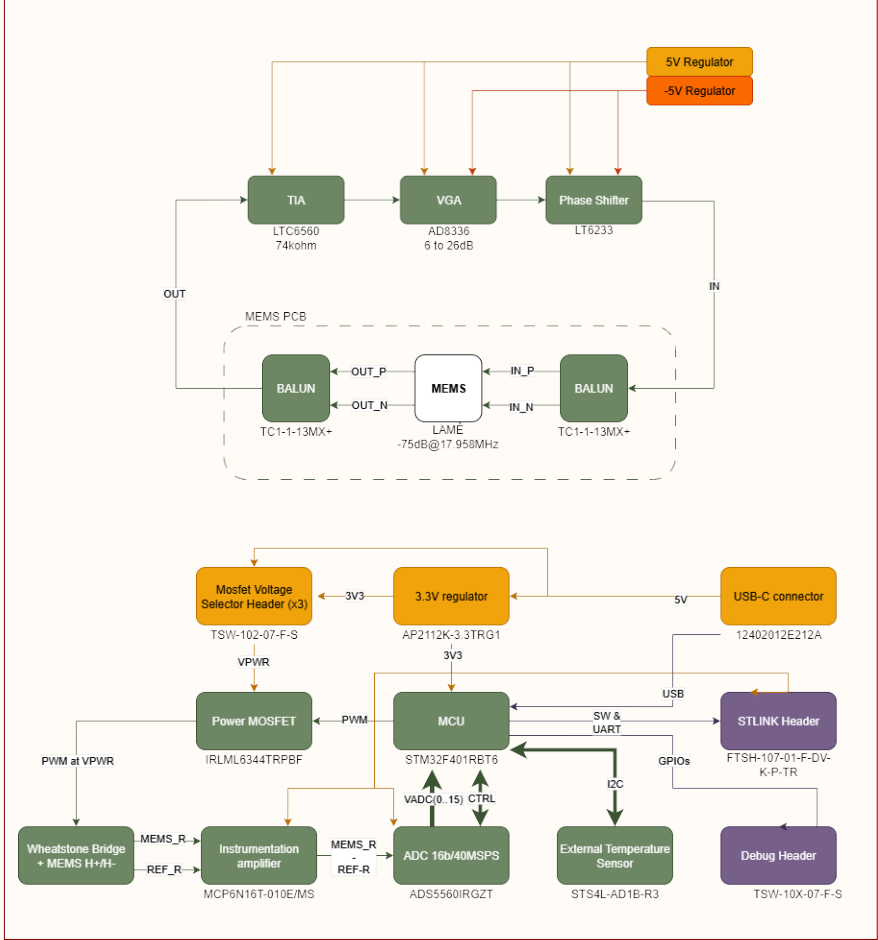


Conditioning and TLL PCB

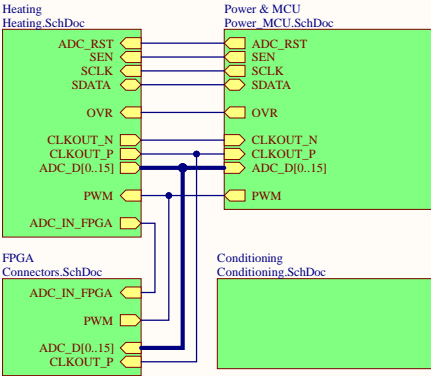
Top Level
TopLevel.SchDoc



Revi si on	Descri ption	Date
A	- Ini ti al project	XXX
B	- Correctives: Added vol tage, translators, 7 segments, etc.	XXX
C	- Si ngle board condi ti oning & TLL	Aug 2025



