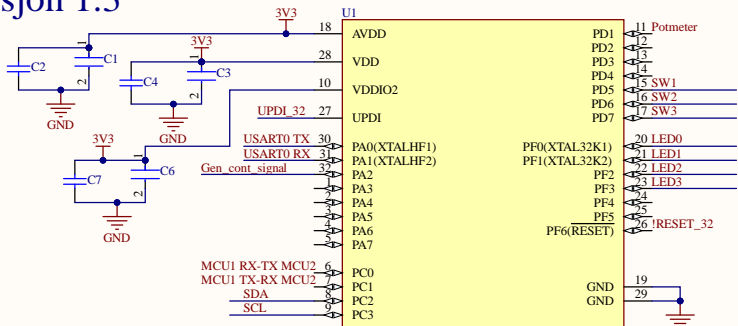
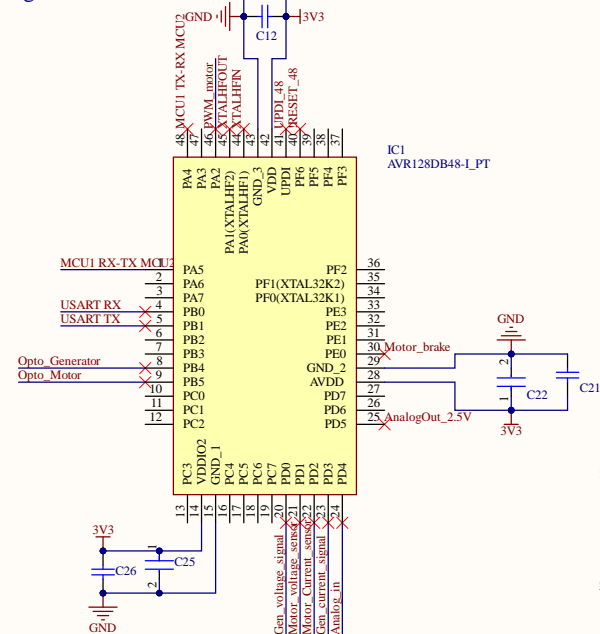


Versjon 1.3

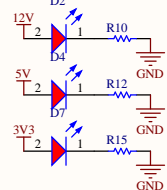
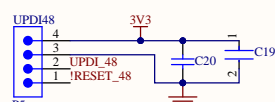
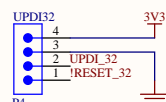
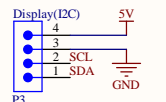
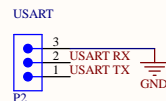
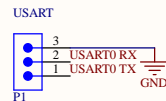
HMI MCU



Everything-else MCU



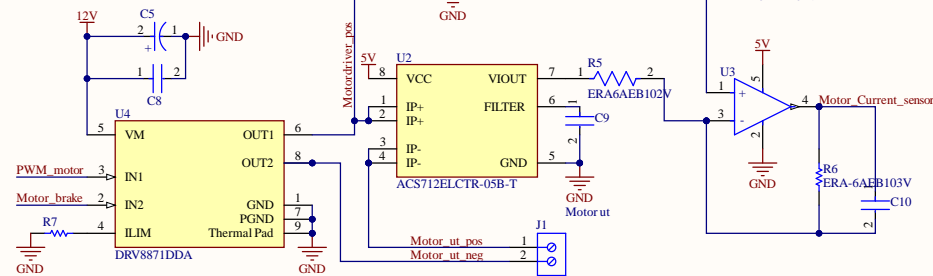
Input/Output



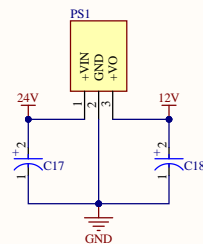
Diodes på spenning inn for å hindre reverse voltage

Motordriver med strømsensor og utgang

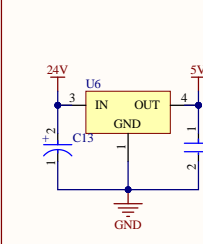
Op-amp vil begrense maksimal spenning til ~4V.
Forsterkning av signal for strømsignal fra 185mv/Atil ~1V/A.



