

Overview

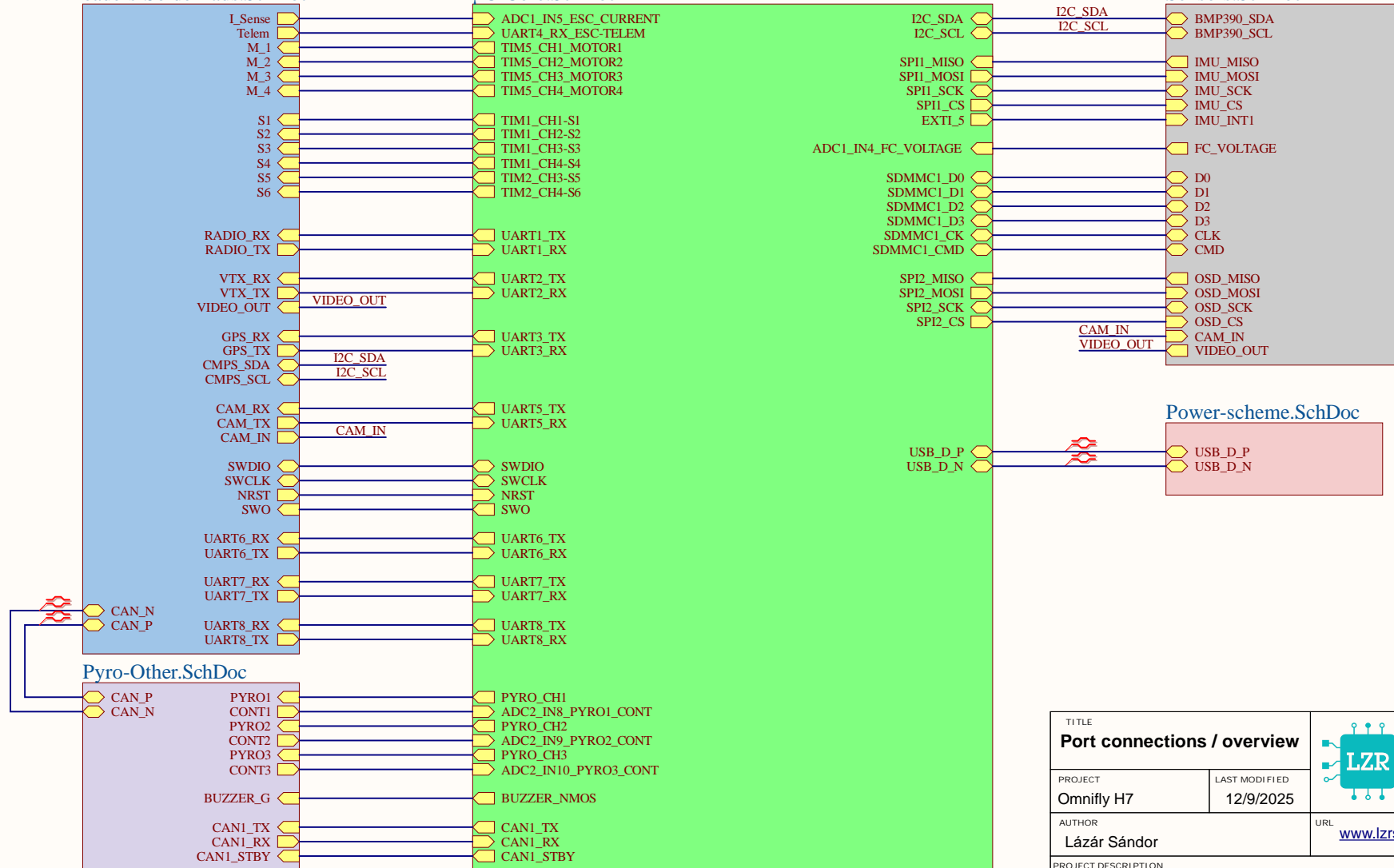
Headers-SolderPads.SchDoc


µC-Core.SchDoc

Sensors.SchDoc

Power-scheme.SchDoc

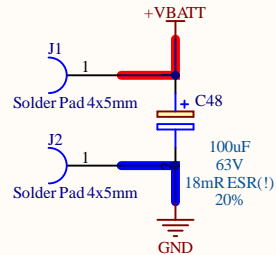
Pyro-Other.SchDoc



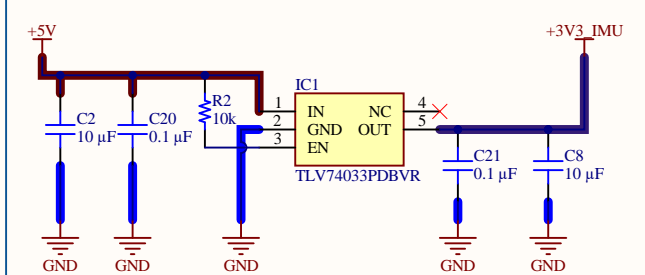
TITLE Port connections / overview			
