

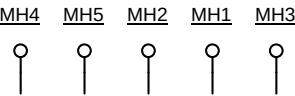


Water Recycling Board

- QUESTIONS TO ANSWER:
- 2 VALVE DRIVERS. WANT A SPARE?
 - 2 PUMP DRIVERS. WANT A SPARE?
 - CONFIRM VALVE CURRENTS 1A.

Changelog:
REV A--Initial concept. PCB Q25076-001
REV B--Change C120, C121 to 470pF.

LAYOUT FEATURES
MOUNTING HOLES

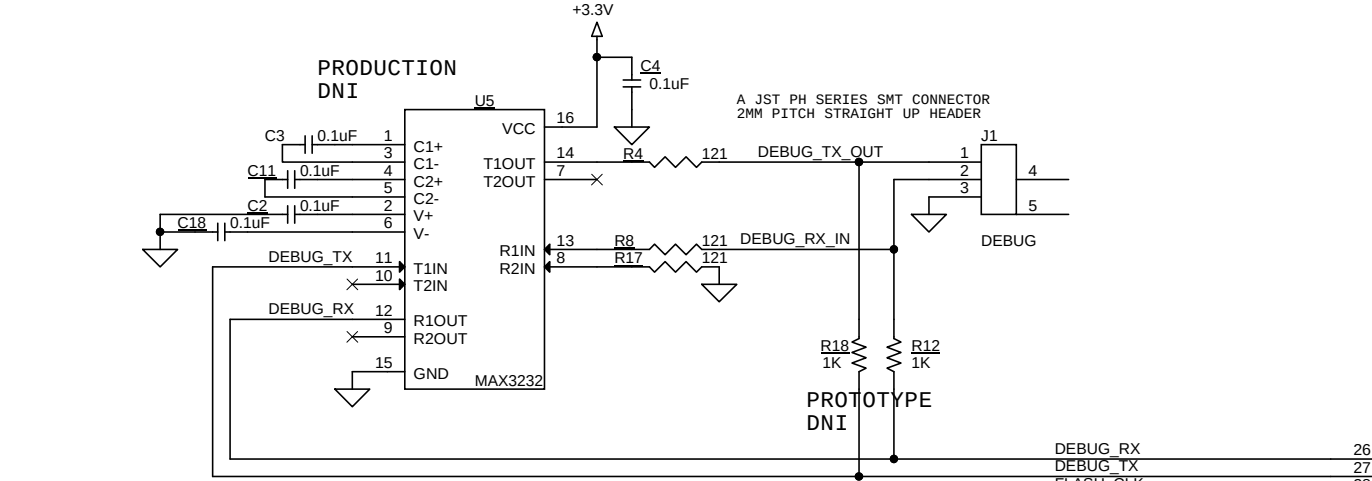


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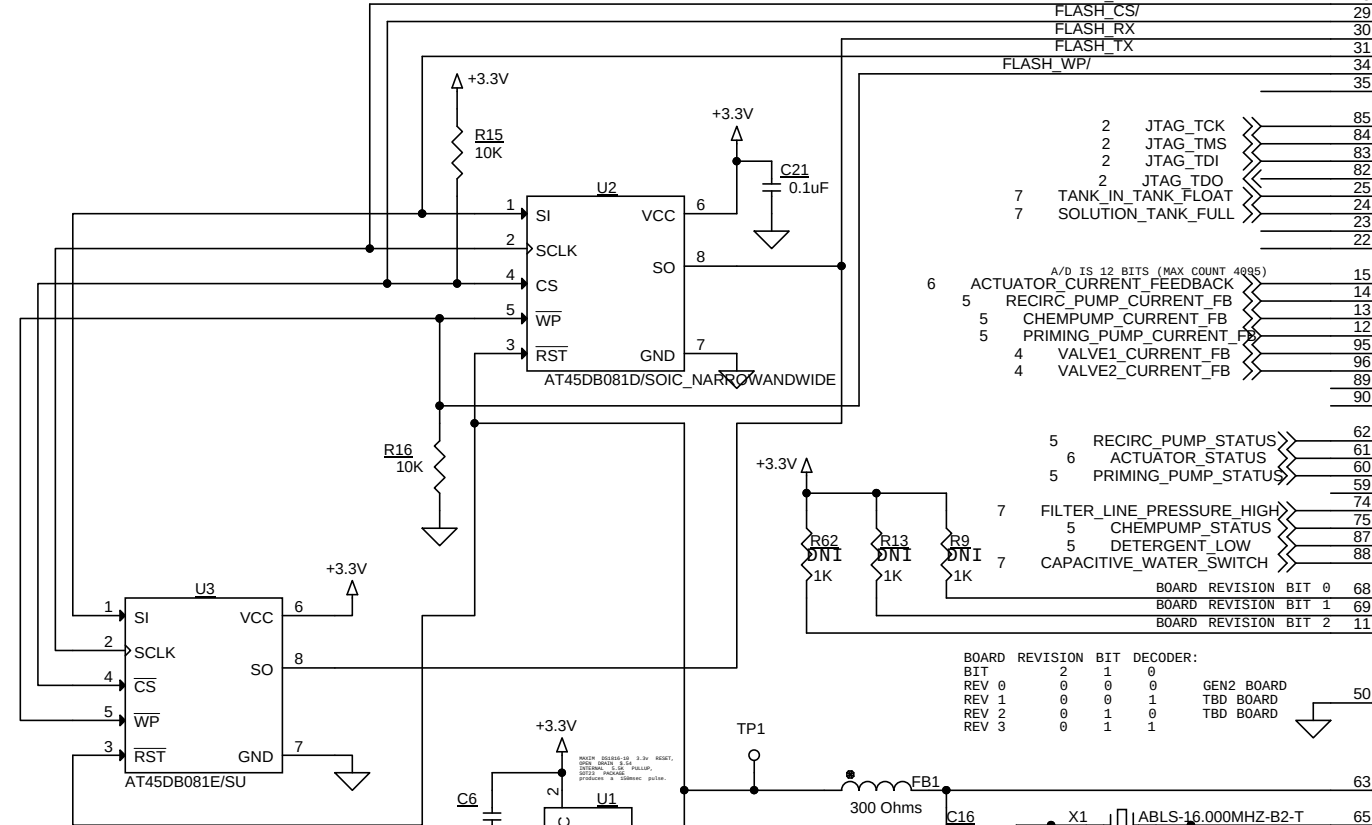
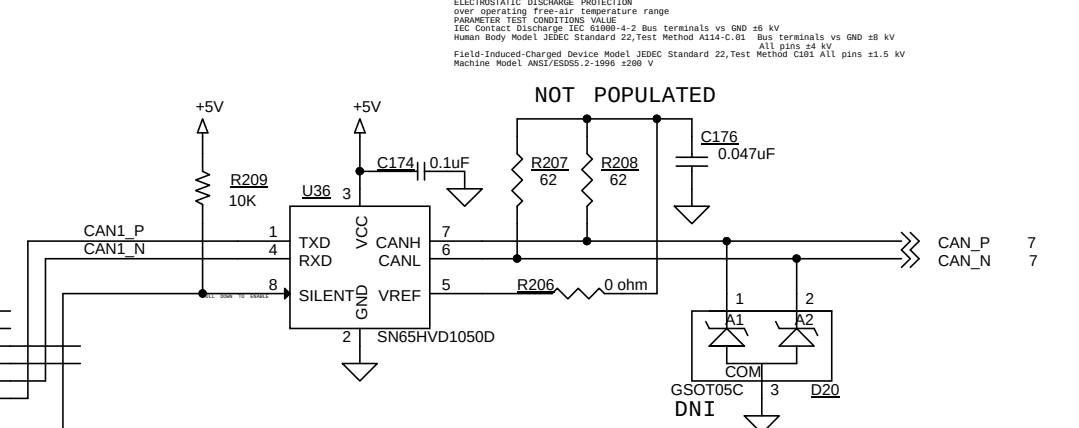
- (REFERENCE ONLY) PCA : 1231424
- (REFERENCE ONLY) BOM ITEMS:
- ☐ PCB1 Q25076-001
 - ☐ SCHEMATIC1 Q26026-001
 - ☐ FIRMWARE Q30098-001