Top Level

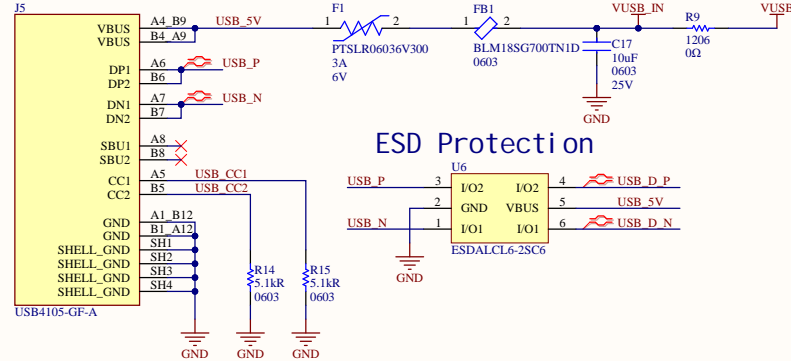


Power & MCU

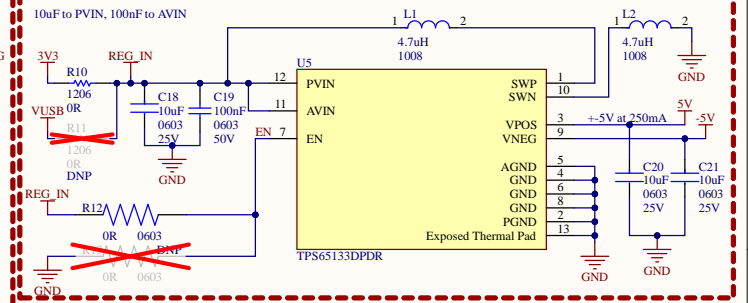
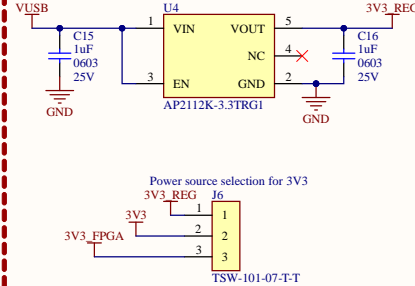
3V3 Regulator