PROJECT Omnifly H7	LAST MODIFIED 12/9/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Overview.SchDoc			SHEET 1 OF 6

Power Scheme

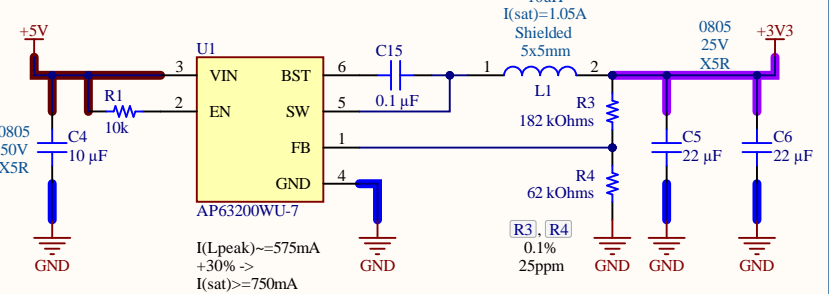
Direct battery voltage(2-6S)



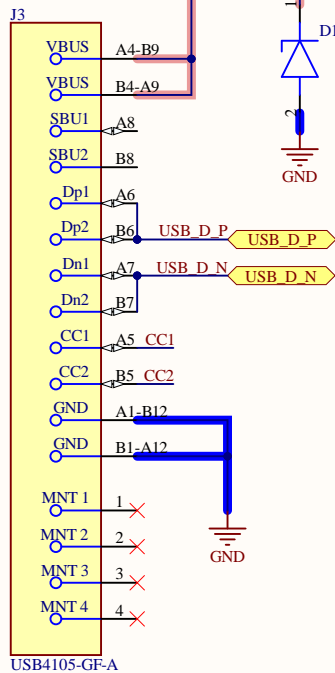
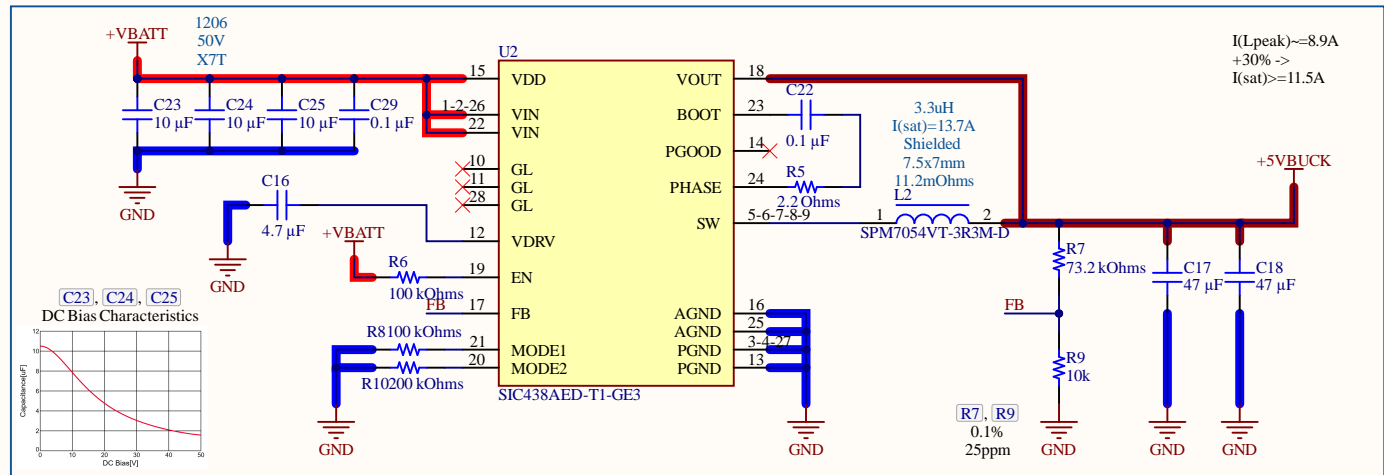
IMU LDO Regulator