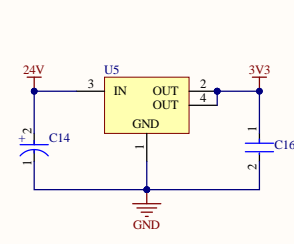
12V Power supply



5V Power supply

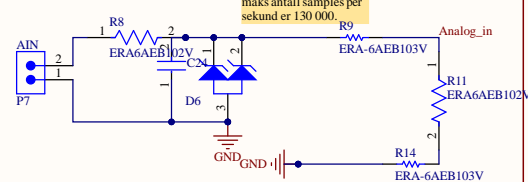


3.3V Power supply

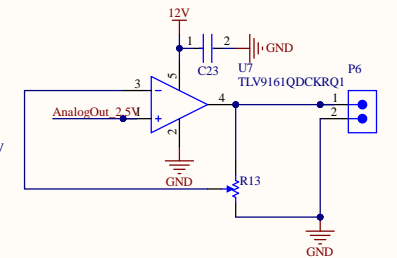


Analog signal in

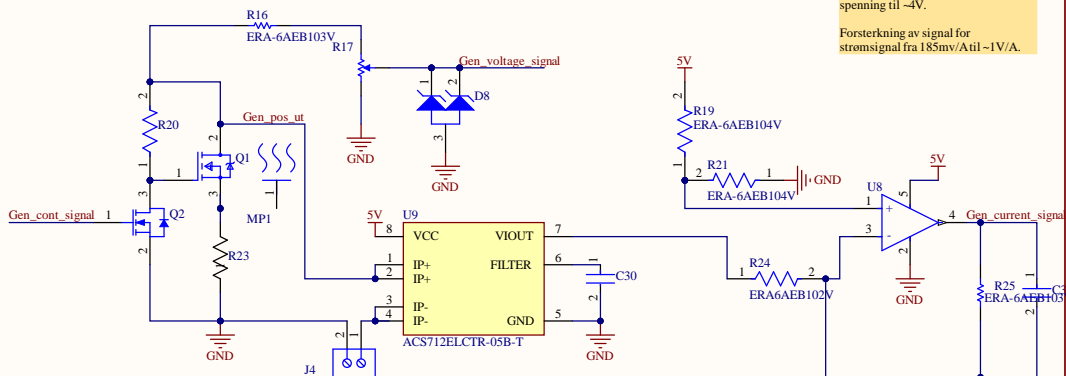
AIN får gyldig spenningsområde 0-5V, og dette filteres med RC filter med cutoff 100KHz fordi teoretisk maks antall samples per sekund er 130 000.



Analog signal ut

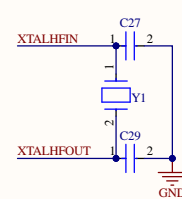


Load with measurement



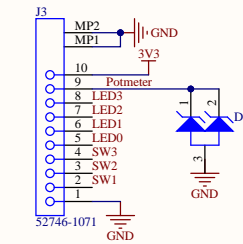
Op-amp vil begrense maksimal spenning til ~4V.
Forsterkning av signal for strømsignal fra 185mv/Atil ~1V/A.

Crystal 16 MHz

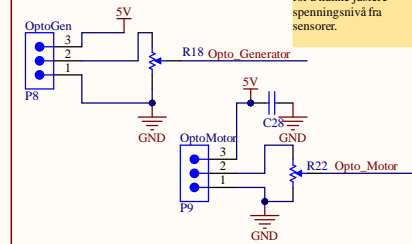


C = 2(C_{load} - C_{stray})
C = 2(18pF - 5pF)
C = 26pF
C = 25pF av hensyn til tilgjengelighet

Connector for B&L



Input for tach-sensors



Potentiometer er lagt inn for å kunne justere spenningsnivå fra sensorer.

Title		
Size	Number	Revision
A3		
Date:	5.14.2024	Sheet of
File:	C:\Users\...\Hovedkort.SchDoc	Drawn By:

