

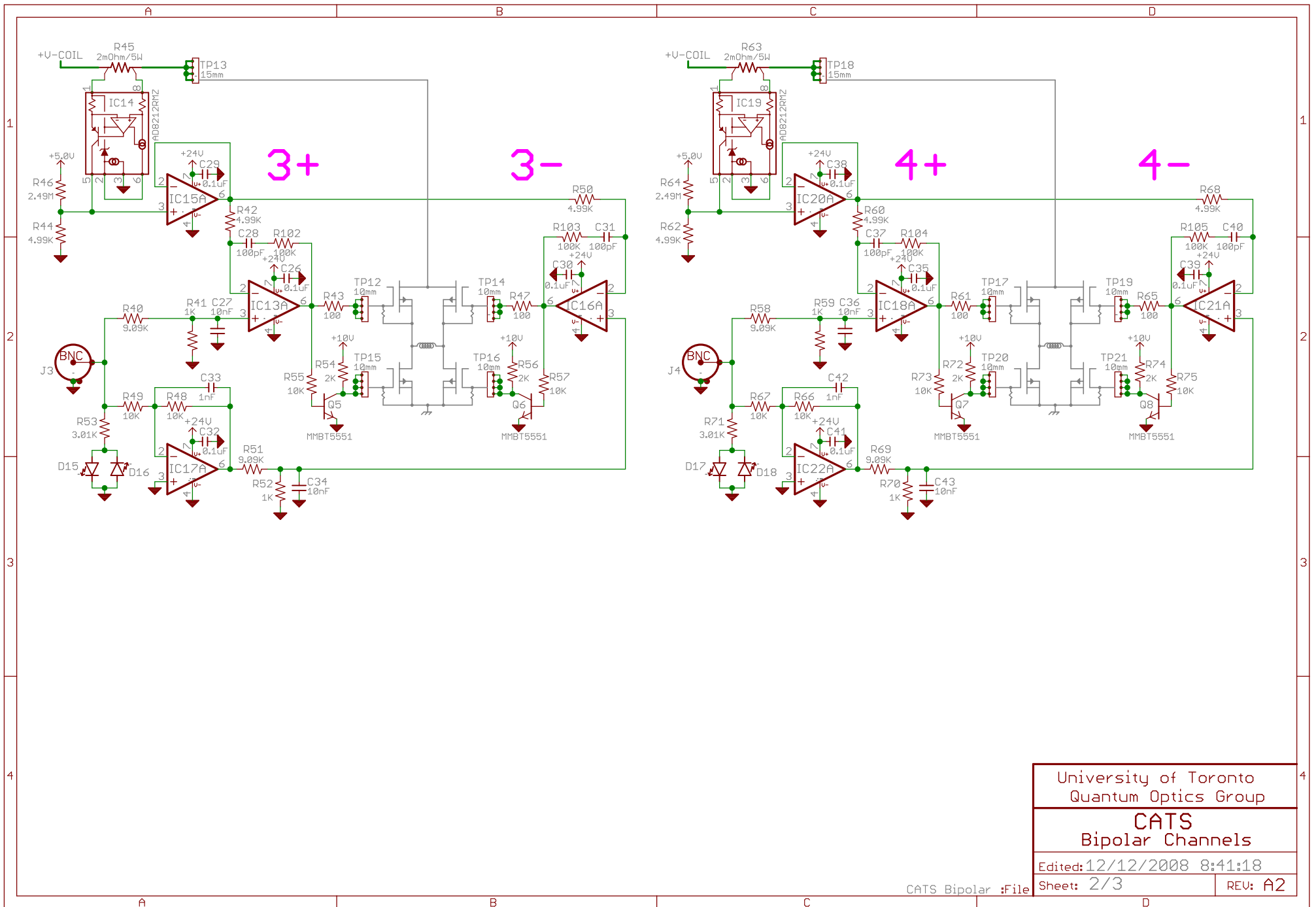
Notes

Current: $I = (V_{ctrl} - 0.1U) * 10$ (or $10A/U$) where V_{ctrl} is $\pm 10U$ max, deadband $\pm 10mV$
 $U_{coil} \geq +7.0U$ (or will draw max current!)
 "Kitten" board has undervoltage detection to shut off boards if supply drops $< 7.5U$.
 If uni- and bipolar boards are on one PCB, connect grounds, remove bipolar U_{coil} return, bipolar takes $+24U$ and $+5.0U$ fom unipolar side.