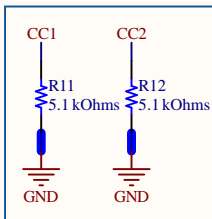
3.3V Buck Converter



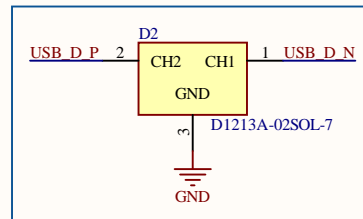
5V Buck Converter



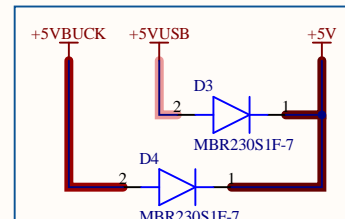
CC1, CC2 Pulldowns




USB D_P, D_N ESD Protection

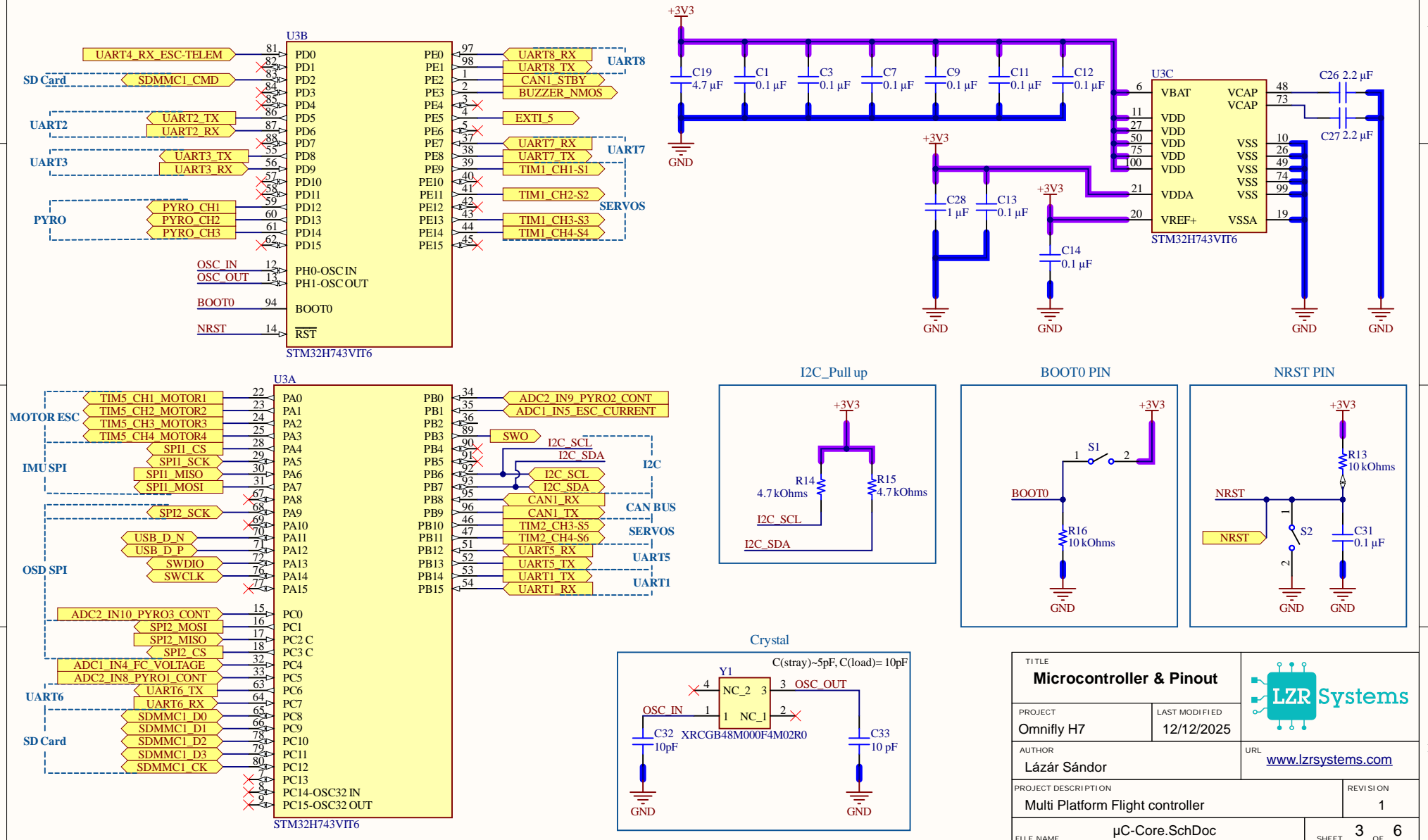



5V Rail



TITLE			
Power Scheme			
PROJECT	LAST MODIFIED		
Omnifly H7	12/12/2025		
AUTHOR		URL	
Lázár Sándor		www.lzrsystems.com	
PROJECT DESCRIPTION		REVISION	