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RS-232 SERIAL PORT

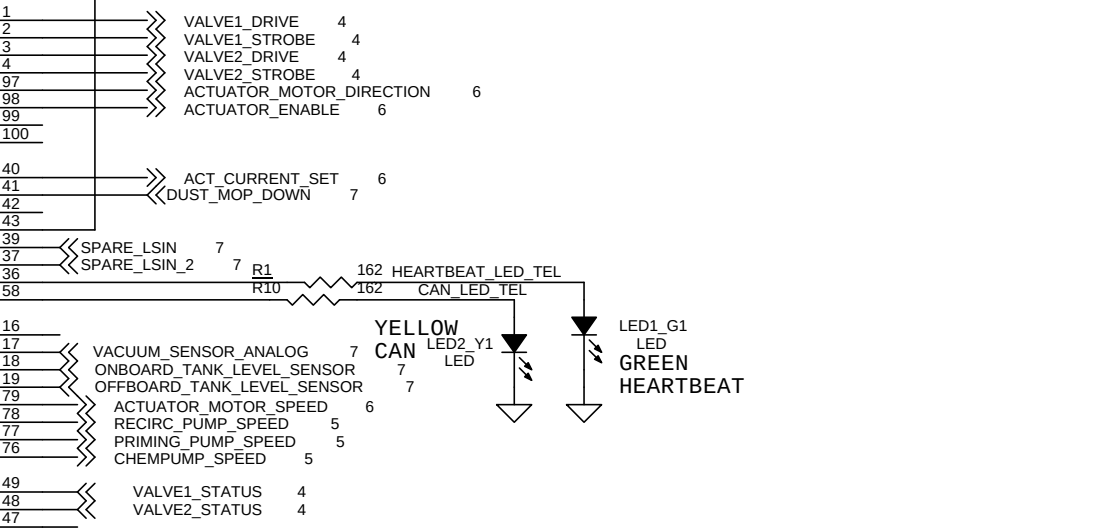


CAN INTERFACE

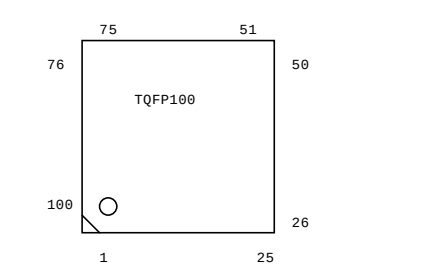
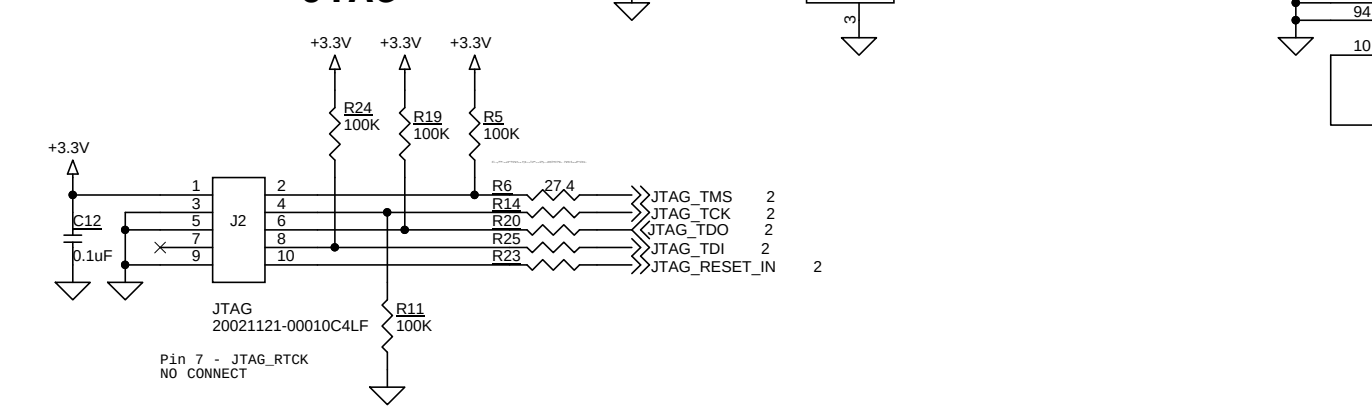


5V TOLERANT INPUTS EXCEPT PB0, PB1

PA0/U0RX	70	PB0/U1RX	71
PA1/U0TX	72	PB1/U1TX	72
PA2/SSI0CLK	73	PB2/I2C0SCL	73
PA3/SSI0FSS	74	PB3/I2C0SDA	92
PA4/SSI0RX	91	PB4/AIN10/M0PWM2	91
PA5/SSI0TX	91	PB5/AIN11/M0PWM3	91
PA6			
PA7			
PC0/TCK	85	PD0/AIN15/SSI1CLK	1
PC1/TMS	84	PD1/AIN14/SSI1FSS	2
PC2/TDI	83	PD2/AIN13/SSI1RX	3
PC3/TDO	82	PD3/AIN12/SSI1TX	4
PC4/U1RX/U1RTS/M0PWM6	25	PD4/AIN7	97
PC5/U1TX/U1CTS/M0PWM7	24	PD5/AIN6	98
PC6/U3RX	23	PD6/AIN5	99
PC7/U3TX	22	PD7/AIN4	100
PE0/AIN3	15	CAN0RX/PF0/U1RTS/M1PWM4	40
PE1/AIN2	14	PF1/U1CTS/M1PWM5	41
PE2/AIN1	13	PF2/M1PWM6	42
PE3/AIN0	12	CAN0TX/PF3/M1PWM7	43
PE4/AIN9/I2C2SCL/M1PWM2	96	PF4	39
PE5/AIN8/I2C2SDA/M1PWM3	95	PF5	37
PE6/AIN21	89	PF6	36
PE7/AIN20	90	PF7	58
PG0	62	PH0/AIN16/M0PWM0	16
PG1	61	PH1/AIN17/M0PWM1	17
PG2/M1PWM0	60	PH2/AIN18/M0PWM2	18
PG3/M1PWM1	59	PH3/AIN19/M0PWM3	19
PG4/U2RX/M0PWM4	74	PH4/SSI2CLK/M0PWM4	79
PG5/U2TX/M0PWM5	75	PH5/SSI2FSS/M0PWM5	78
PG6/M0PWM6	87	PH6/SSI2RX/M0PWM6	77
PG7/M0PWM7	88	PH7/SSI2TX/M0PWM7	76
BOARD REVISION BIT 0	68	PK0/SSI3CLK	49
BOARD REVISION BIT 1	69	PK1/SSI3FSS	48
BOARD REVISION BIT 2	11	PK2/SSI3RX	47
		PK3/SSI3TX	46
WAKE	50		
RESET	63		
OSC0	65		
OSC1	66		
XOSC1	54		
XOSC0	52		
GNDX	53		
GND1	6		
GND2	21		
GND3	33		
GND4	45		
GND5	57		
GND6	64		
GND7	81		
GND8	94		
GND9	10		
FLASH 256KB			
SRAM 32KB			
TM4C123BH6PZI			