+/-5V Regulator

USB-C Power & Data

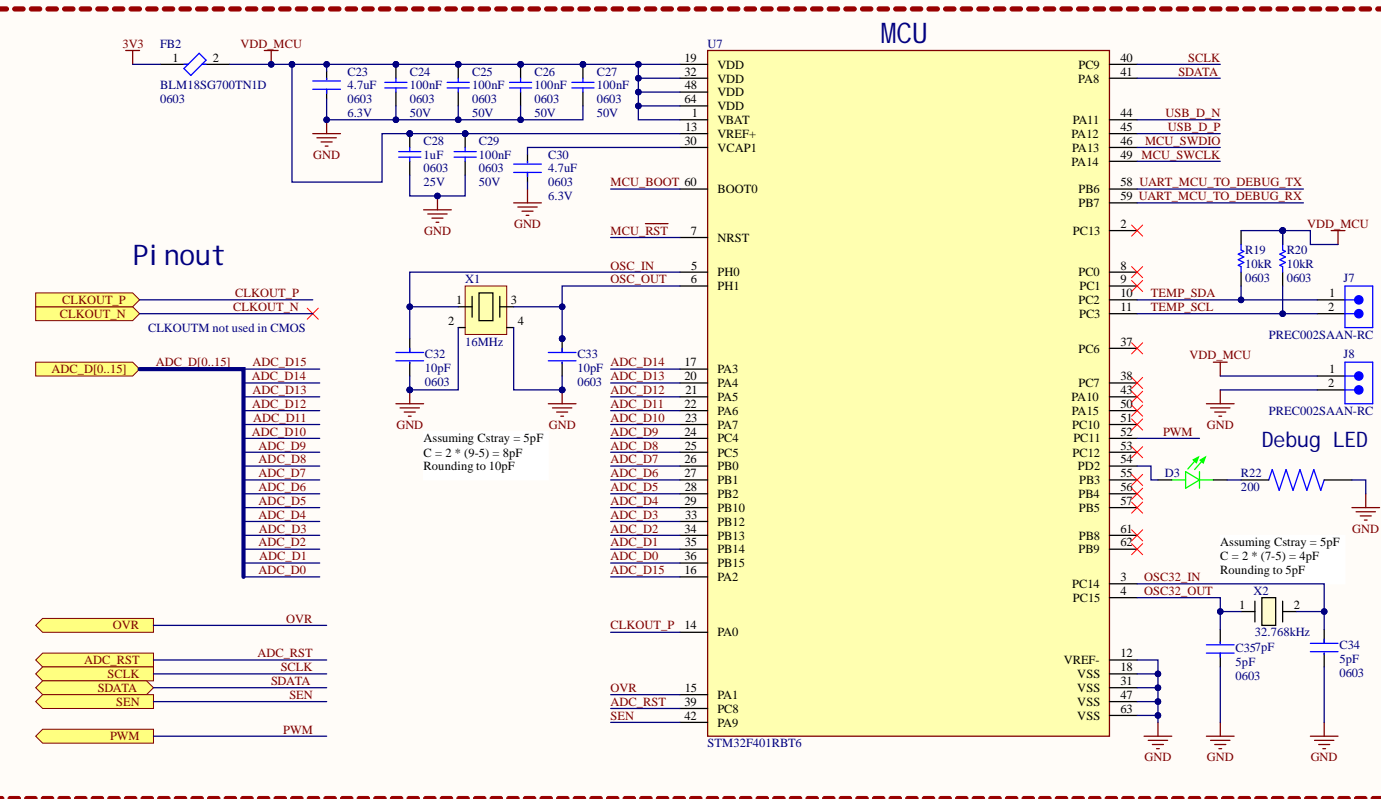


ESD Protection

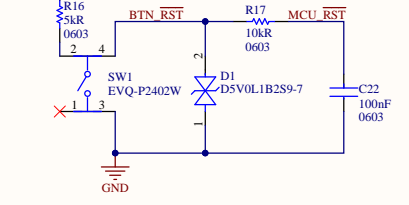


MCU & Pi nout

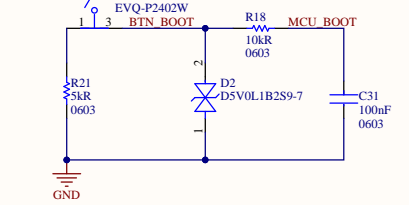
Buttons & ST-LINK Header



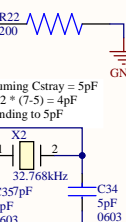
Reset



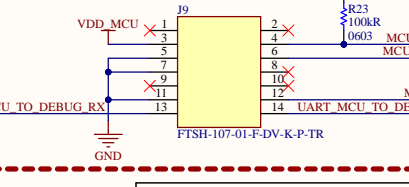
Boot



Debug LED

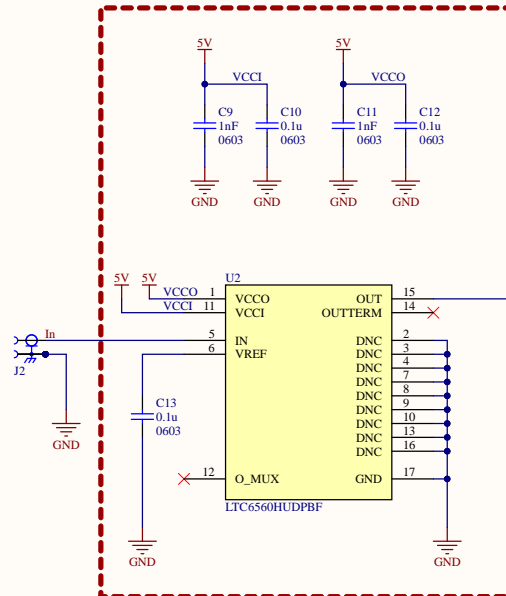


ST-LINK Mini Header

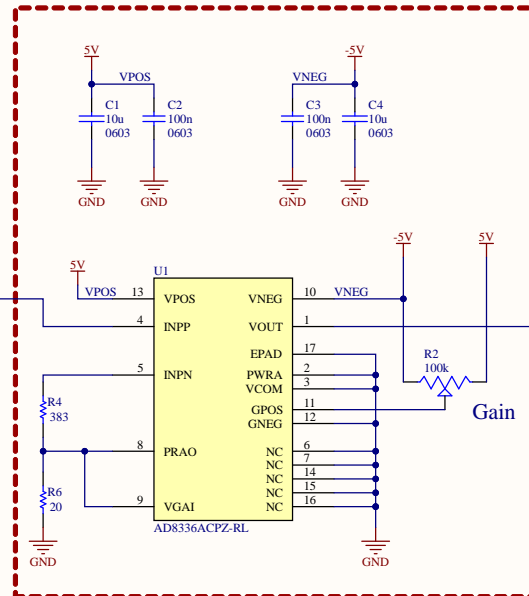


Conditioning