Multi Platform Flight controller		1	
FILE NAME		SHEET	
Power-scheme.SchDoc		2 OF 6	

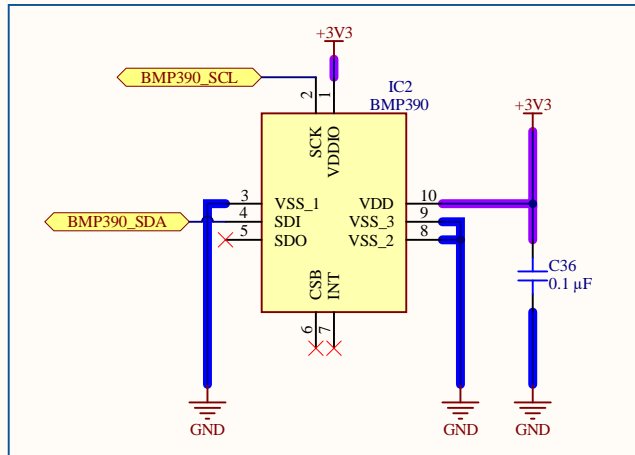
Microcontroller



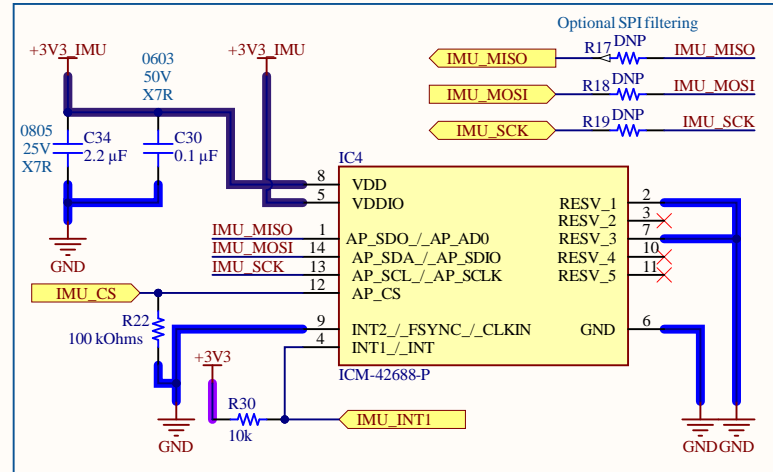
TITLE Microcontroller & Pinout			
PROJECT Omnify H7	LAST MODIFIED 12/12/2025		
AUTHOR Lázár Sándor	URL www.lzrsystems.com	REVISION 1	
PROJECT DESCRIPTION Multi Platform Flight controller		SHEET 3 OF 6	
FILE NAME µC-Core.SchDoc			