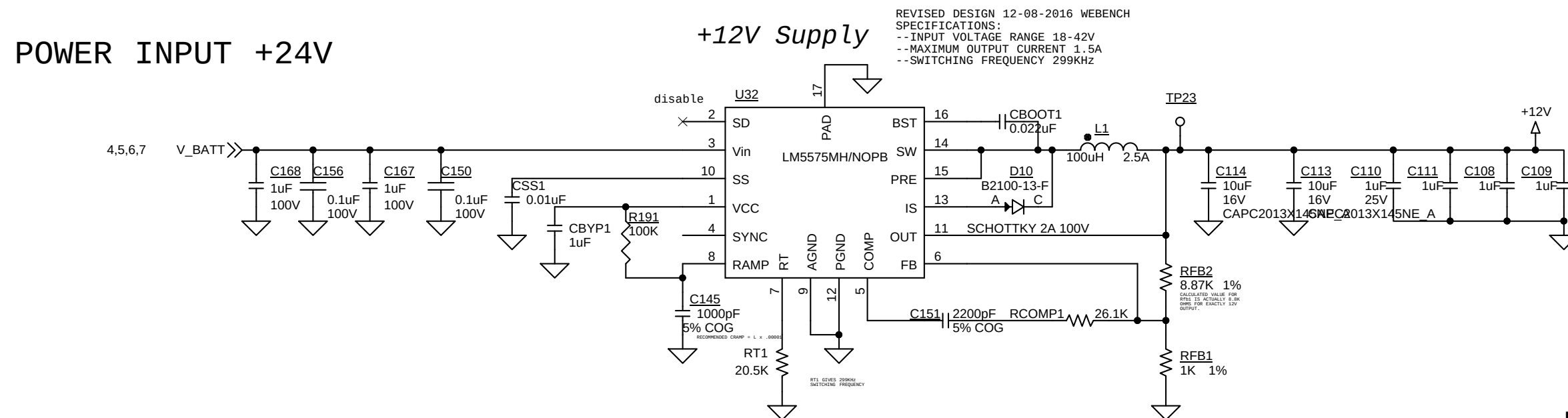
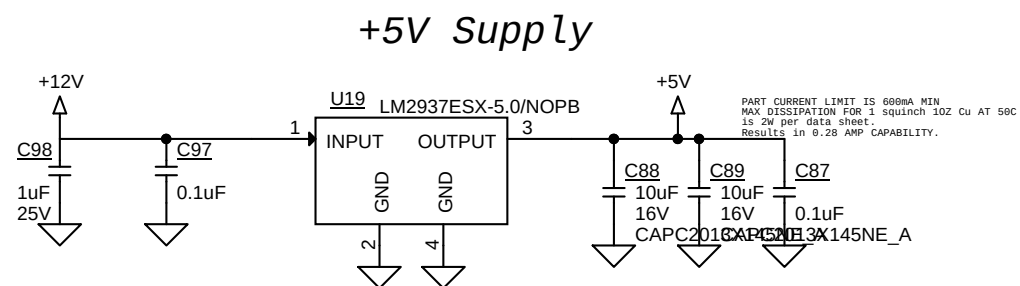
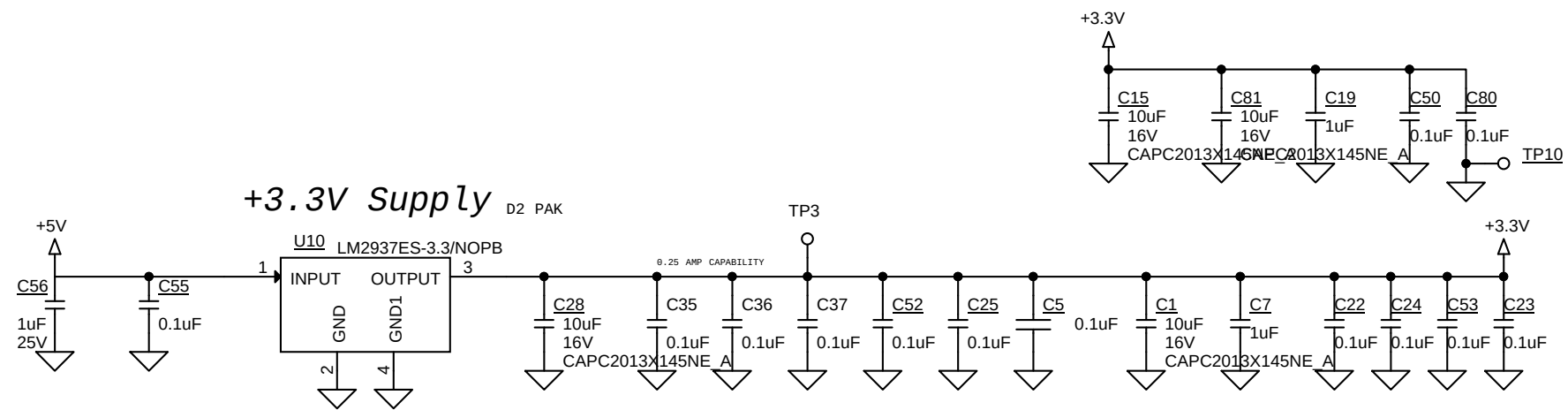


