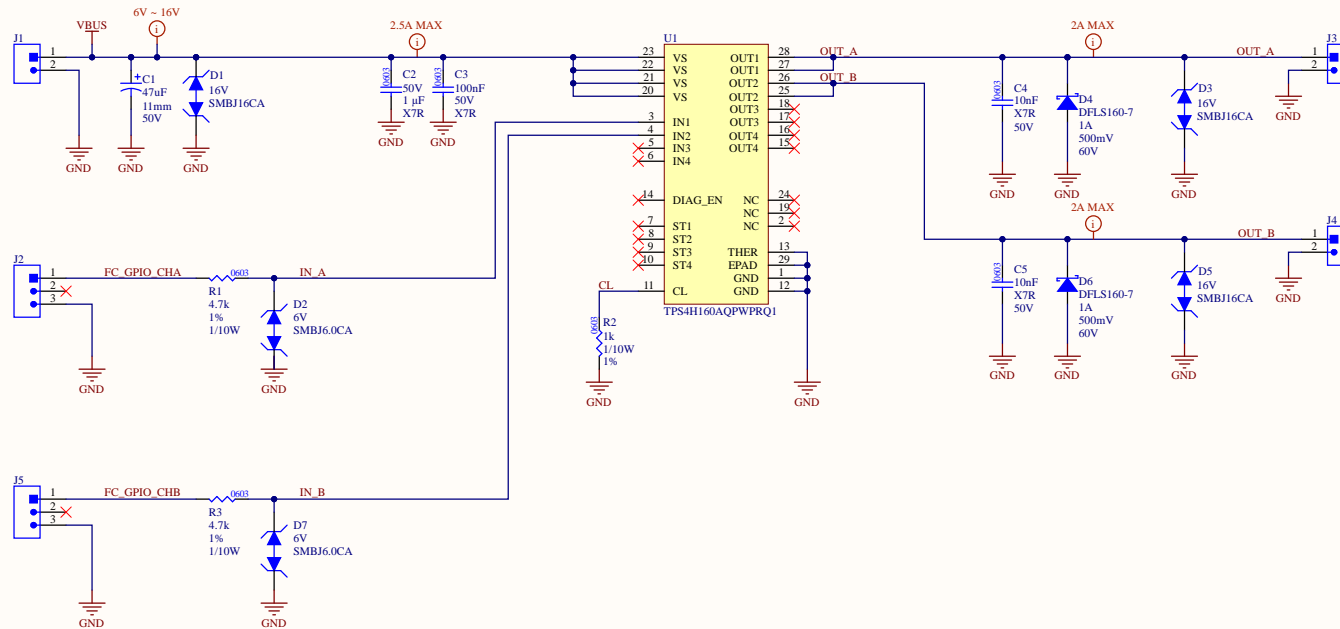


# Water System Controller

<https://uwarg-docs.atlassian.net/wiki/spaces/EL/pages/2765914176/Water+System+Controller>

Do not reverse polarity on the input. Use of gendered connectors is highly recommended. See 8.3.6.4 of ic



