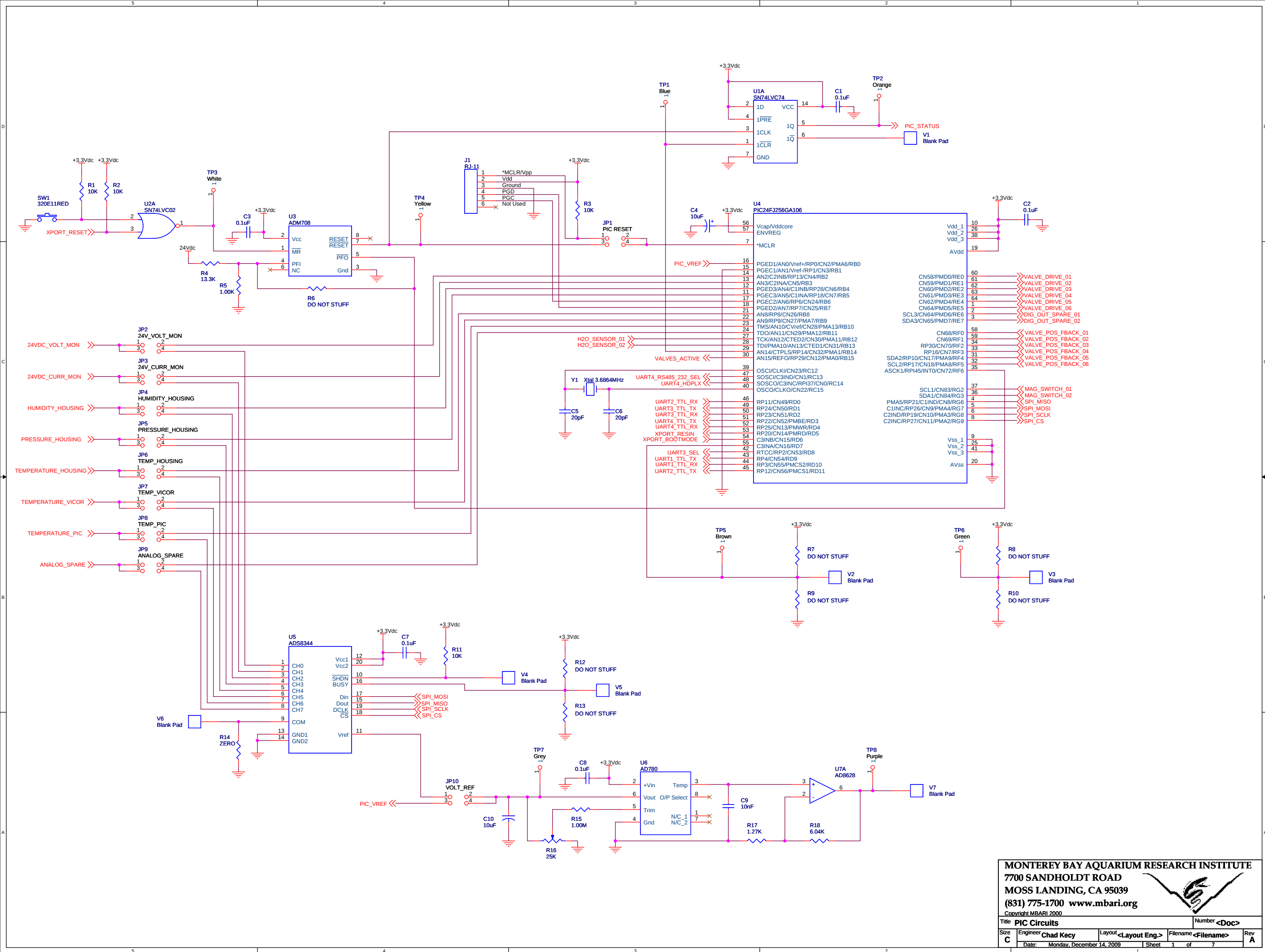
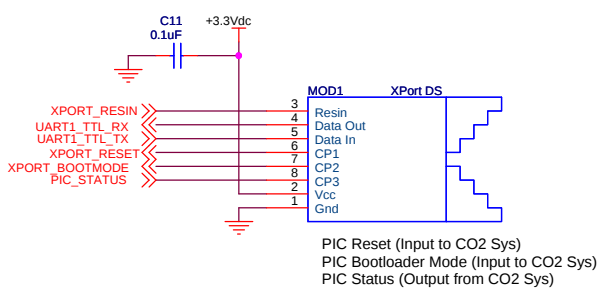


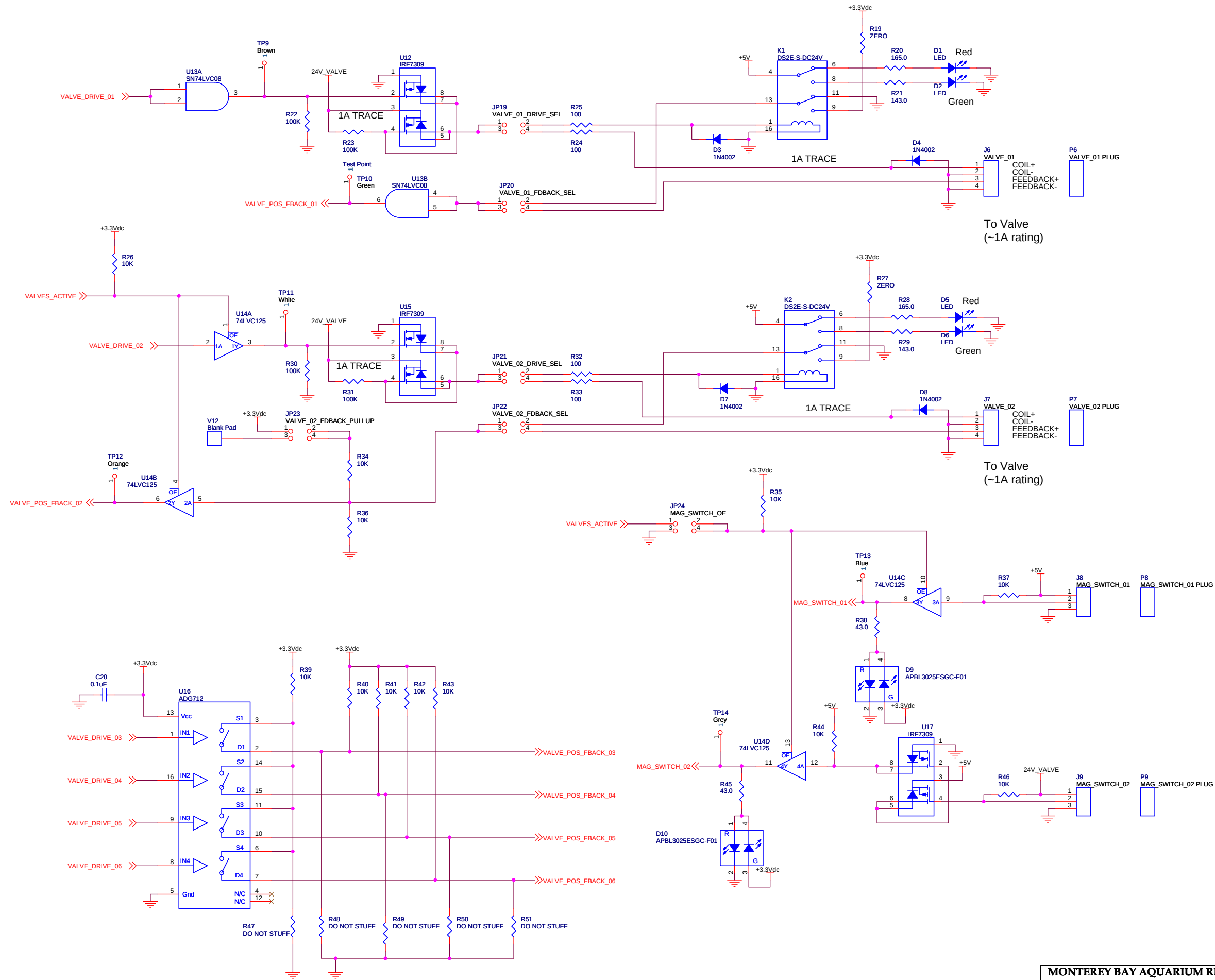




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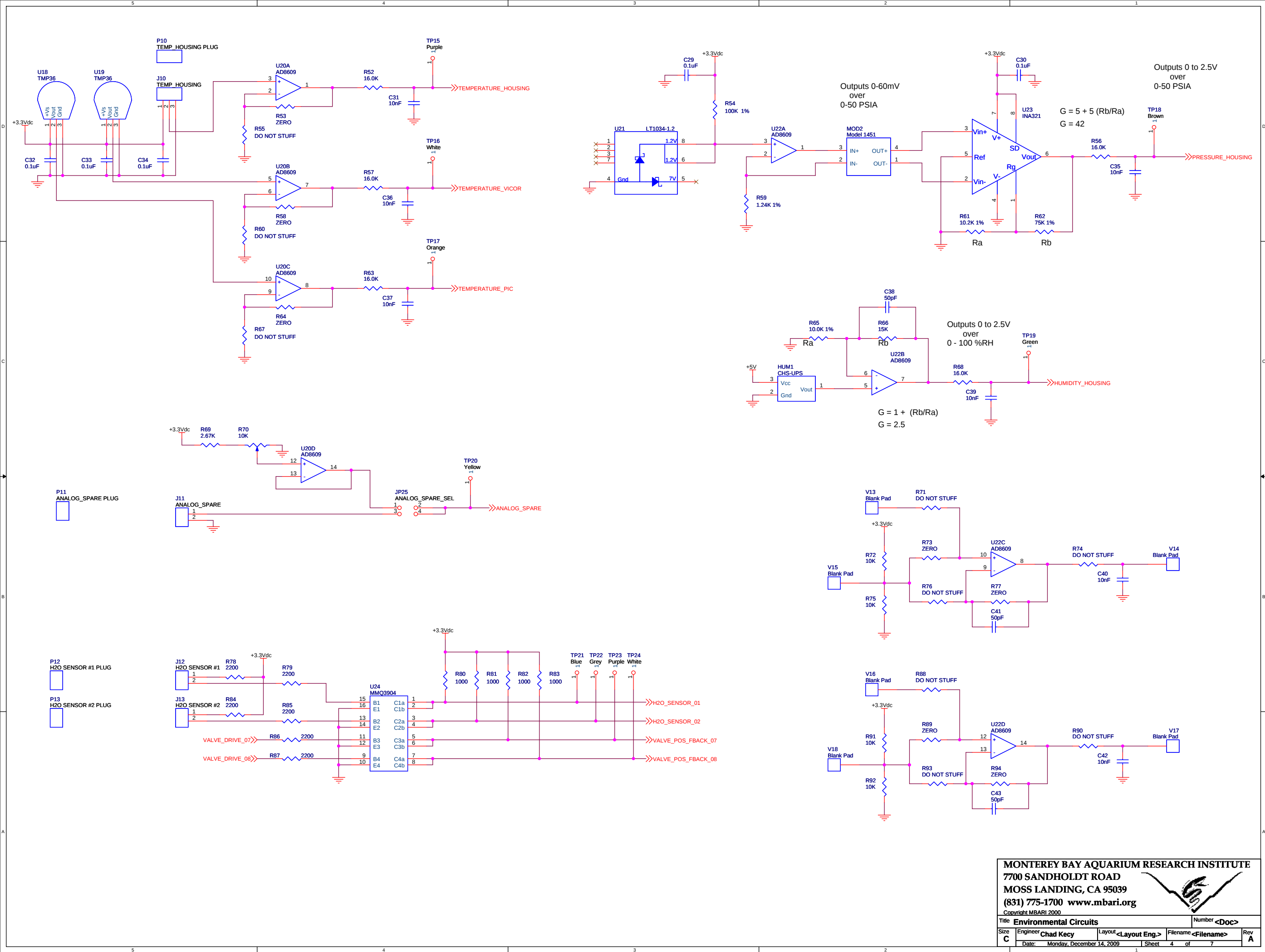


