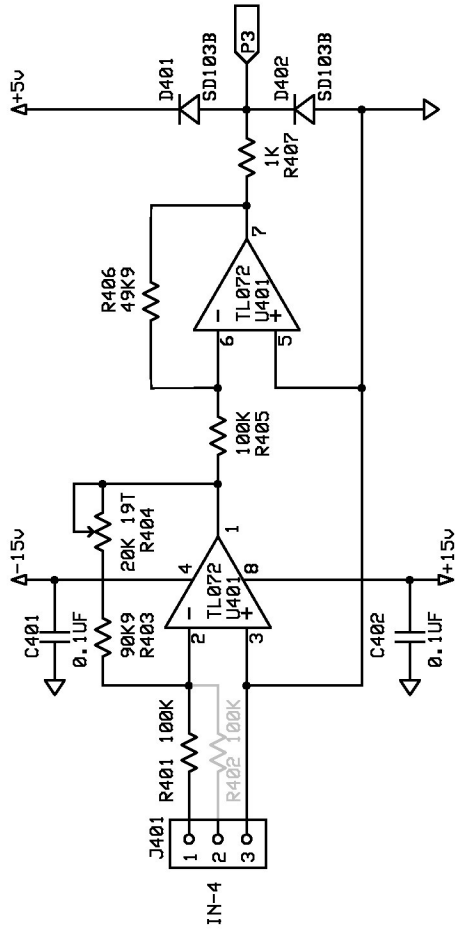
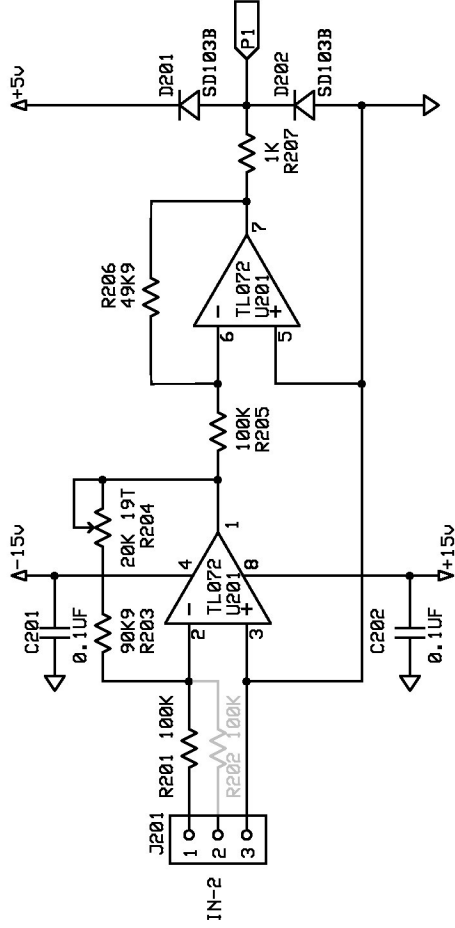
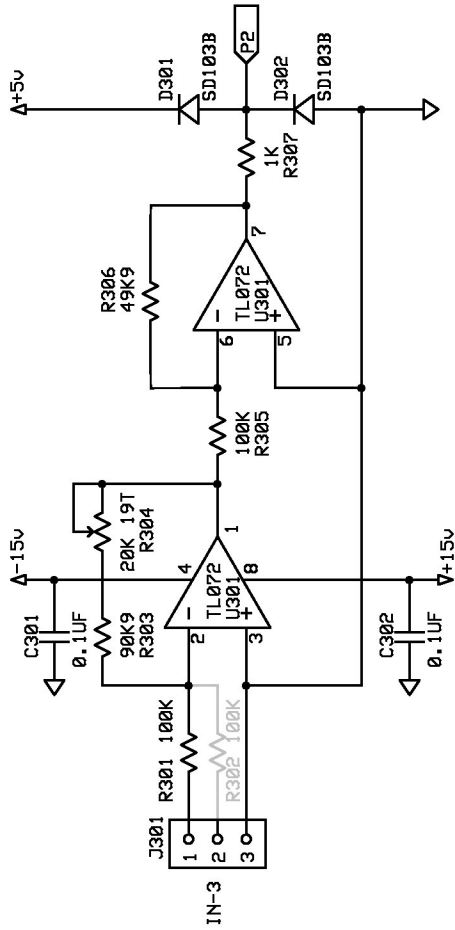
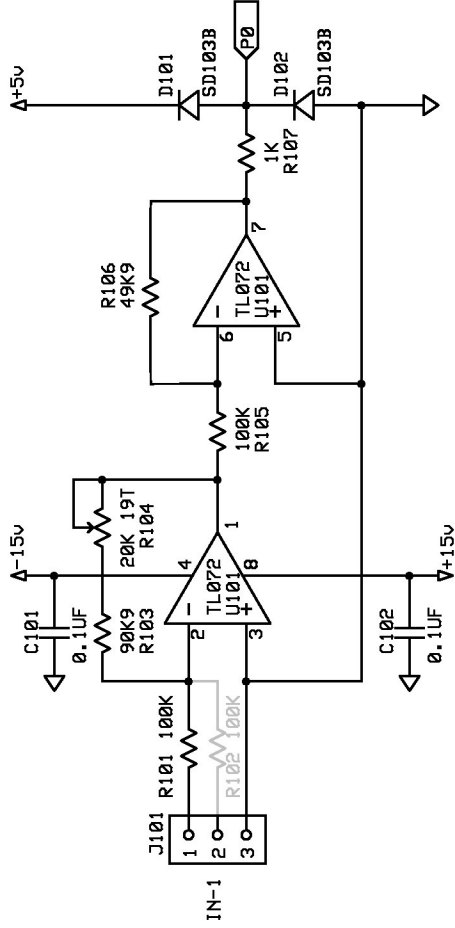