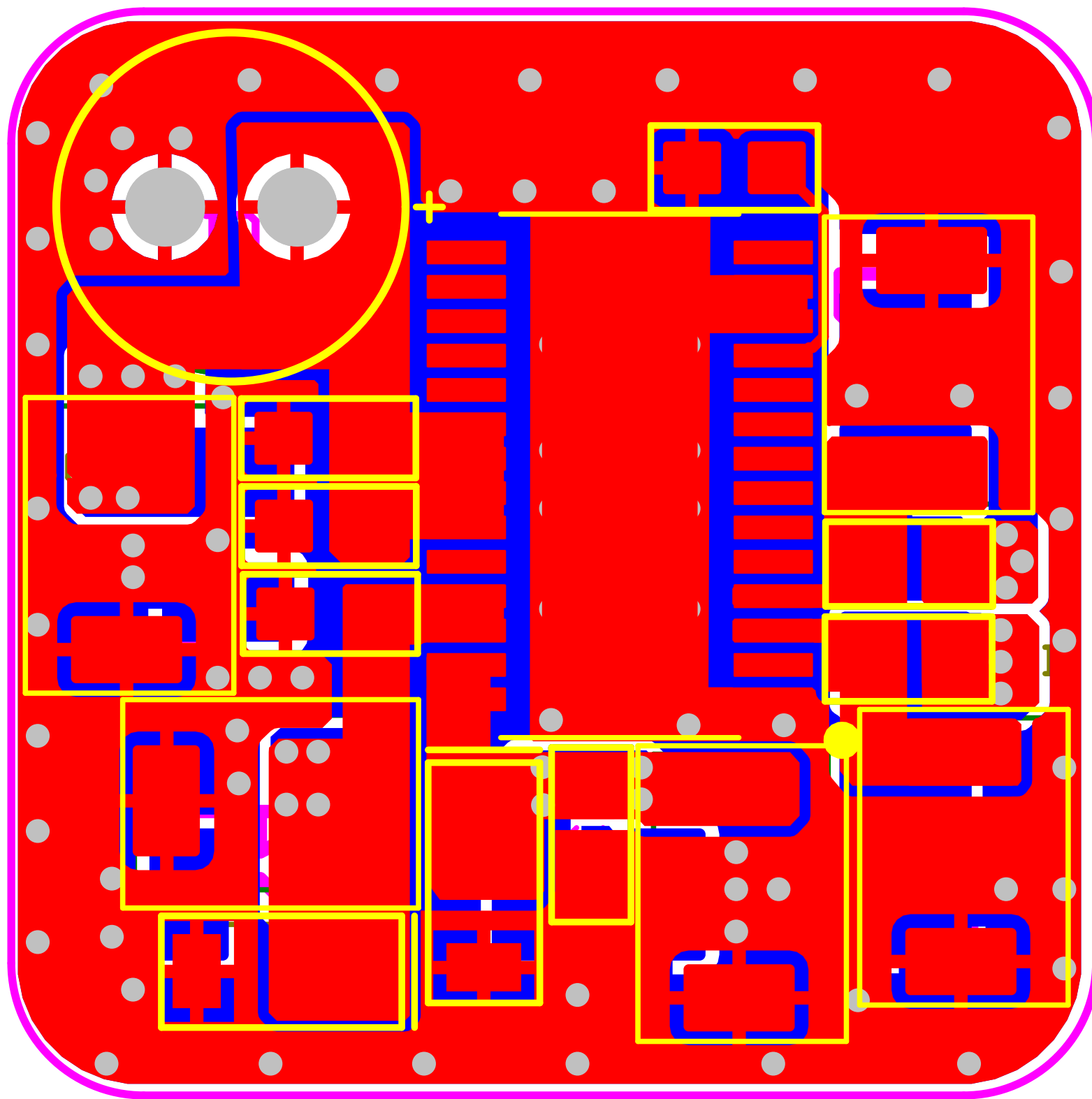
Resistors designed to protect Pixhawk by limiting current into internal clamping circuit. See IC datasheet section 9.2.2 for recommendations. TVS diodes will likely fry themselves in the case of a significant failure, but may be able to fault out an upstream buck converter.

# WARG

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PROJECT Water System Controller.PrjPcb, [No Variations]		REVISION *
DOCUMENT Schematic.SchDoc		MODIFIED 2024-11-10
ENGINEER Shawn Yang	REVIEWER *	SHEET * OF *



Comment	Description	Designator	Footprint	LibRef	Quantity
50YXF47MEFC6.3X11	CAP ALUM 47UF 20% 50V RADIAL	C1	50YXF47MEFC6.3X11- Footprint-1	CMP-00104-3	1
06035C105KAT2A	CAP CER 1uF ±10% 50V X7R 0603	C2	.CAP_0603-Footprint- 1	CMP-076-000003-3	1
CGA3E2X7R1H104K08 0AA	CAP CER 0.1UF 50V X7R 0603	C3	.CAP_0603-Footprint- 1	CMP-00227-5	1
CC0603KRX7R9BB103	CAP CER 10000PF 50V X7R 0603	C4, C5	.CAP_0603-Footprint- 1	CMP-00271-1	2
SMBJ16CA	TVS DIODE 16VWM 26VC SMB	D1, D3, D5	DO-214AA-Footprint-1	CMP-00424-1	3
SMBJ6.0CA	TVS DIODE 6VWM 10.3VC SMB	D2, D7	DO-214AA-Footprint-1	CMP-00397-2	2
DFLS160-7	DIODE SCHOTTKY 60V 1A PWR DI 123	D4, D6	DFLS160- 7_Footprint_1	CMP-00177-2	2
SOLDERPAD_2PIN	Solder Pad 2 Pins, 2.54mm pitch, 1.27mm pad size	J1, J3, J4	SOLDERPAD_2PIN- Footprint	CMP-00296-1	3
SOLDERPAD_3PIN	Solder Pad 3 Pin, 2.54mm pitch	J2, J5	SOLDERPAD_3PIN- Footprint-1	CMP-00292-3	2
RC0603FR-074K7L	RES 4.7K OHM 1% 1/10W 0603	R1, R3	.RES_0603-Footprint-1	CMP-00344-1	2
RC0603FR-071KL	RES 1k OHM 1% 1/10W 0603	R2	.RES_0603-Footprint-1	CMP-009-00012-4	1
TPS4H160AQPWPRQ1	IC PWR SWITCH N- CHAN 1:1 28HTSSOP	U1	TPS4H160AQPWPRQ1- Footprint-1	CMP-00273-2-5	1