Sensors

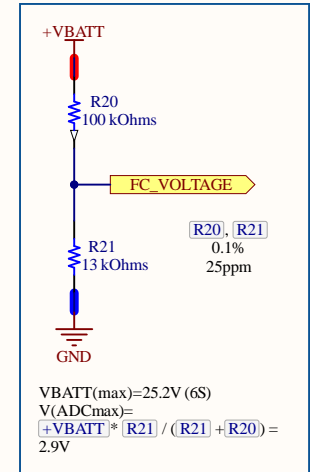
BMP390 - Barometric pressure sensor



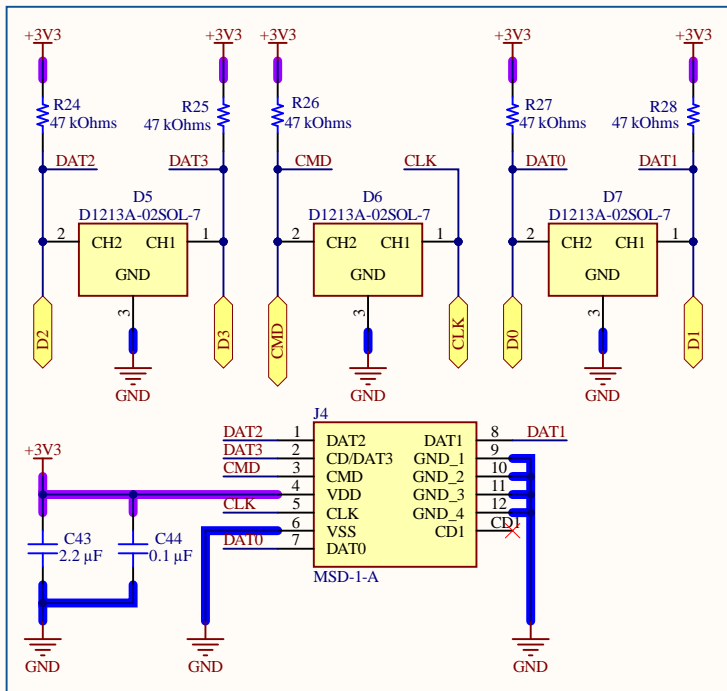
ICM-42688-P - Inertial measurement unit



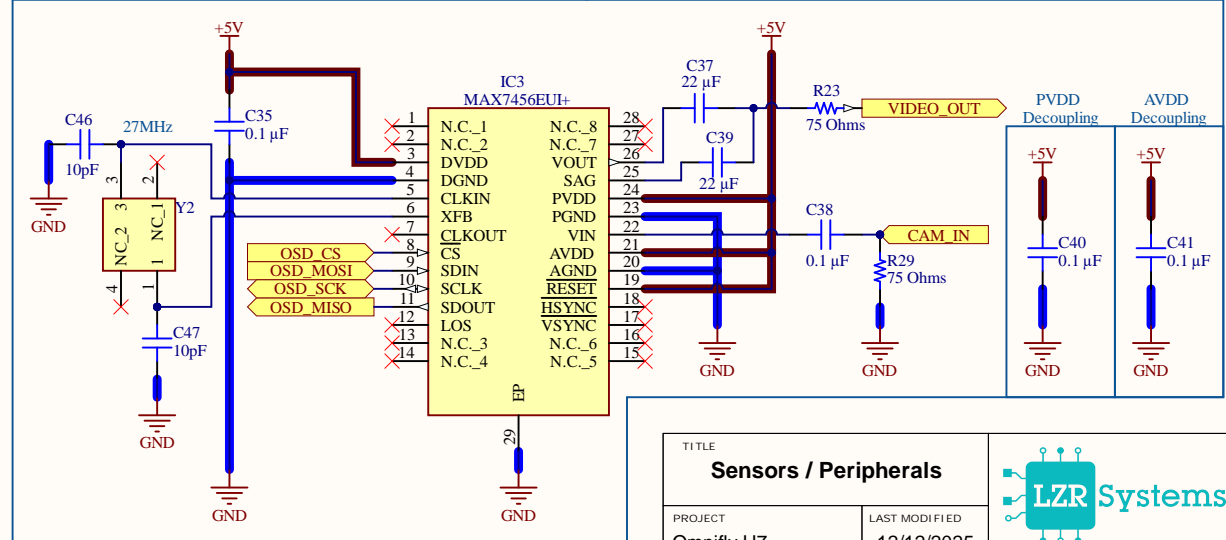
Voltage sense




MSD-1-A - micro SD Card reader



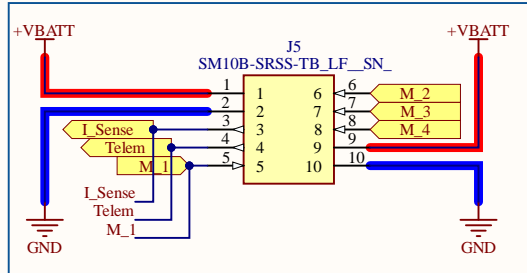
Analog video OSD interface



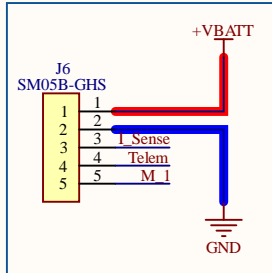
TITLE Sensors / Peripherals			
PROJECT Omnifly H7	LAST MODIFIED 12/12/2025		
AUTHOR Lázár Sándor		URL www.lzrsystems.com	
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Sensors.SchDoc			SHEET 4 OF 6

