

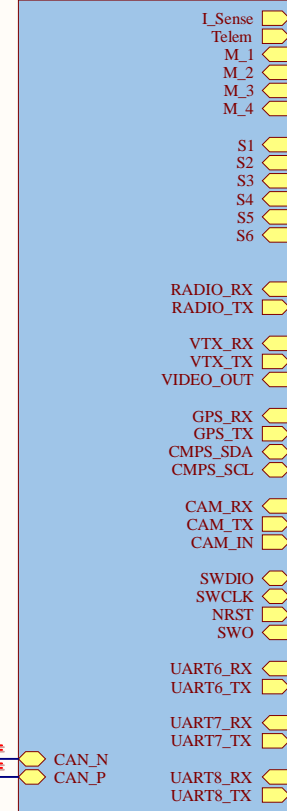
Overview

Headers-SolderPads.SchDoc

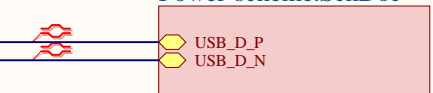
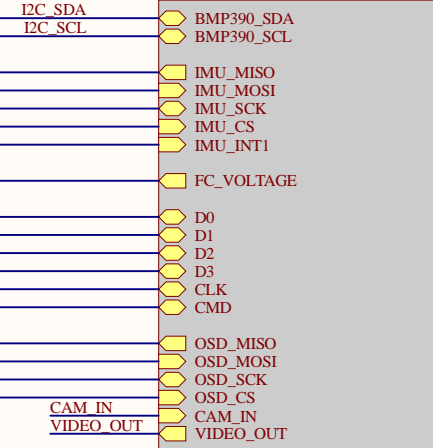
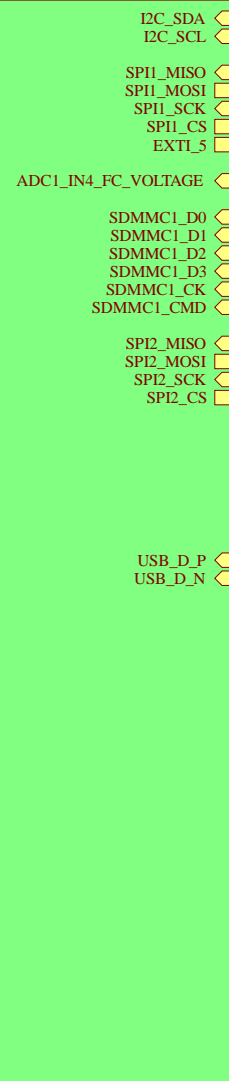
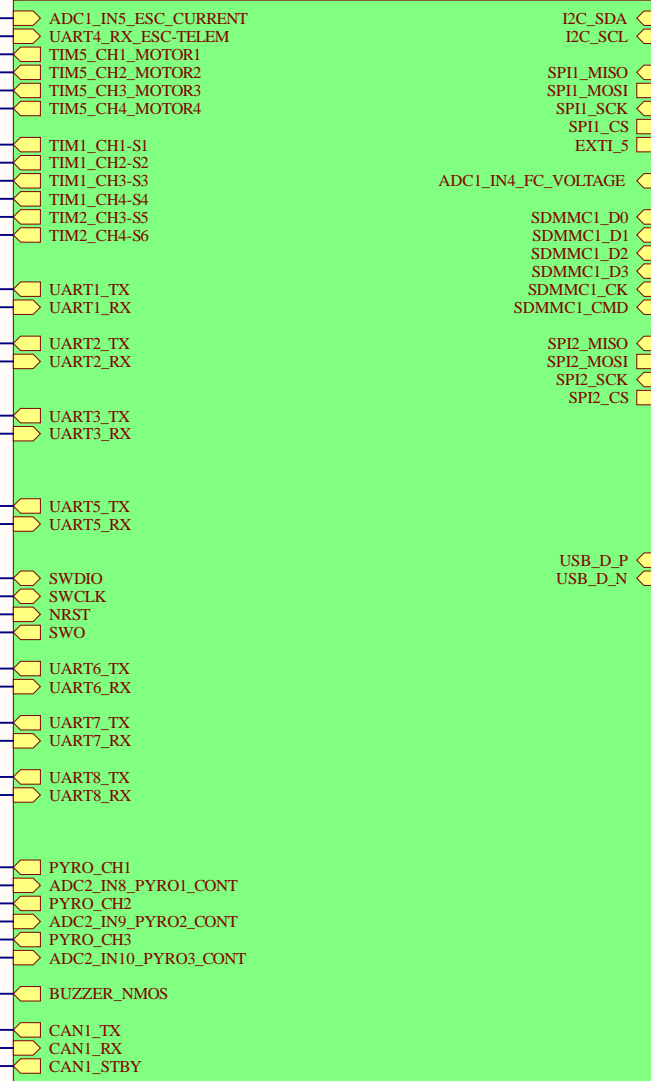
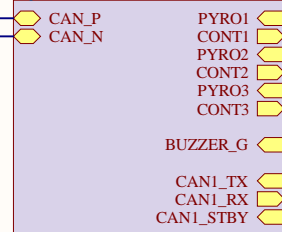
µC-Core.SchDoc