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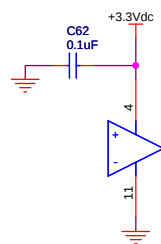
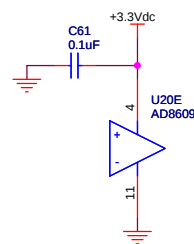
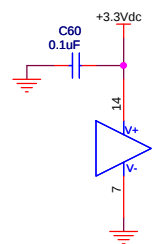
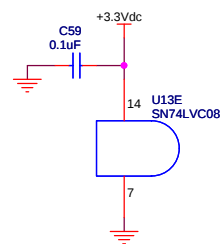
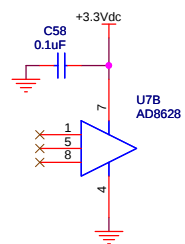
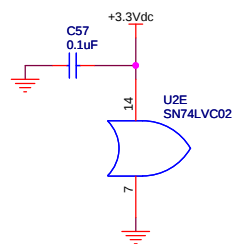
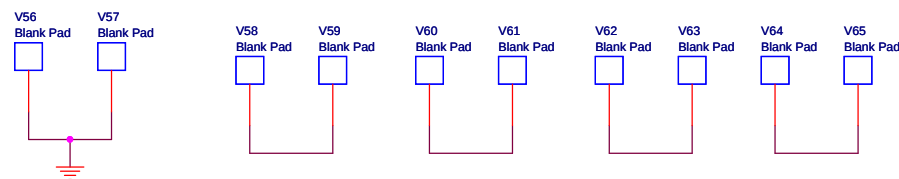
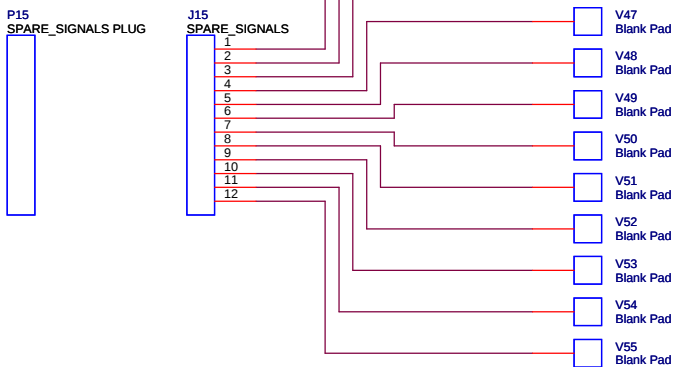
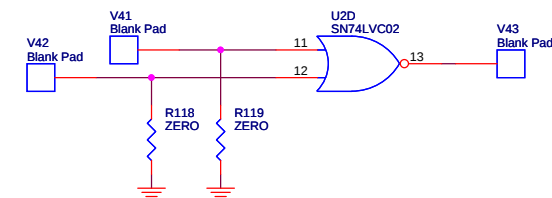
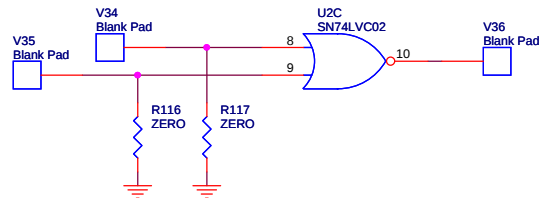
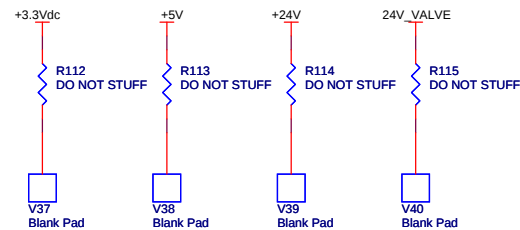
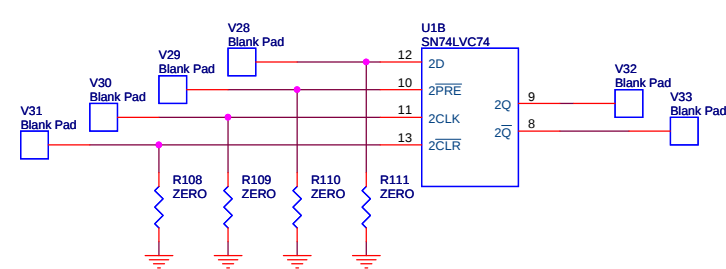
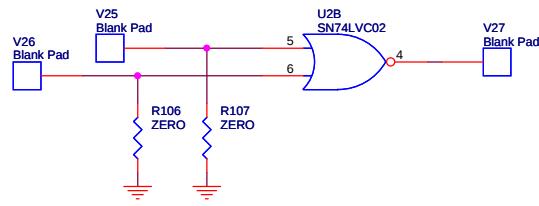
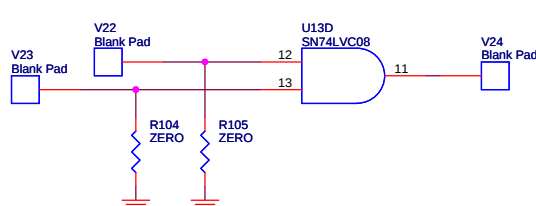
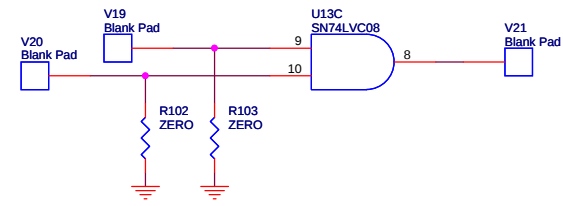
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Board Fabrication