Calibration Notes:

Trim range is 0.467 to 0.537. Adjust while measuring the voltage at the AtomPro28 input pins to compensate for the attenuation from the 1K Rx02 series resistor. Ideal calibration procedure is to set the trim so that a 10.0 volt input equals a value of 1023 and check that that a 5.0 volt input results in a value of 511.



Design Notes:

P0-P3 not current limited if pin set to output high and input clamped
 R107, R207, R307, R407 may be changed to 3K to limit current if output high
 and input 0 to 10 volts

ComputerVoltageSource

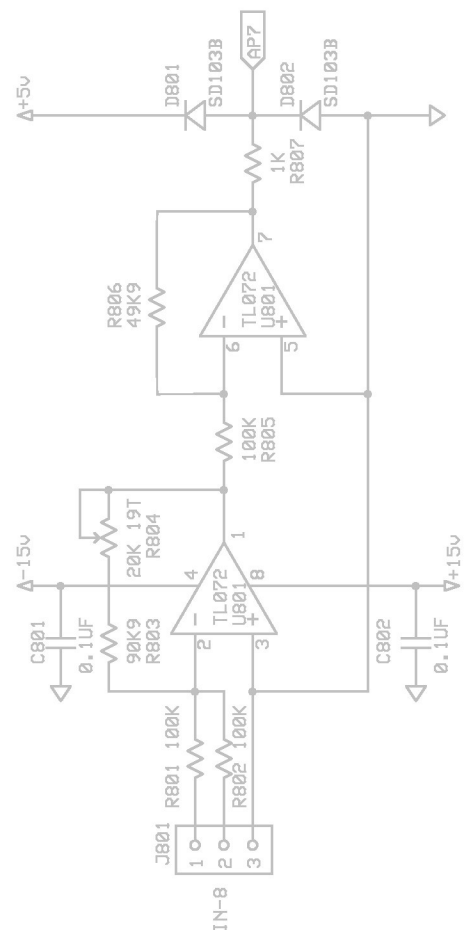
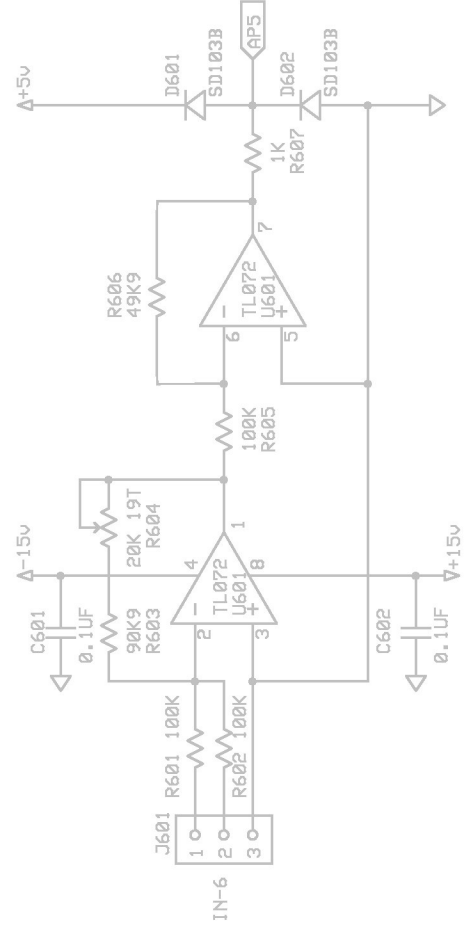
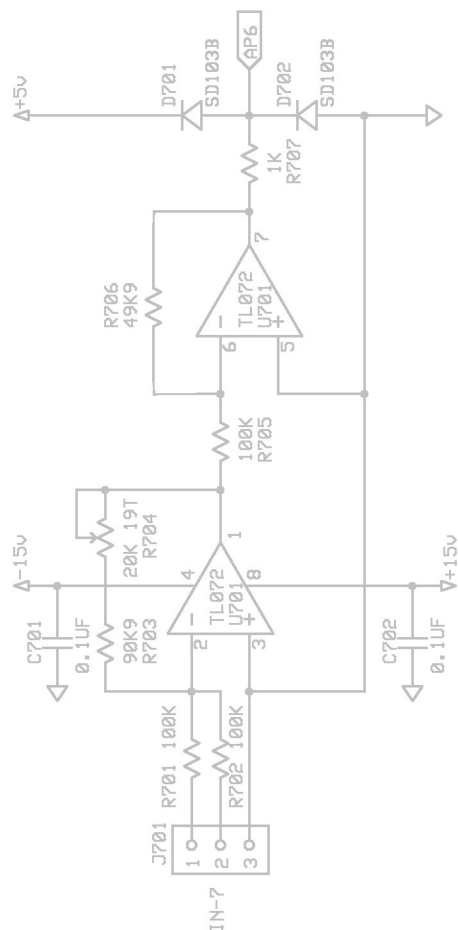
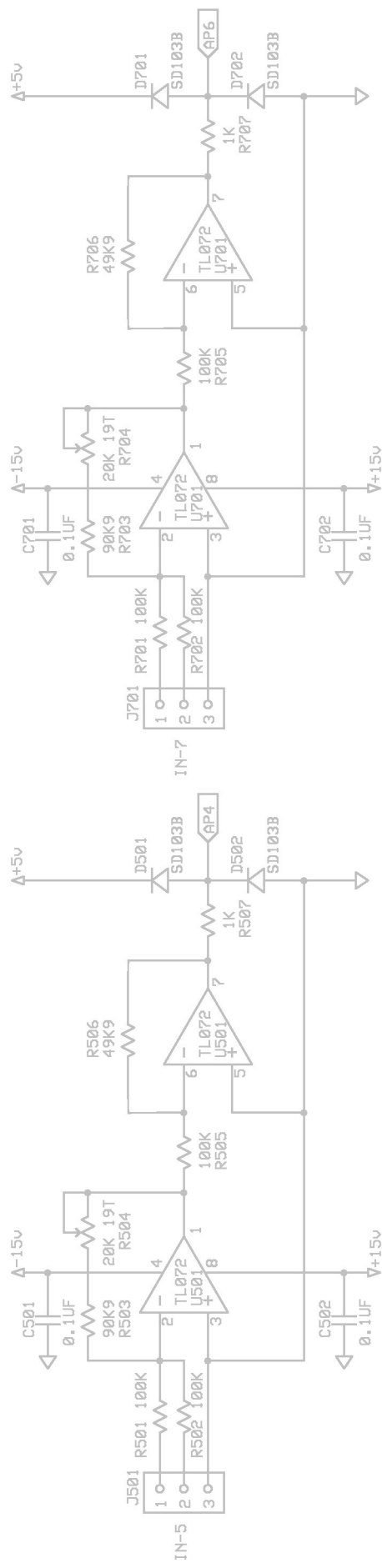
Main Control Board 1 of 5