Headers-SolderPads

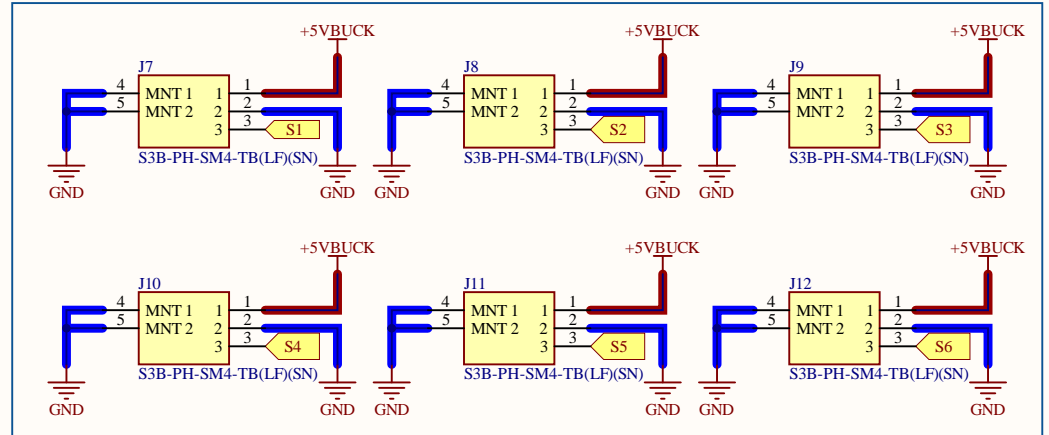
Standard quad motor ESC header



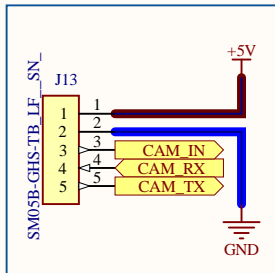
Custom single motor ESC header



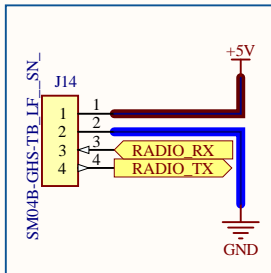
Servo headers



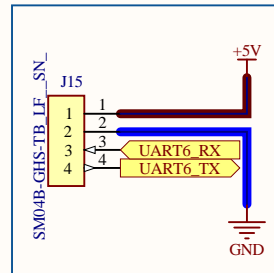
Analog FPV Camera header



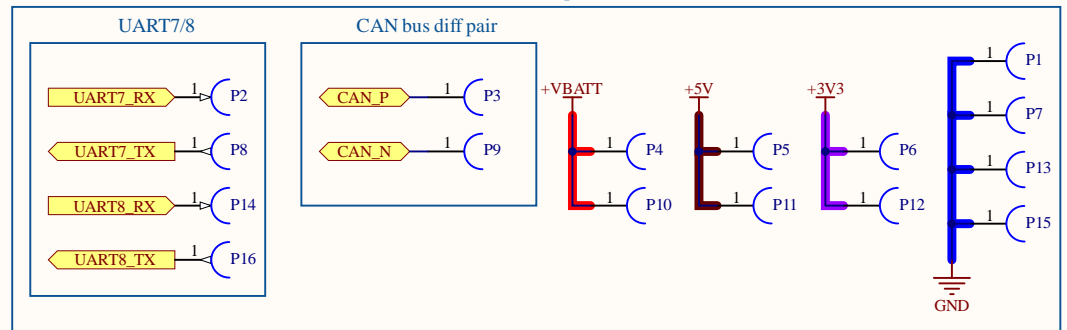