JTAG



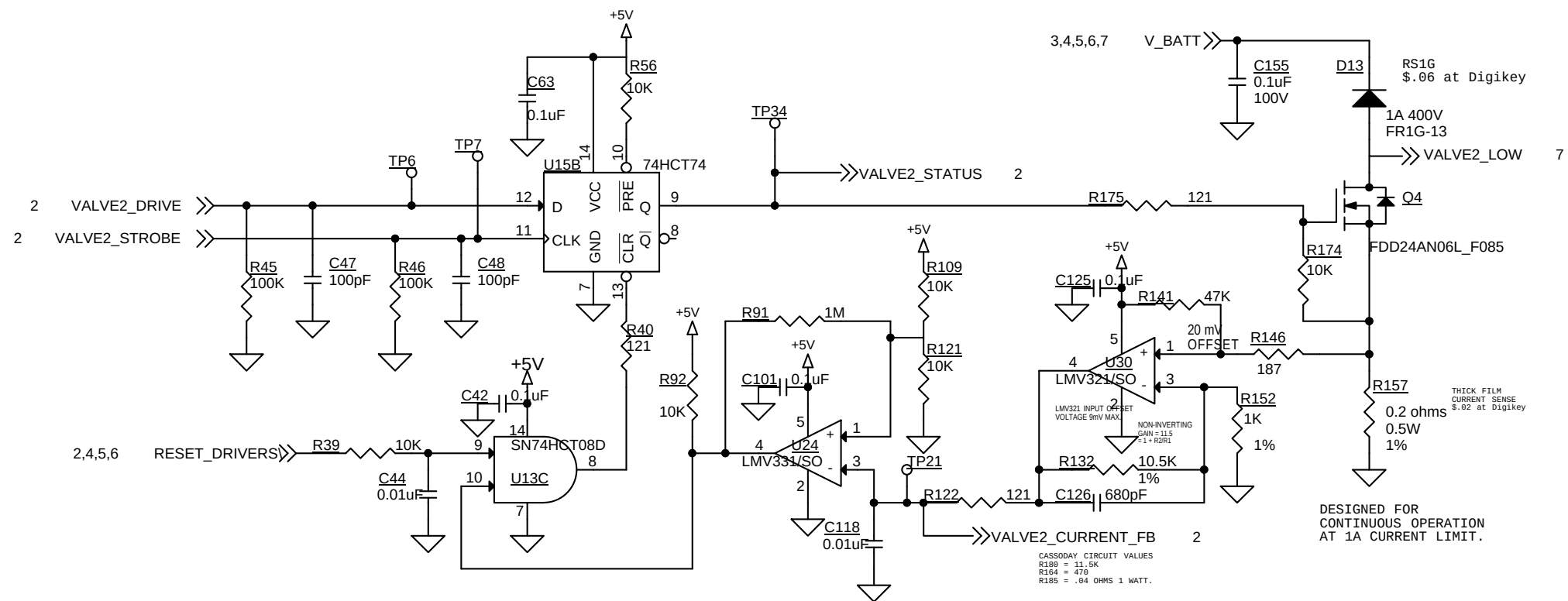
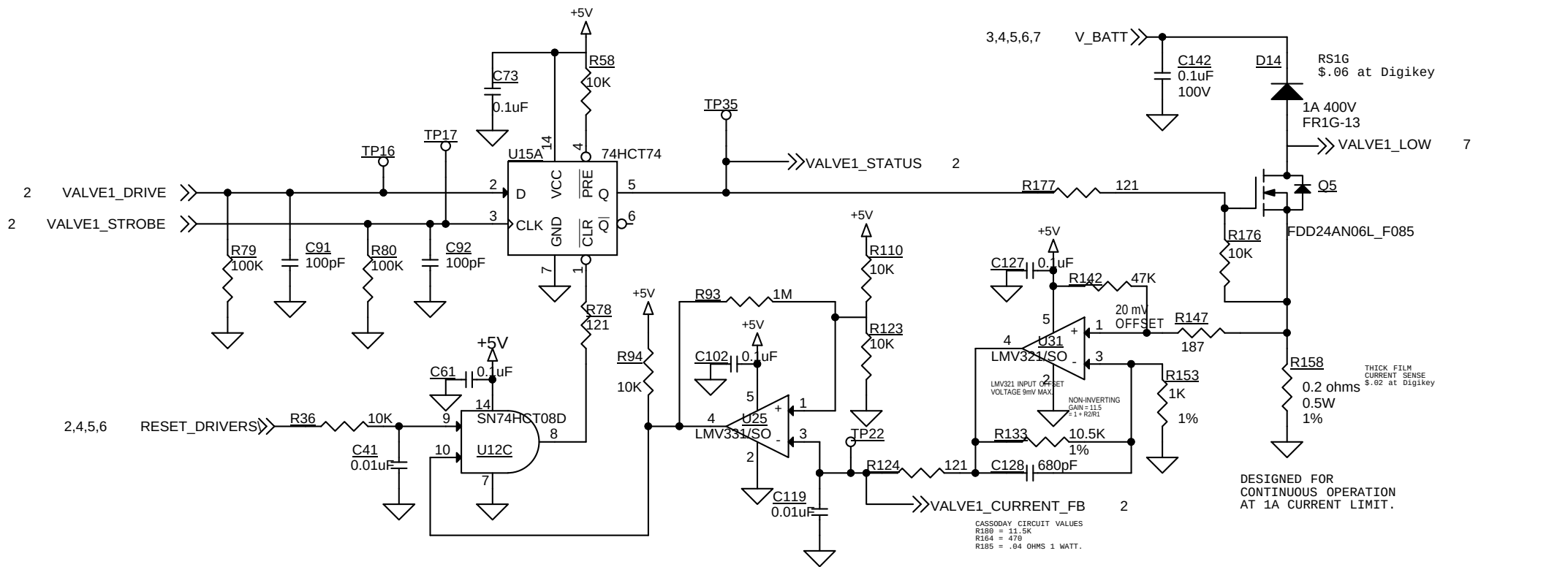
MICROPROCESSOR