Sensors.SchDoc

Power-scheme.SchDoc



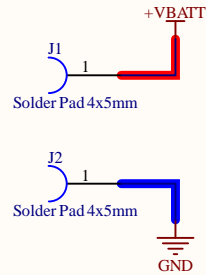
Pyro-Other.SchDoc



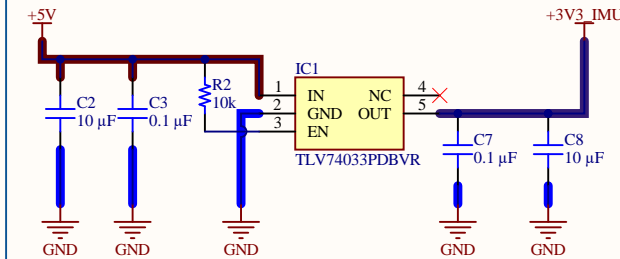
TITLE Port connections / overview			
PROJECT Omnifly H7	LAST MODIFIED 12/9/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Overview.SchDoc		SHEET 1 OF 6	

Power Scheme

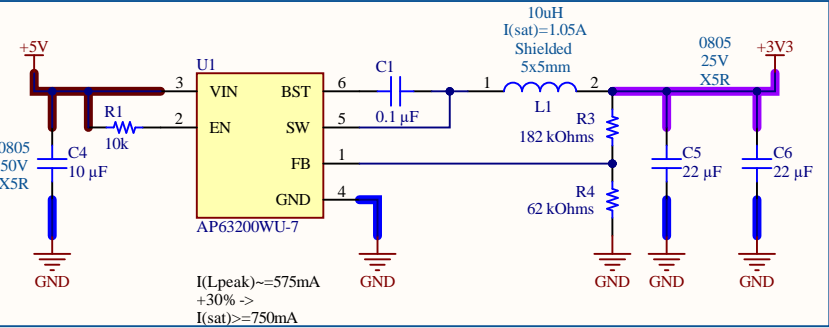
Direct battery voltage(2-6S)