Radio / Remote header



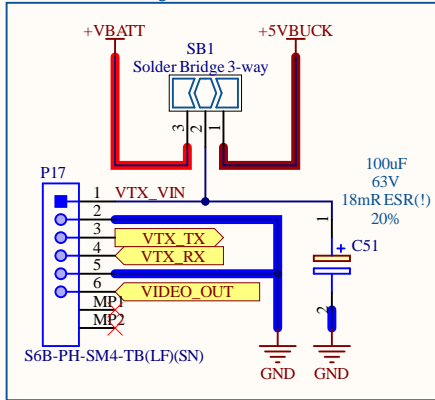
UART6 header



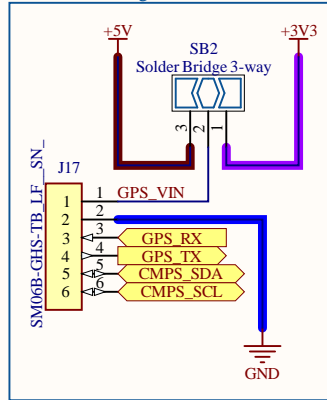
Solder pads



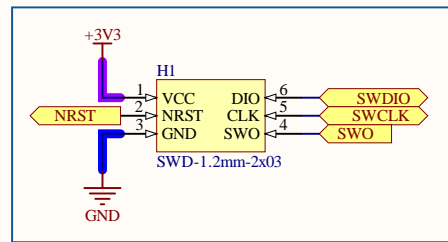
Analog VTX / DJI O4 header



GPS+Magnetometer header

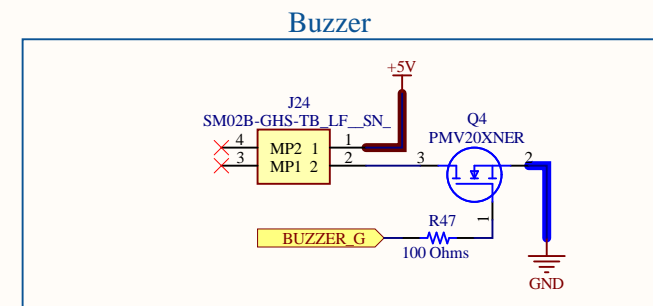
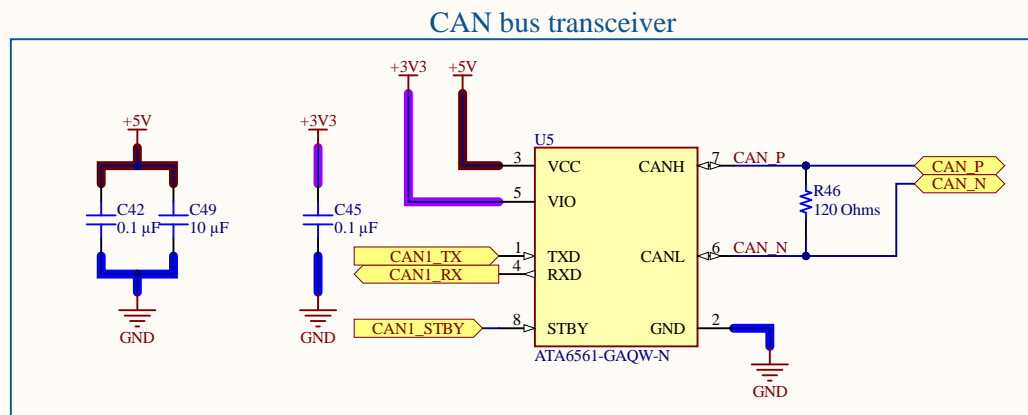
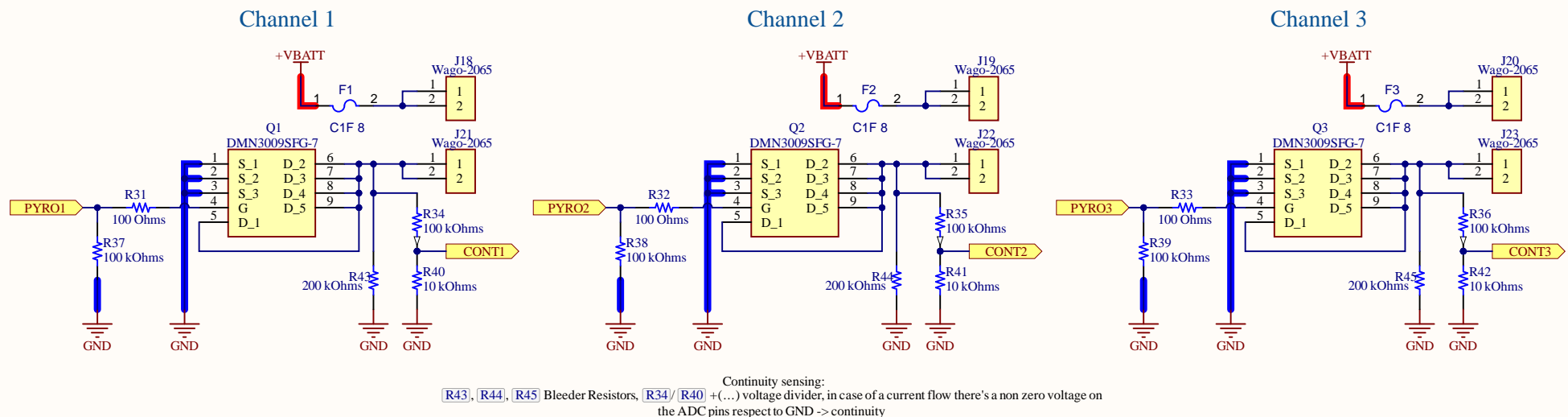



SWD header



TITLE Headers / Solder pads			
PROJECT Omnifly H7	LAST MODIFIED 12/11/2025		
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 Omniffy H7	LAST MODIFIED 12/12/2025	URL www.lzrsystems.com	
AUTHOR Lázár Sándor			
PROJECT DESCRIPTION Multi Platform Flight controller			REVISION 1
FILE NAME Pyro-Other.SchDoc		SHEET 6 OF 6	