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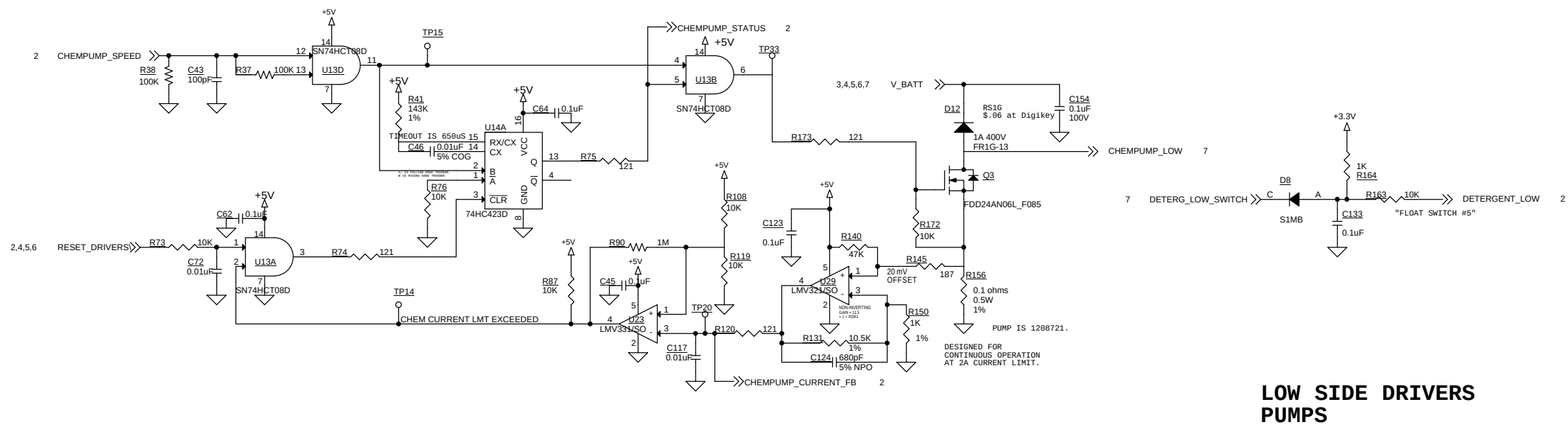
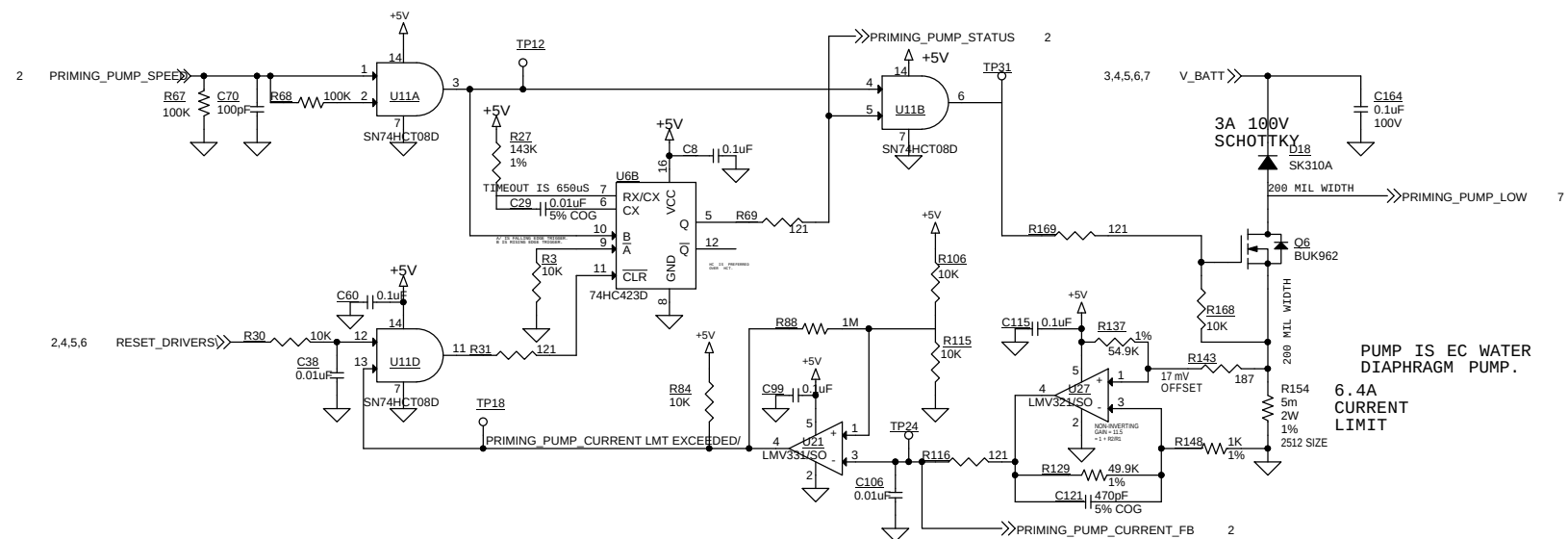
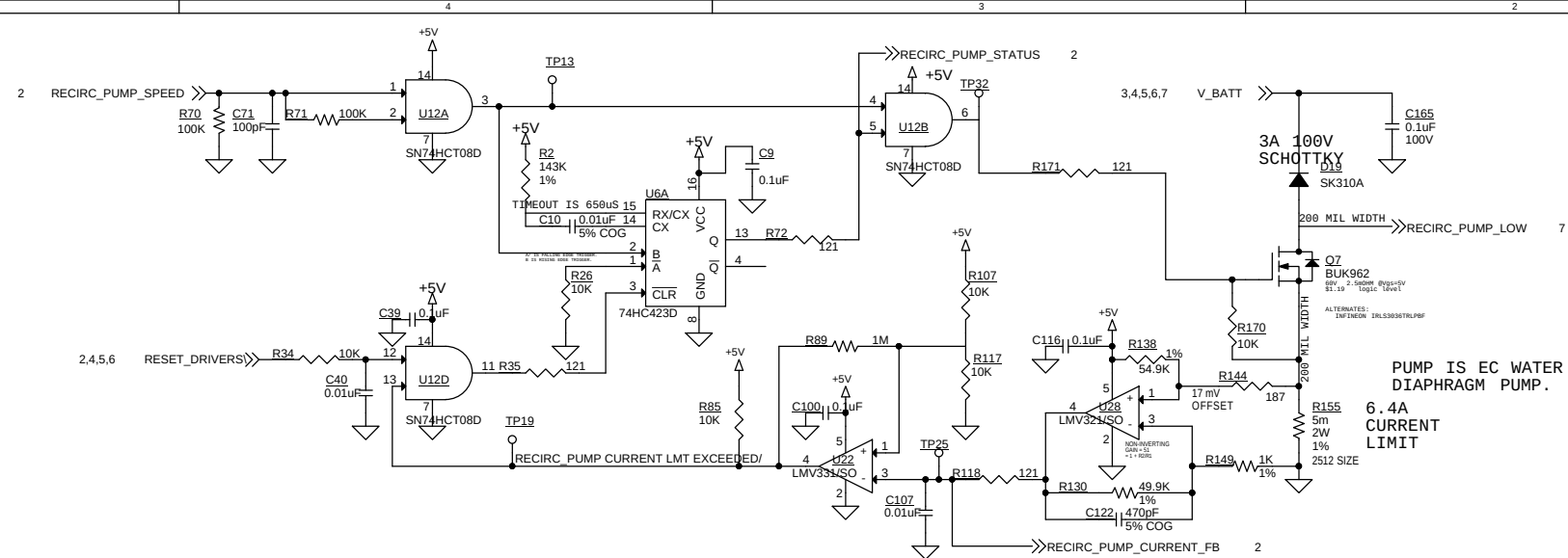
Power Supplies