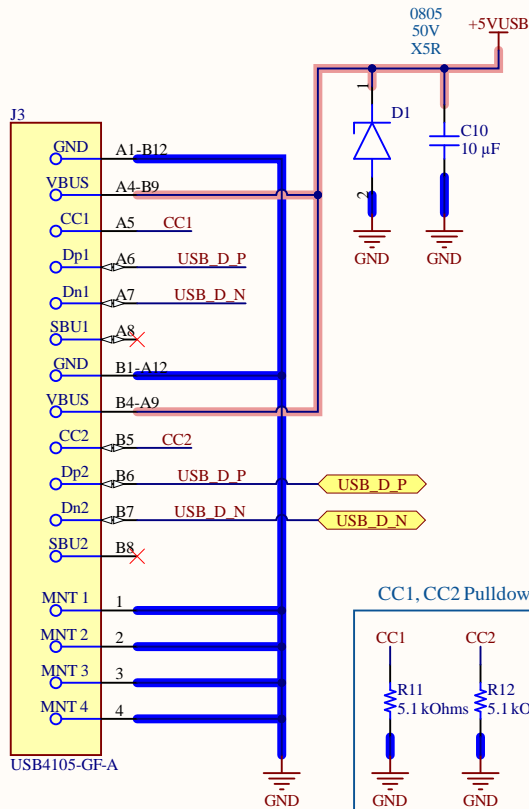
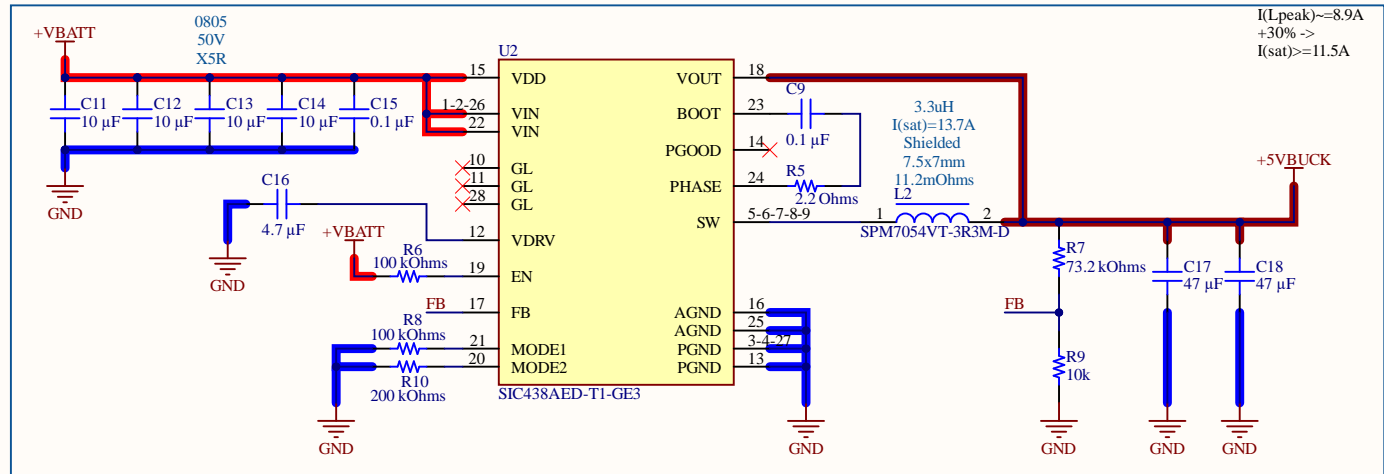
IMU LDO Regulator