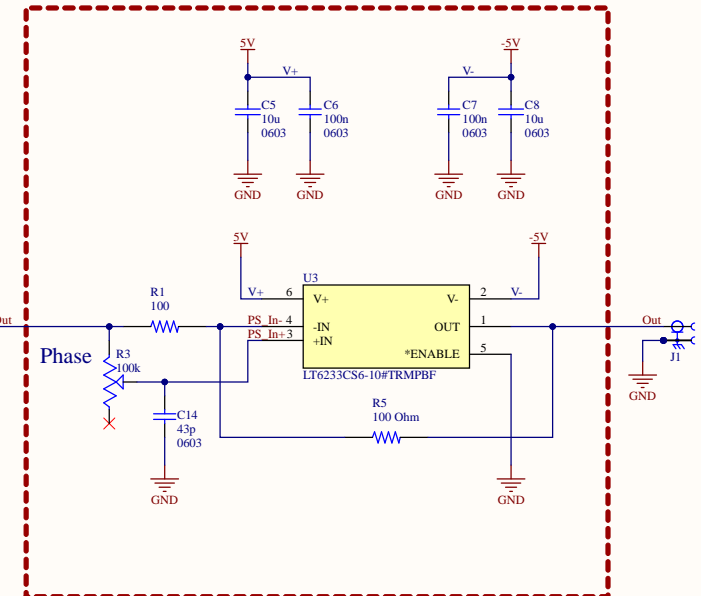
TIA



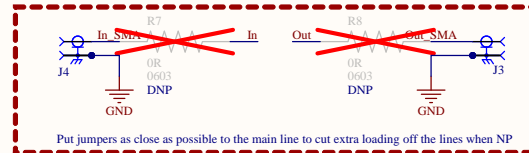
VGA



Phase Shifter



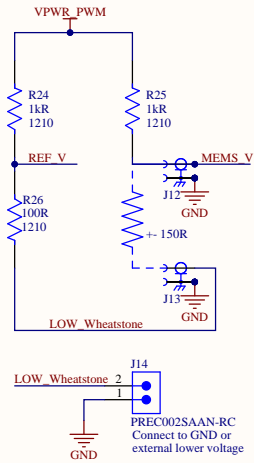
Measurement and backup lines



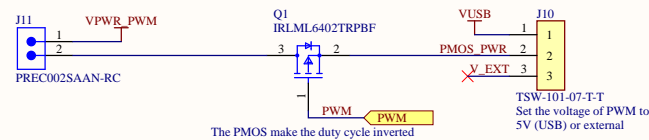
Project:	Conditioning & TLL PCB	
Date:	9/16/2025	Revision: C
File:	Conditioning SchDoc	Sheet 4 of 6
Designed By :	Alexis Gagnon Megane Cyr	
© COPYRIGHT 2024 École de Technologie Supérieure 1100 Rue Notre-Dame Ouest, Montréal, QC H3C 1K3		