David J. Brown

12/31/2006

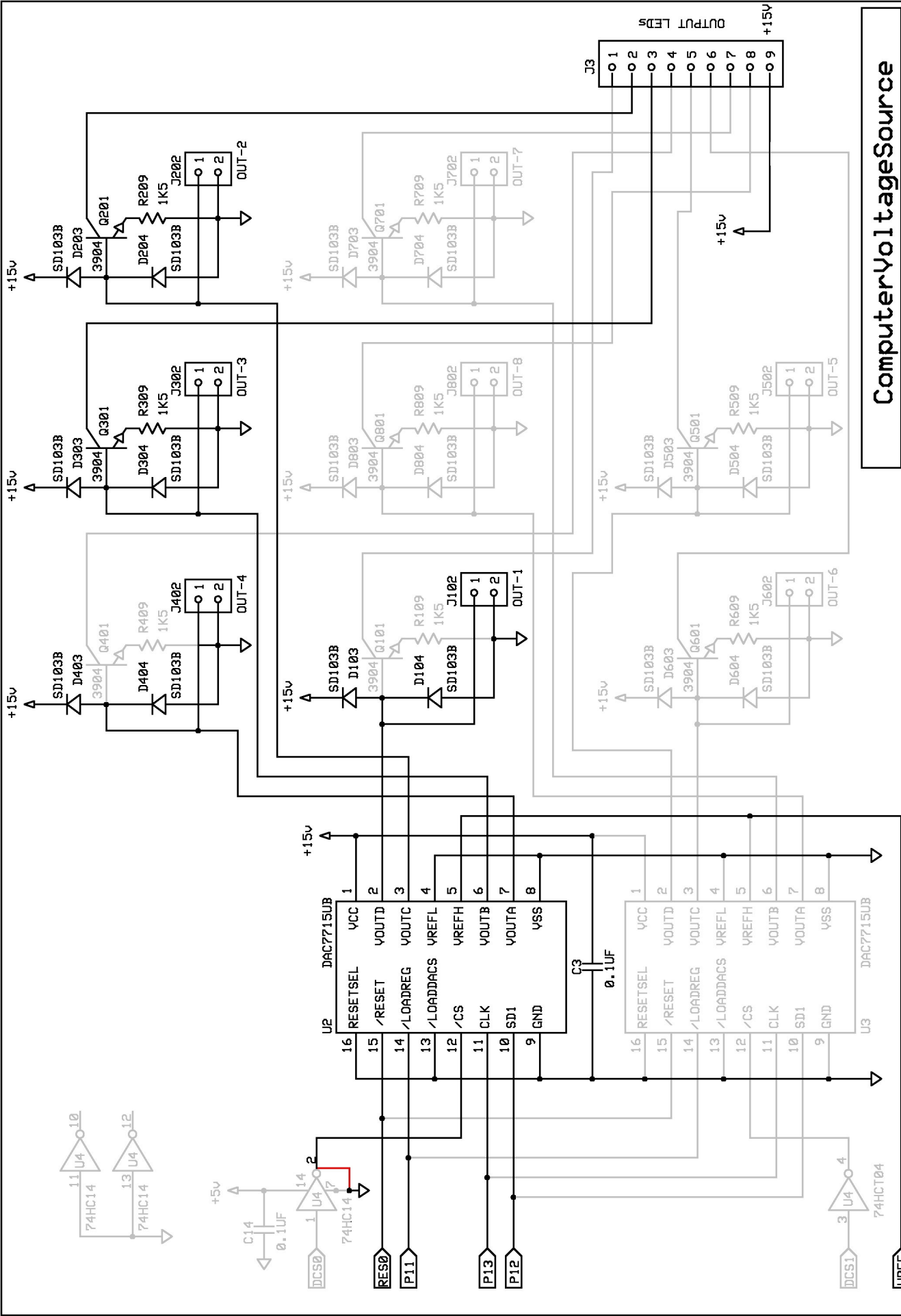
Revised 3/23/2007

Analog In 1-4



Design Notes:

AP4-AP7 not current limited if pin set to output high and input clamped
 R507, 607, 707, 807 may be changed to 3K to limit current if output high
 and input 0 to 10 volts