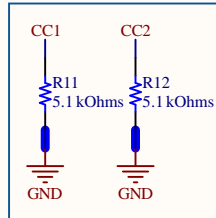
3.3V Buck Converter



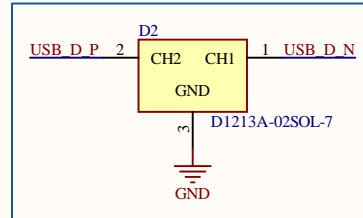
5V Buck Converter



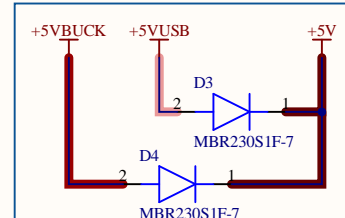
CC1, CC2 Pulldowns




USB D_P, D_N ESD Protection

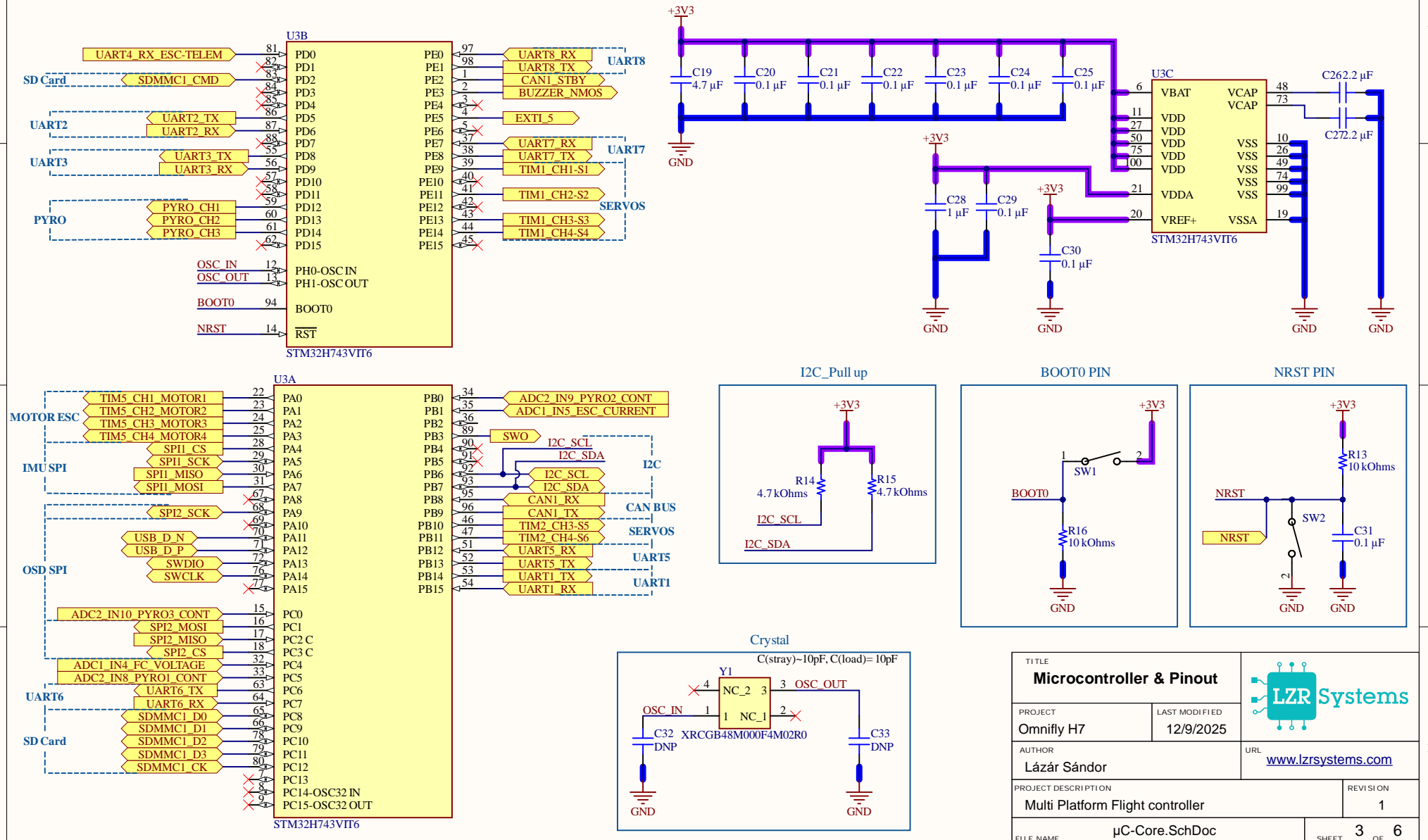


5V Rail



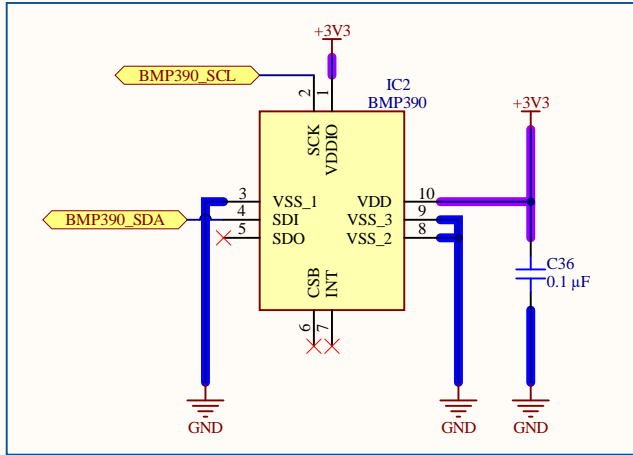
TITLE Power Scheme			
PROJECT OmniFly H7	LAST MODIFIED 10/5/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Power-scheme.SchDoc			SHEET 2 OF 6