Size of board ~6" x 8"

Four layer board

- Signal
- Power (Share 3.3V and 5V)
- Ground
- Signal

Mounting holes in the corners.

Trace current ratings noted on schematic as needed.

Need four boards built and populated.

Parts Placement

Place all components on top side of board.
(IC bypass caps can go on backside)

Space JP2-JP9 out so they do not look like one giant jumper set.

Place U19 near U27.

JP11, JP14, JP17, and JP18 near respective connectors.

TP32-TP36 spread out on edges of board.

D11-D14 lined up near each other (placed close to PS circuits)

TP26-29 near respective LEDs.

C45 directly across U25-1 and U25-2

C52 directly across U26-1 and U26-2

C50 directly across U27-1 and U27-3

C49 directly across U28-IN and U85-TAB

Minimize trace length between Y1, U4, C5, and C6.

Silkscreening

All components have their part number shown (C1, R1, ...)

All blank pads have their part number shown (V1, V2, ...)

All Jumpers also have pin 1 indicated with an arrow.

LEDs

- D11 '24V Valve'
- D12 '24V'
- D13 '3.3V'
- D14 '5V'

CONNECTORS

- J1 'PIC Program'
- MOD1 'Ethernet'
- J2 'UART #2'
- J3 'UART #3'
- J4 'UART #3'
- J5 'UART #4'
- J6 'Valve #1'
- J7 'Valve #2'
- J8 'Mag Switch #1'
- J9 'Mag Switch #2'
- J10 'Housing Temp'
- J11 'Analog Spare'
- J12 'H2O Sense #1'
- J13 'H2O Sense #2'
- J14 'Power In'
- J15 'Spare Signals'

Label SW1 'Reset'