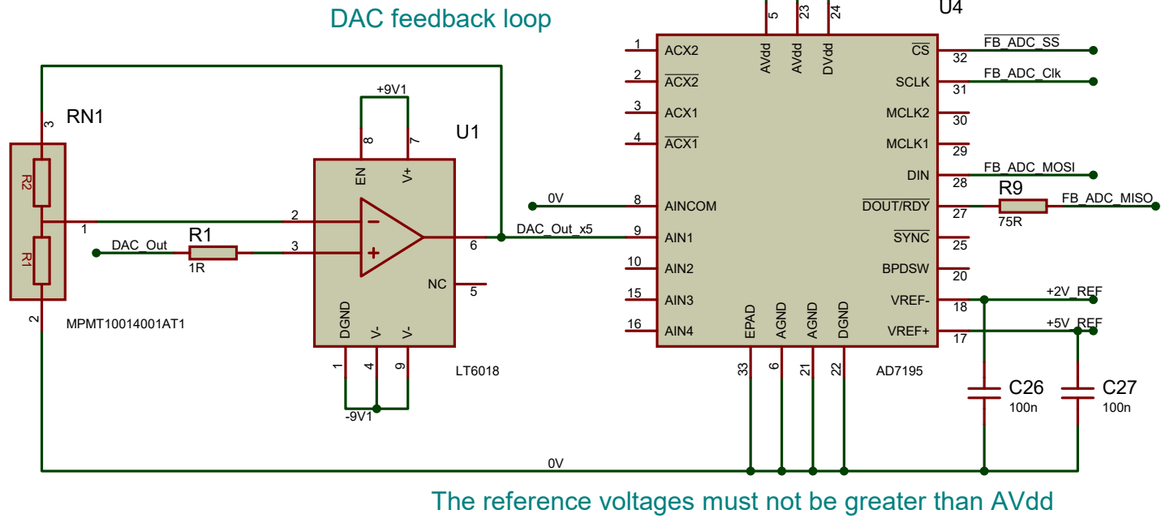


ADC



Decoupling

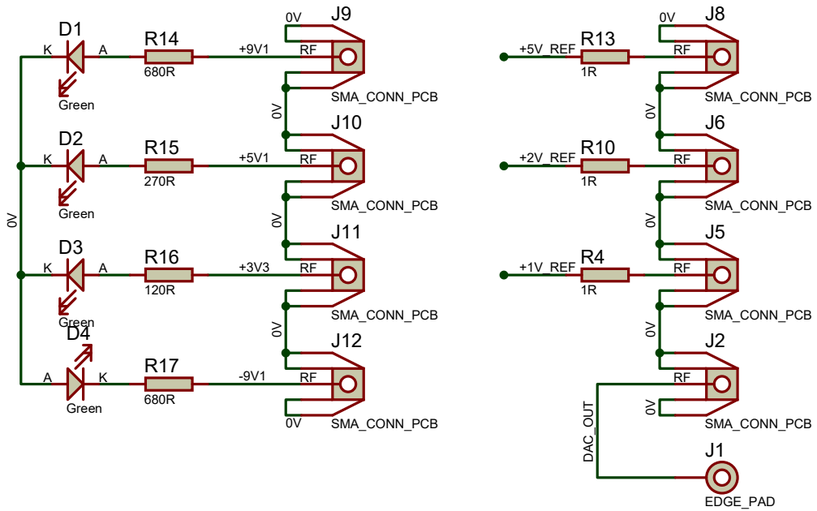
DAC feedback loop



The reference voltages must not be greater than AVdd

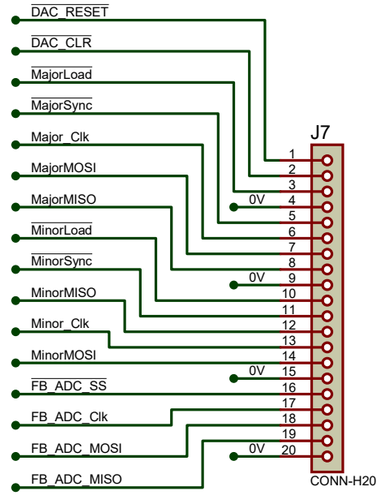
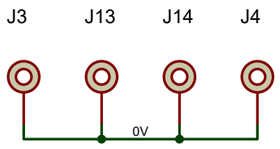
Debugging

Voltage monitoring points



MCU connectivity

To Atmel SAML22 dev board



Mounting posts and ground stitching