Microcontroller

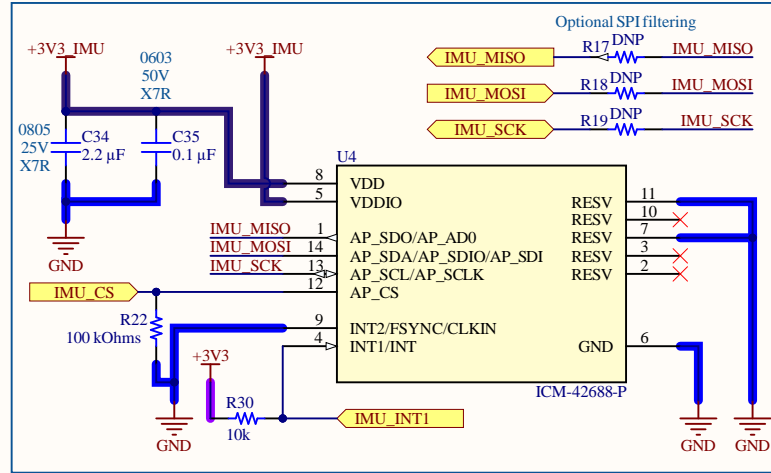


Sensors

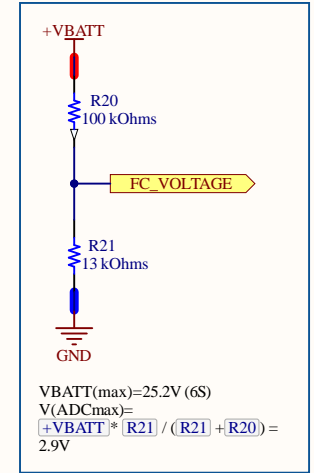
BMP390 - Barometric pressure sensor



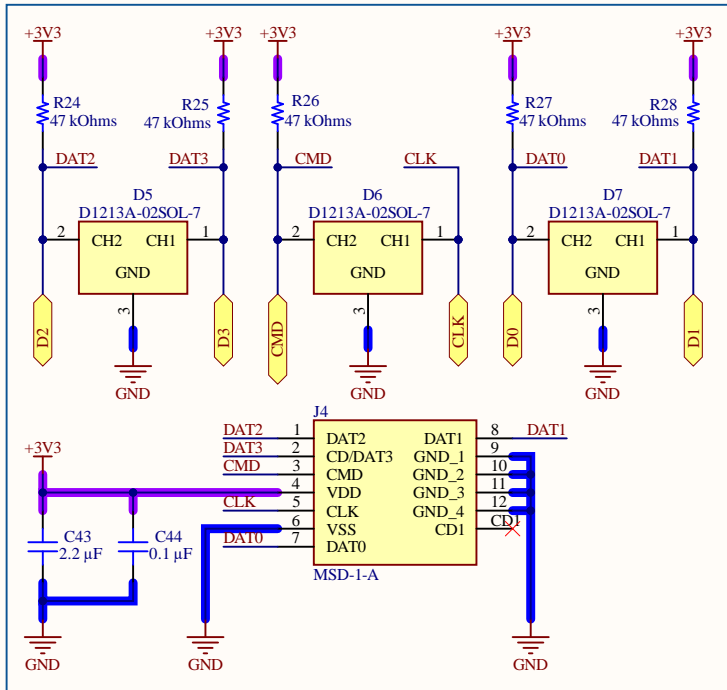
ICM-42688-P - Inertial measurement unit



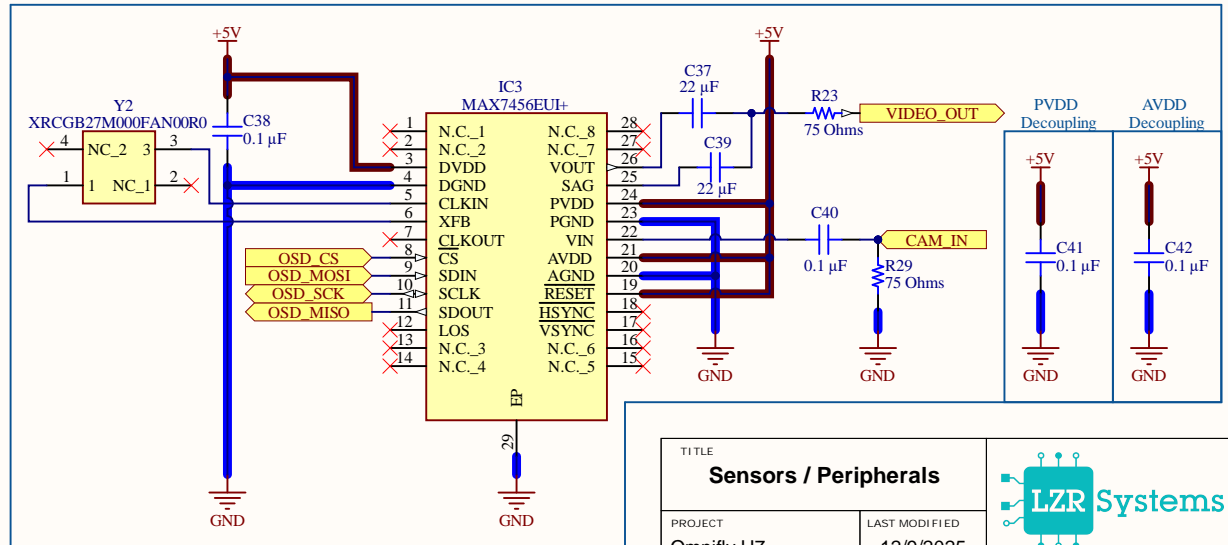
Voltage sense




MSD-1-A - micro SD Card reader



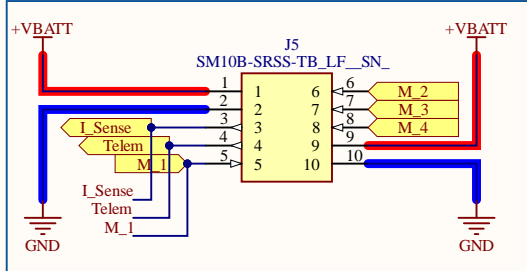
Analog video on screen display interface



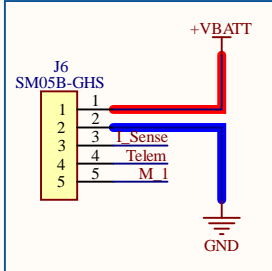
TITLE Sensors / Peripherals			
PROJECT Omnifly H7	LAST MODIFIED 12/9/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Sensors.SchDoc			SHEET 4 OF 6