Heating

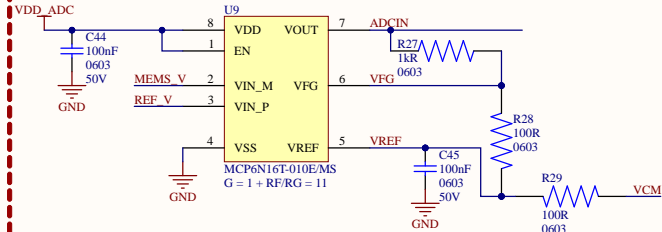
Wheatstone Bridge



PWM Voltage

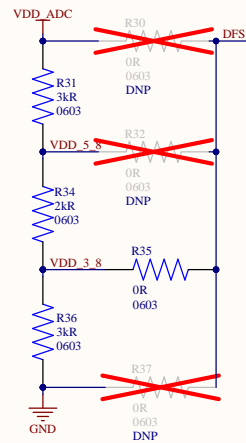


Instrumentation Amplifier

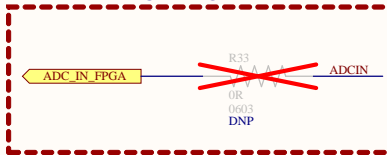


DFS Pick

Control ADC output style

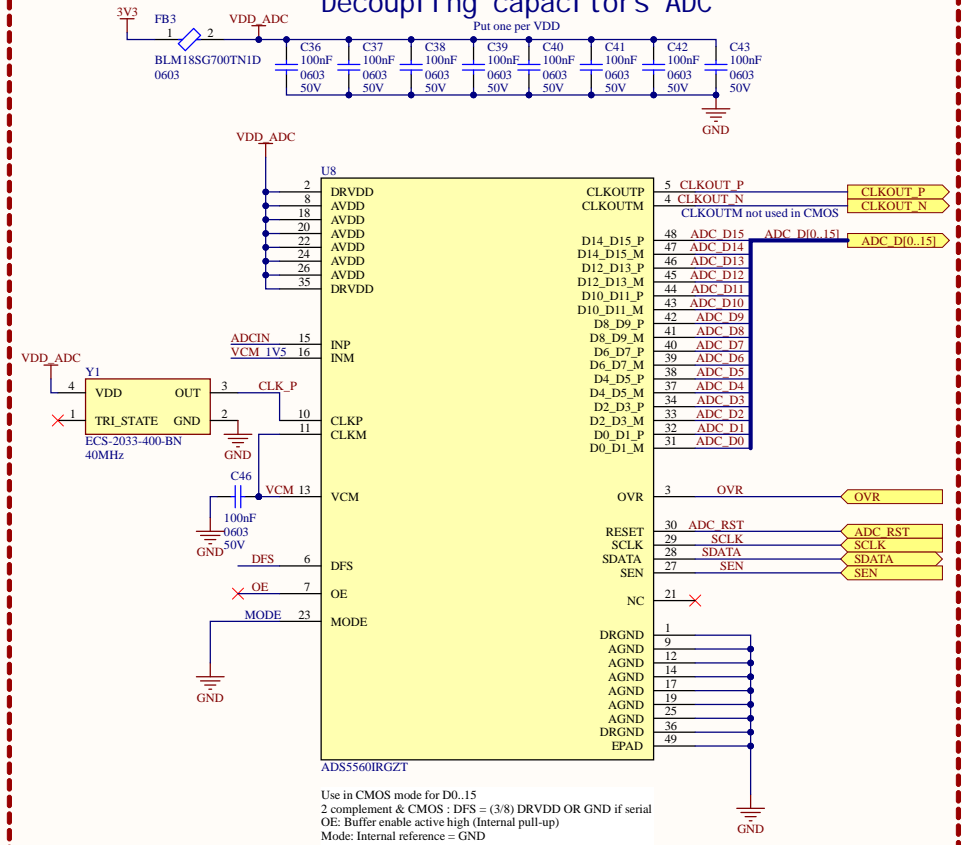


To FPGA



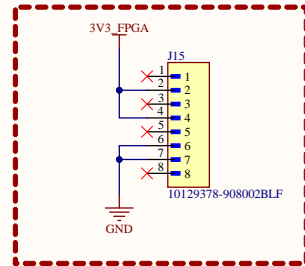
16 bits ADC

Decoupling capacitors ADC



Connectors

FPGA Header - Power



FPGA Header - ADC