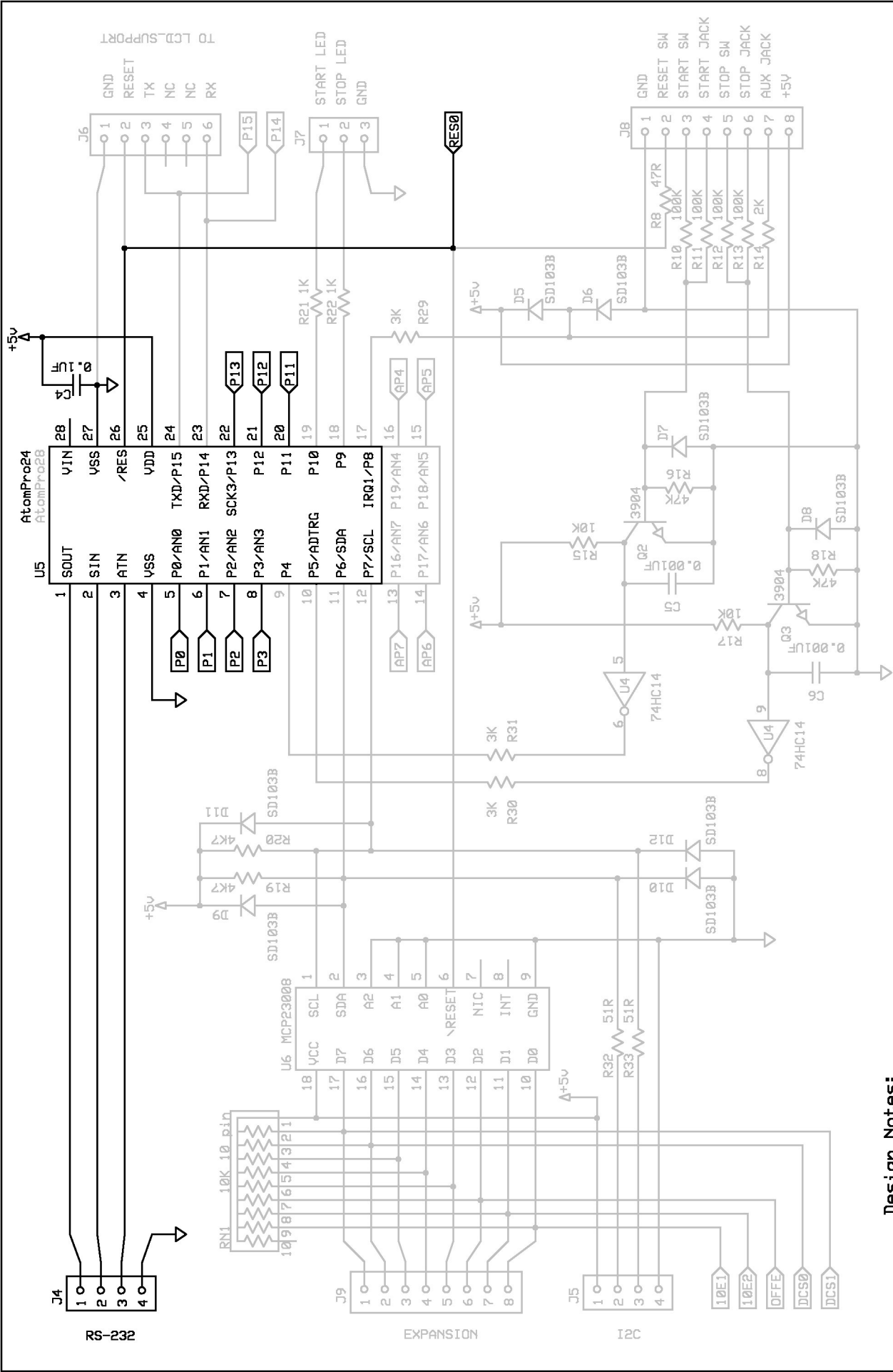
ComputerVoltageSource

Main Control Board 3 of 5

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12/31/2006
Revised (none)