Headers-SolderPads

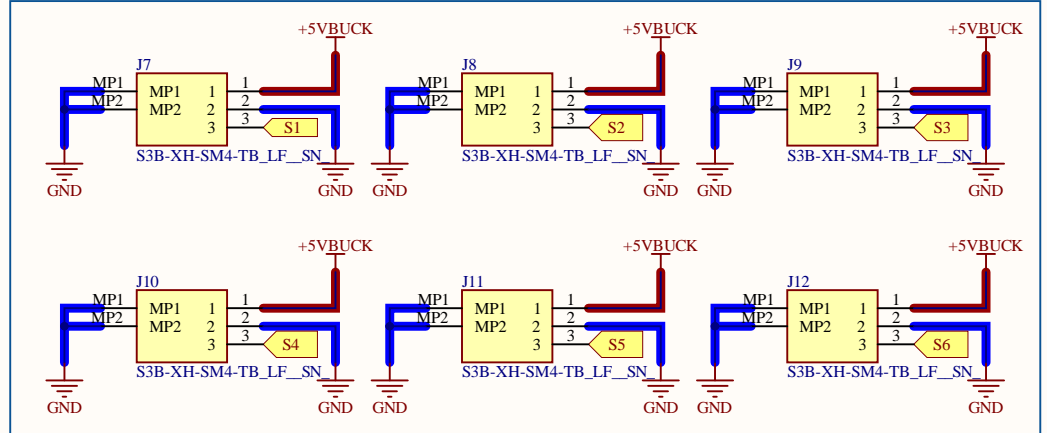
Standard quad motor ESC header



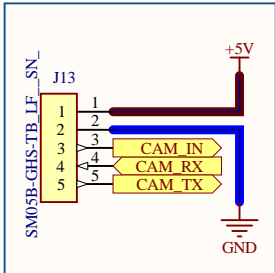
Custom single motor ESC header



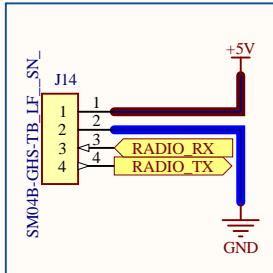
Servo headers



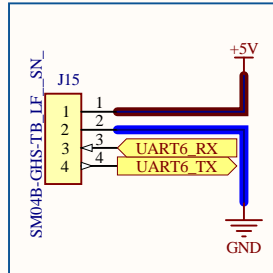
Analog FPV Camera header



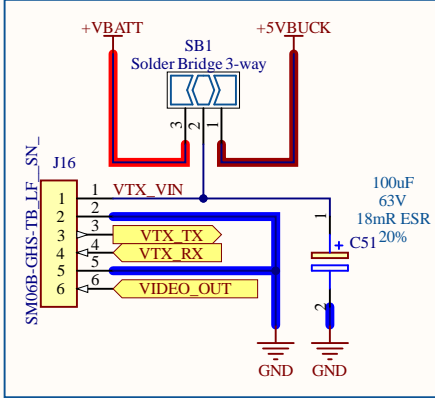
Radio / Remote header



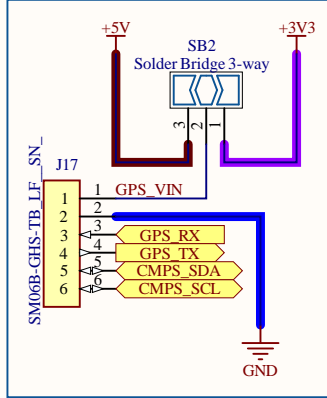
UART6 header



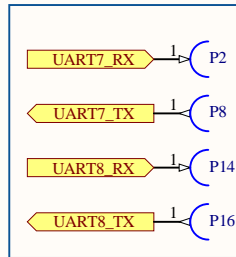
Analog VTX / DJI O4 header



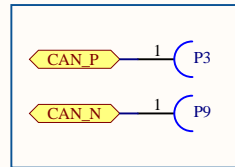
GPS+Magnetometer header



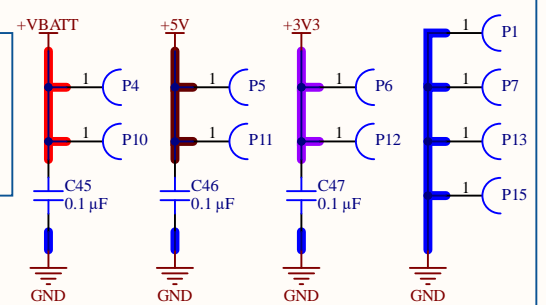