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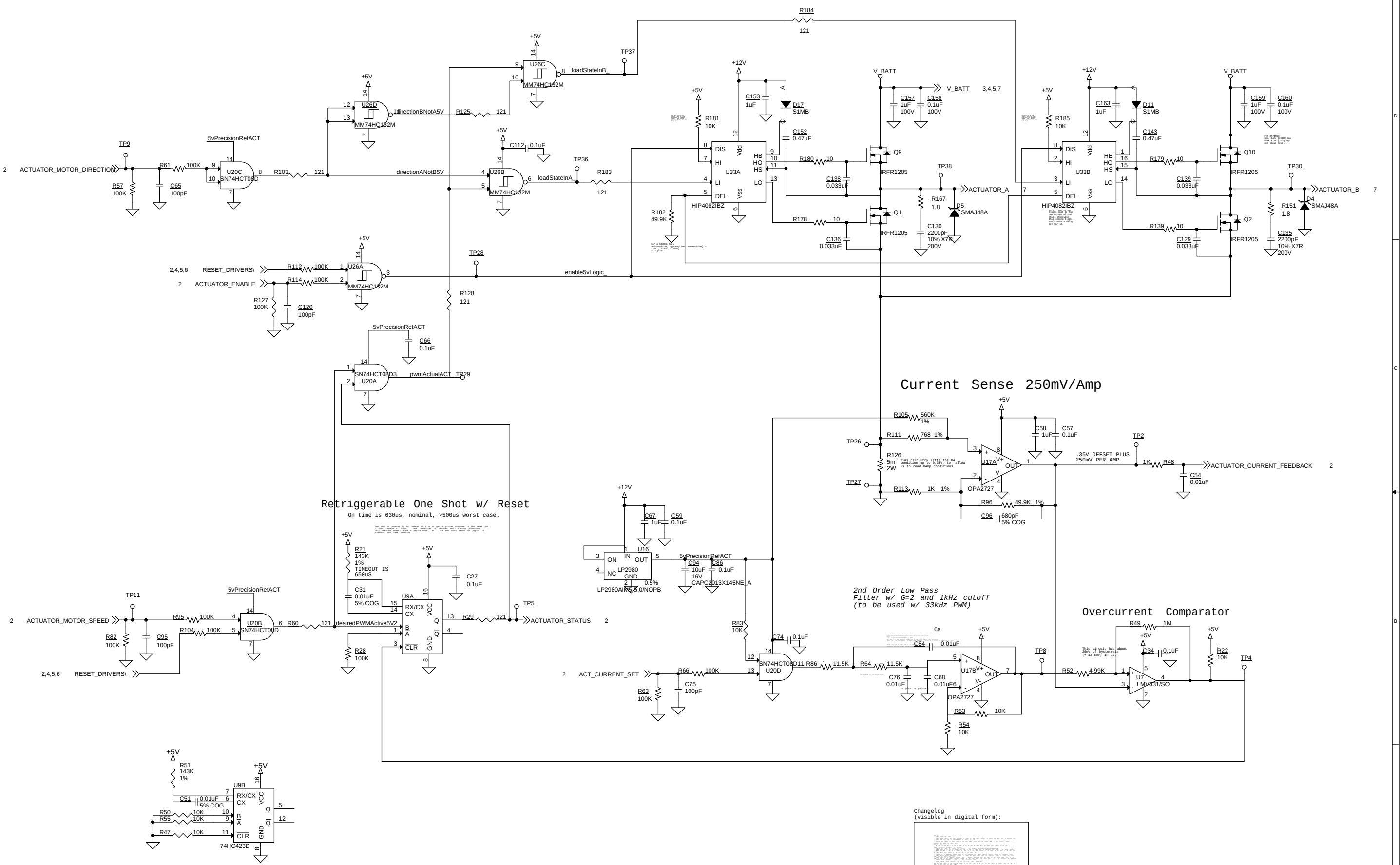
LOW SIDE DRIVERS VALVES