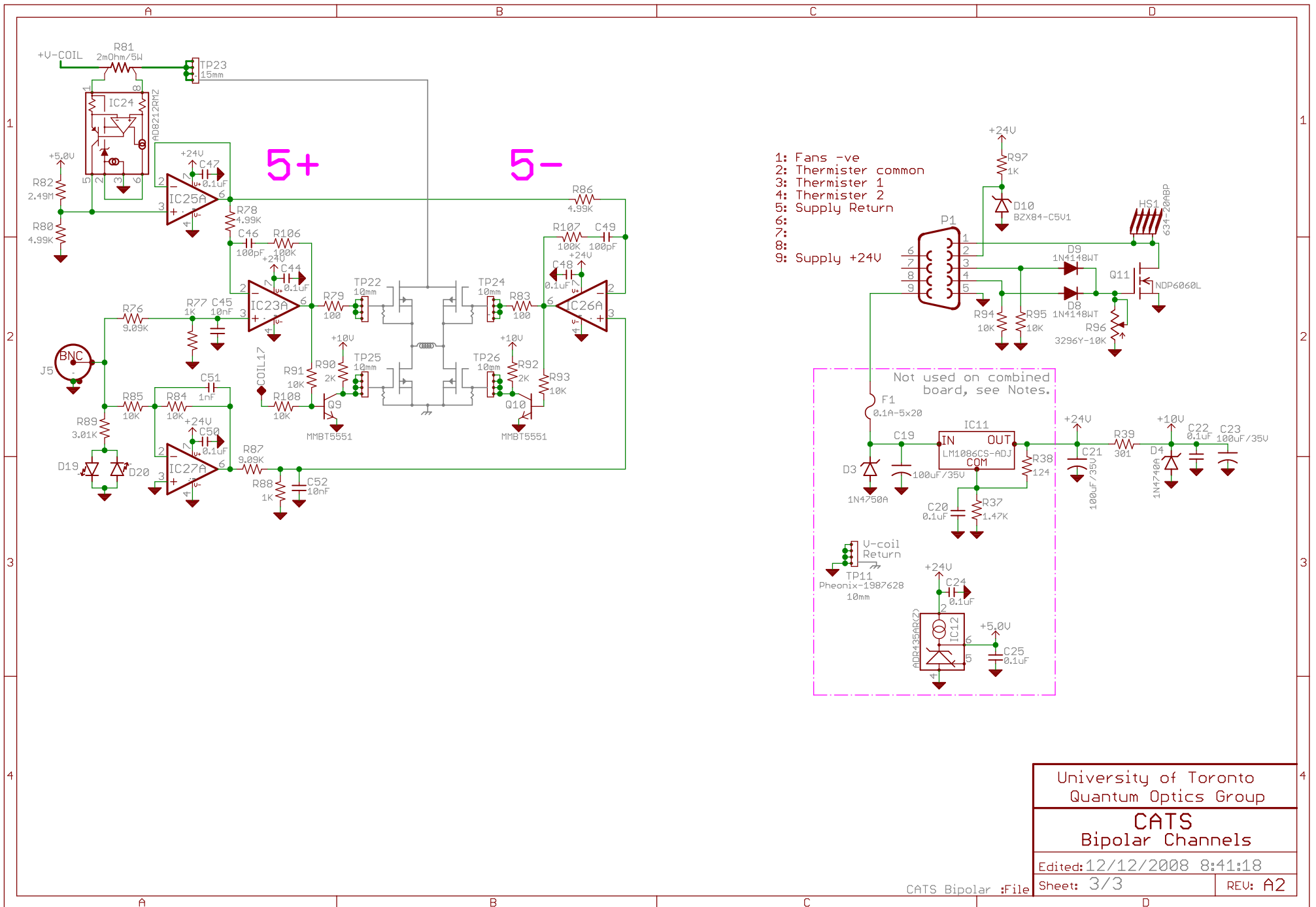
BOM

- FETs have 10-100K G-S resistors.
- Heatsinks: Wakefield 423-K
- 2mOhm sense resistor: Ohmite 650FPR02E
- BNCs: Amp 227673-1
- OPamps: AD820ARZ
- 10mm terminals: Phoenix 1986628
- 10mm end terminal: Phoenix 1987054
- 15mm terminals: Phoenix 1986631
- Standoffs: Keystone 24395
- LED, Green: Lumex SML-LXL1209UPGC
- LED, Yellow: Lumex SML-LXL1209SOC
- Light pipes: Bivar PLP2-500
- Thermistor: Epcos B57703M0103G040 (10K@25°NTC)

A2	Apr'08	A.Stummer	As assembled. Current sensor backwards!
A1	Mar'08	A.Stummer	Original schematic for original PCB.
Ltr	Date	By	Description
REVISIONS			
University of Toronto Quantum Optics Group			CATS - Bipolar Cold Atoms Transfer System Thywissen Lab
Drawn: A.Stummer Apr'08			
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			REV: A2



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