UART7/8



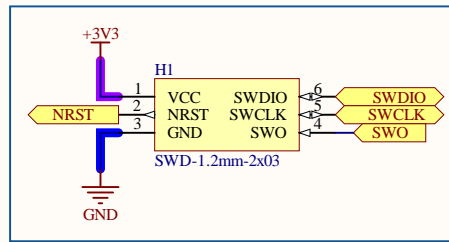
CAN bus diff pair



Solder pads

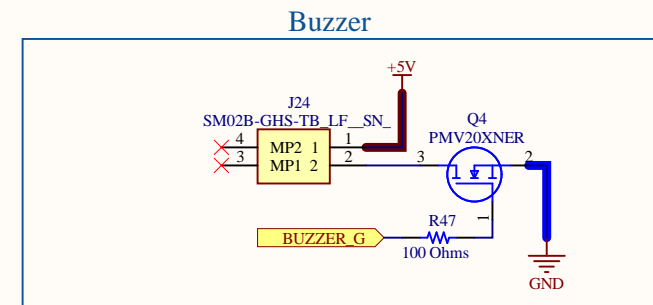
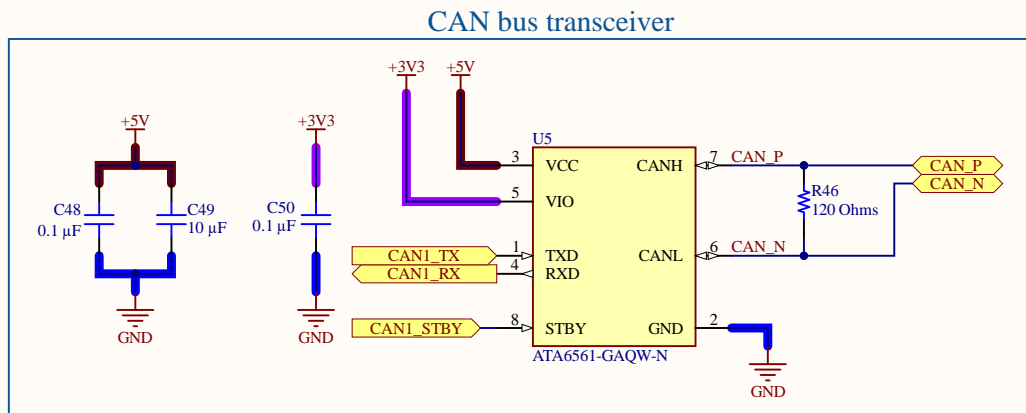
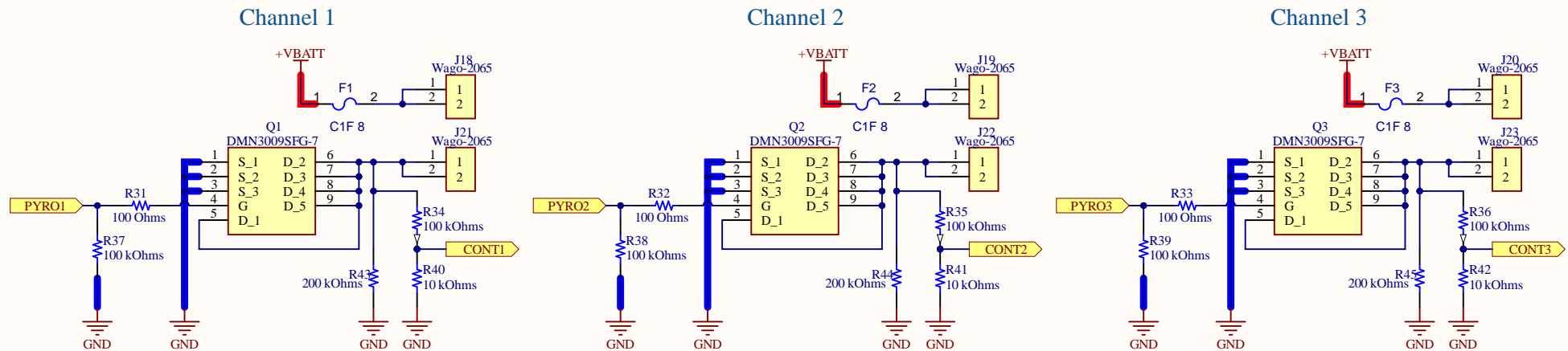



SWD header



TITLE Headers / Solder pads			
PROJECT Omnify H7	LAST MODIFIED 10/5/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Headers-SolderPads.SchDoc		SHEET 5 OF 6	

Pyro / Other peripherals



TITLE Pyro / Buzzer / CAN			
PROJECT Omnify H7	LAST MODIFIED 10/5/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Pyro-Other.SchDoc		SHEET 6 OF 6	