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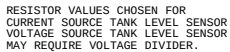
LOW SIDE DRIVERS PUMPS

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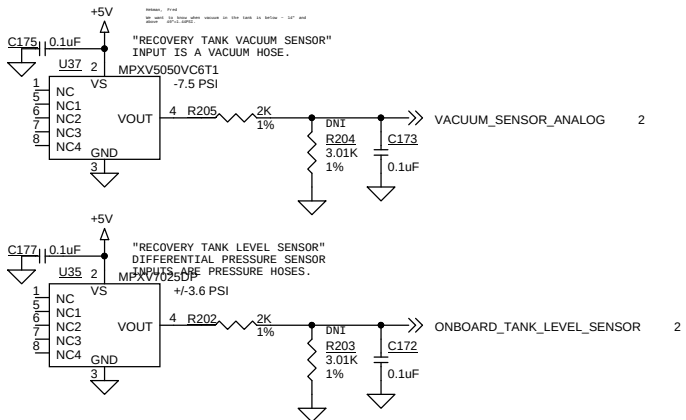


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Current limited 12V source
50mA max +12V



Per the VeeThree rep:
Sensor has a variety of configurations. This one has a somewhat non-linear output that mimics a Warner fuel gauge.
Other styles available that could give a voltage out, 4-20 mA or a "CAN" configuration of some kind.
This one has resistive output:
250 ohms empty
103 ohms $\frac{1}{2}$ full (presumably 12" of water on a 24" unit)
33 ohms full (presumably 24" of water on a 24" unit)
With $\pm 4\%$ accuracy on the pressure sensor.
It is OK for use on 12 or 24 VDC, rated from 8-32VDC.



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