Analog Outputs



ComputerVoltageSource

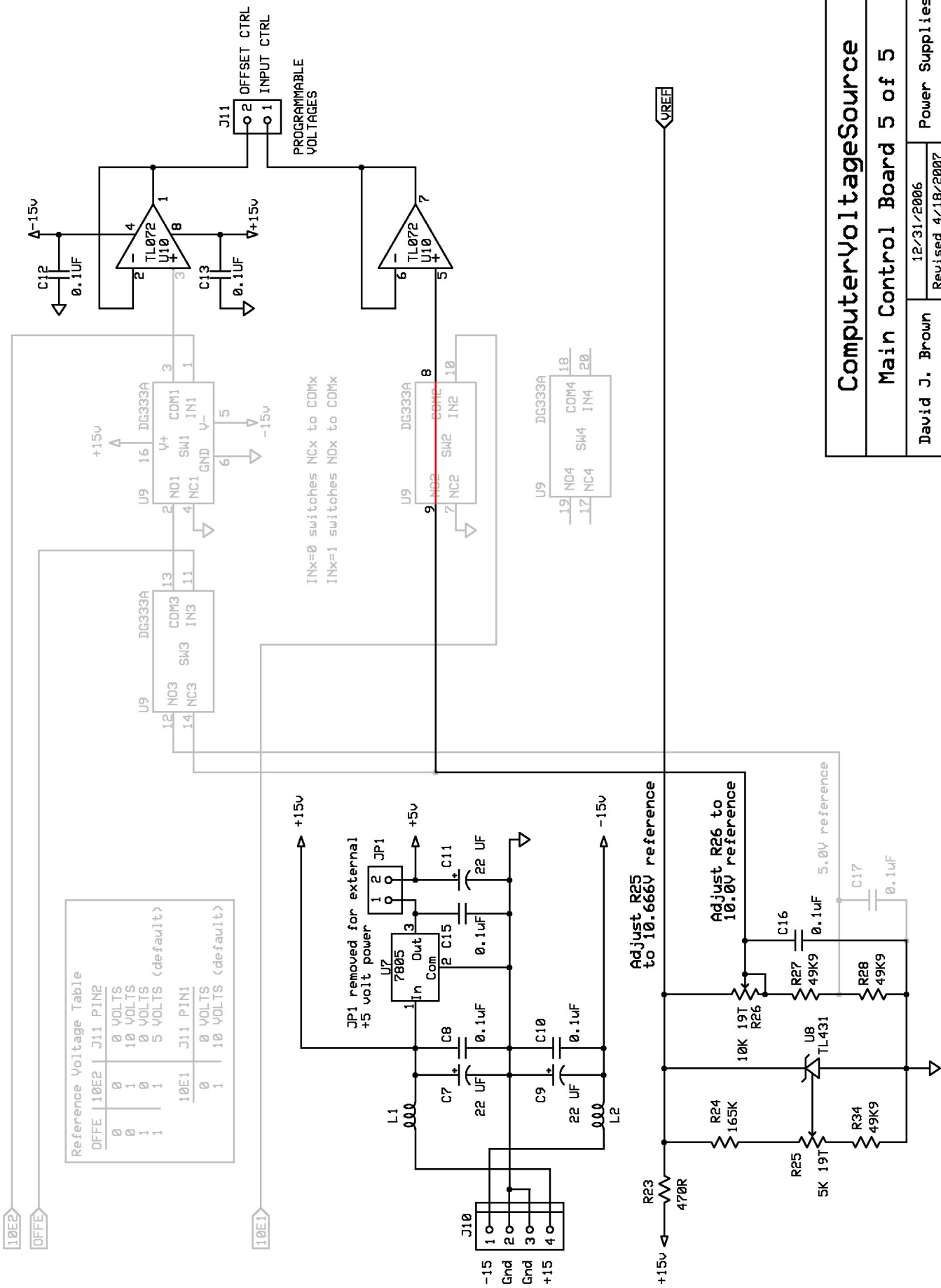
Main Control Board 4 of 5

David J. Brown
 12/31/2006
 Revised 4/18/2007

Processor

Design Notes:

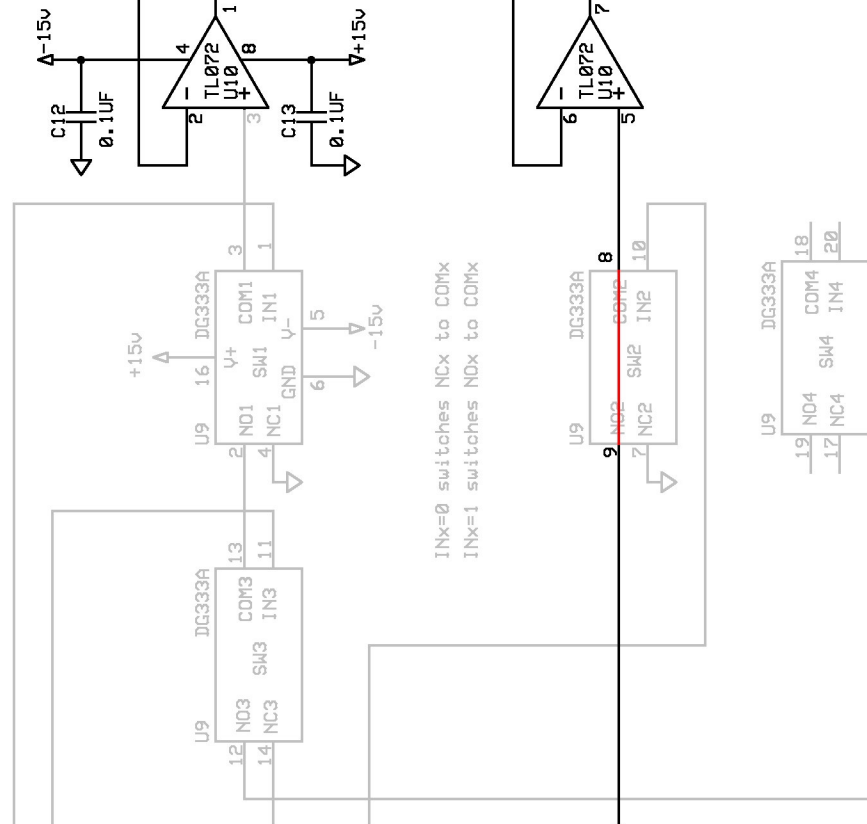
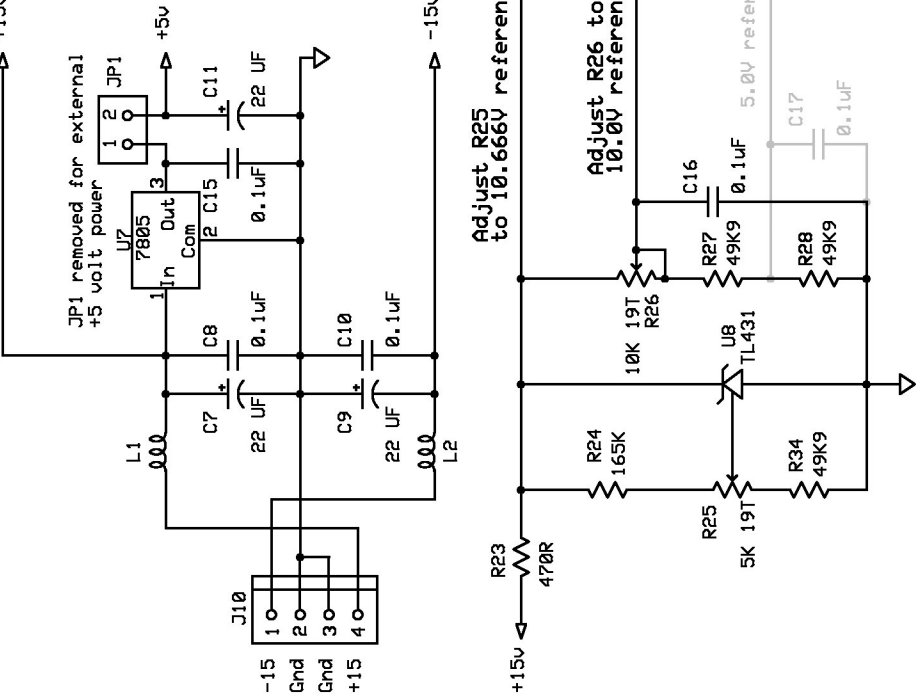
- P14 not current limited if set to output high
- R30/31 limits current if set to output high
- R14 limits current to 7.5 mA when Aux is -15v
- R29 limits current when output high and Aux is negative
- R8 limits current since AtomPro28 reset is sourced high (not open drain)



Reference Voltage Table

| OFFE 10E2 | J11 PINE |
|-------------|---------------------|
| 0 | 0 VOLTS |
| 0 | 1 10 VOLTS |
| 1 | 0 0 VOLTS |
| 1 | 1 5 VOLTS (default) |

| 10E1 | J11 PIN1 |
|------|----------------------|
| 0 | 0 VOLTS |
| 1 | 1 10 VOLTS (default) |



INx=0 switches NCx to COMx
 INx=1 switches NDx to COMx