

# LIGO Laboratory / LIGO Scientific Collaboration

LIGO-D0901284-V1-K **Advanced LIGO UK**

June 2009

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## Satellite Box Circuit Diagrams

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R.W. Parry, R.M.Cutler, University of Birmingham

Distribution of this document:  
Inform [aligo\\_sus](mailto:aligo_sus)

This is an internal working note  
of the Advanced LIGO Project, prepared by members of the UK team.

### **Institute for Gravitational Research**

**University of Glasgow**

Phone +44 (0) 141 330 5884

Fax +44 (0) 141 330 6833

E-mail [k.strain@physics.gla.ac.uk](mailto:k.strain@physics.gla.ac.uk)

**Engineering Department**

### **CCLRC Rutherford Appleton Laboratory**

Phone +44 (0) 1235 445 297

Fax +44 (0) 1235 445 843

E-mail [J.Greenhalgh@rl.ac.uk](mailto:J.Greenhalgh@rl.ac.uk)

### **School of Physics and Astronomy**

**University of Birmingham**

Phone +44 (0) 121 414 6447

Fax +44 (0) 121 414 3722

E-mail [av@star.sr.bham.ac.uk](mailto:av@star.sr.bham.ac.uk)

**Department of Physics**

**University of Strathclyde**

Phone +44 (0) 1411 548 3360

Fax +44 (0) 141 552 2891

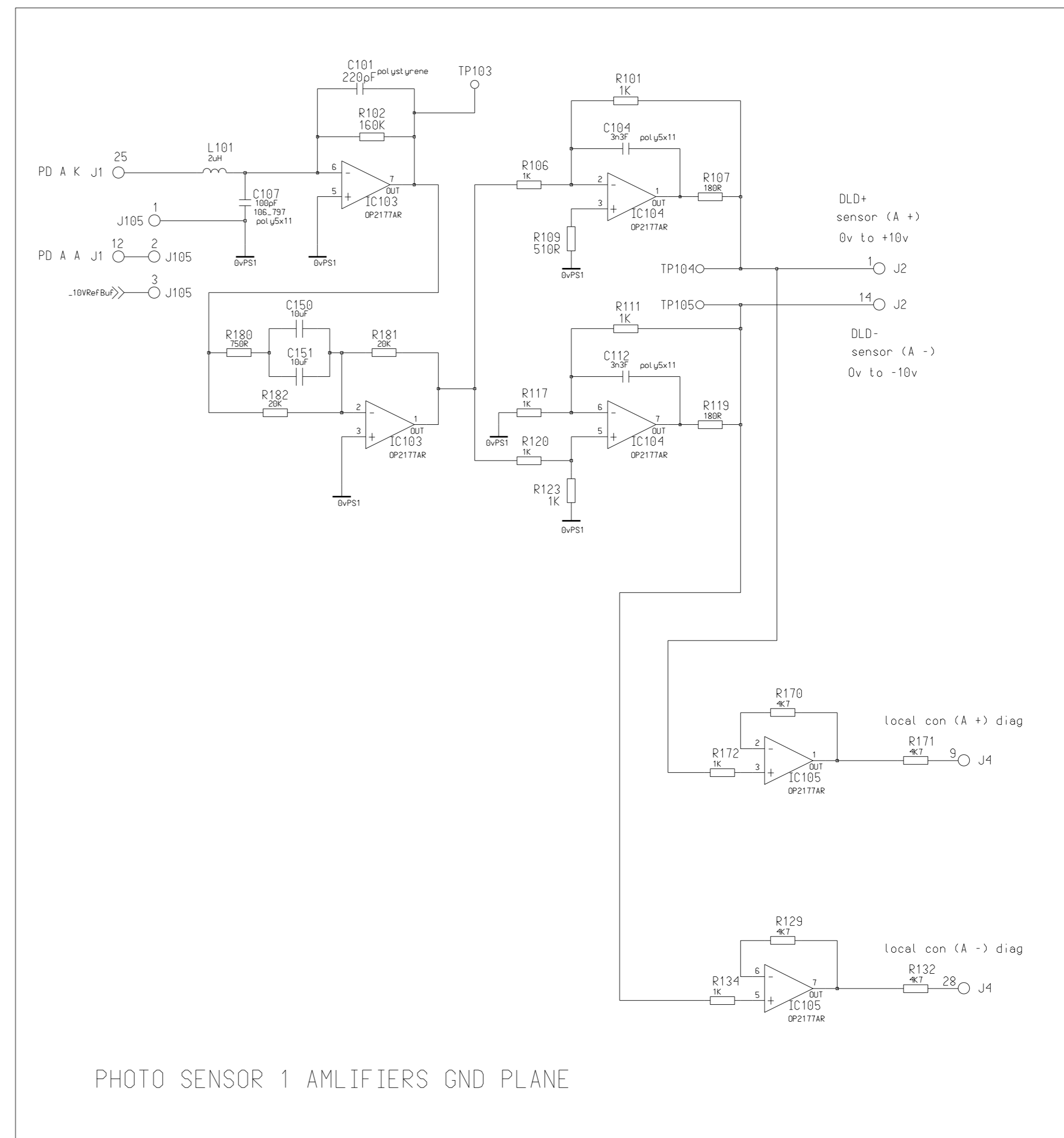
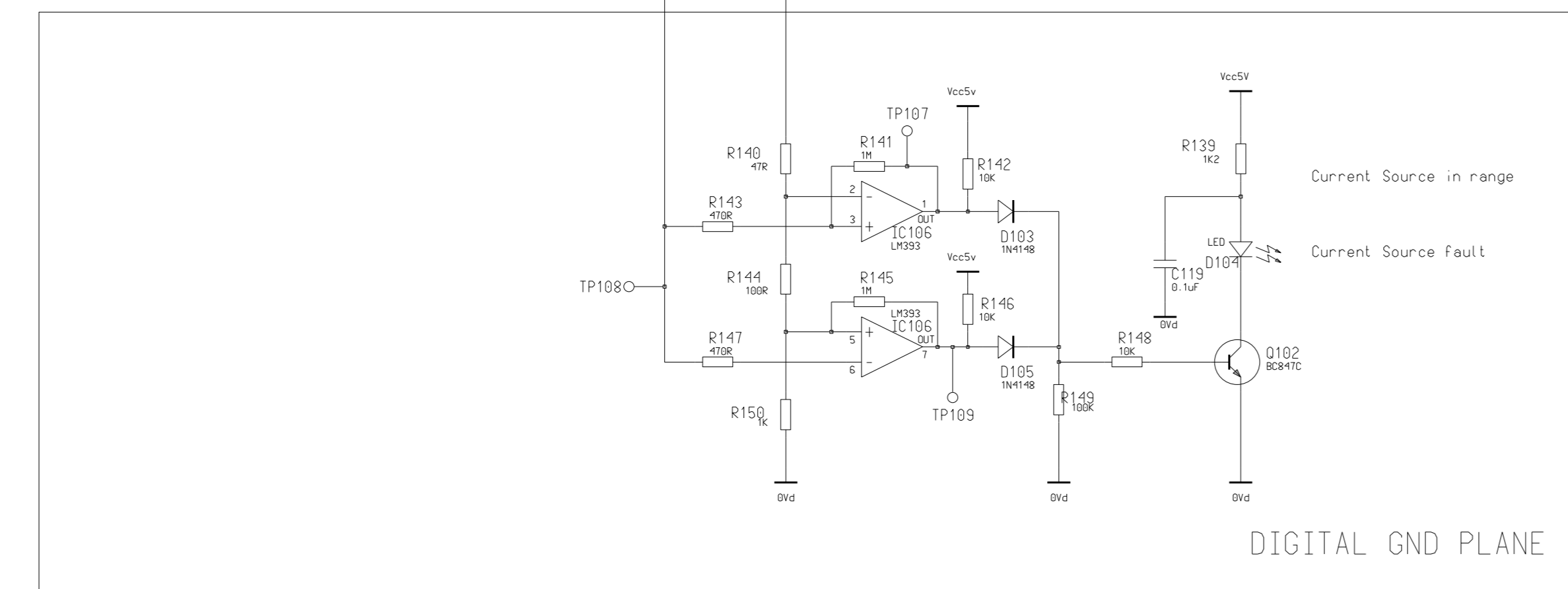
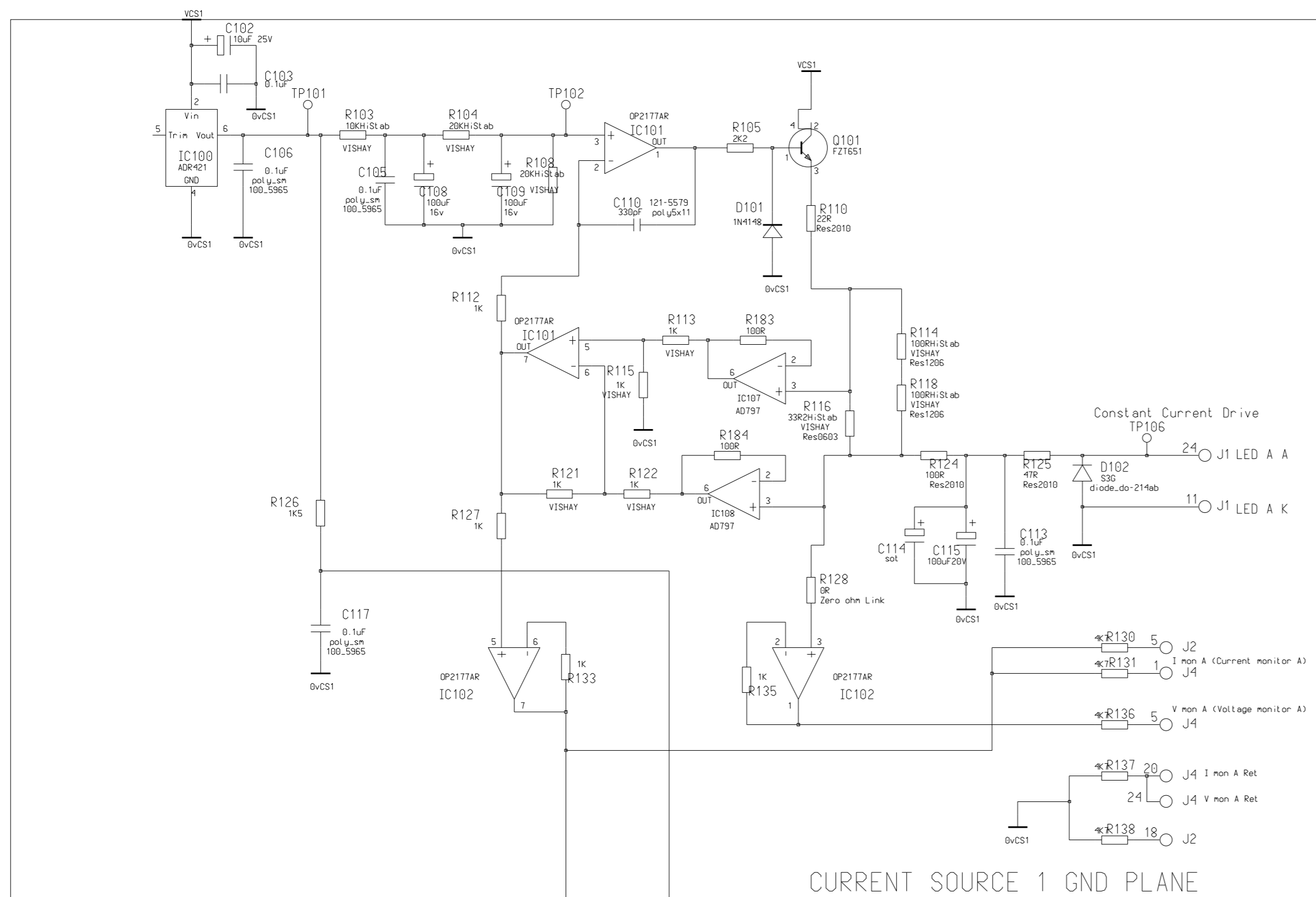
E-mail [N.Lockerbie@phys.strath.ac.uk](mailto:N.Lockerbie@phys.strath.ac.uk)

<http://www.ligo.caltech.edu/>

<http://www.physics.gla.ac.uk/igr/sus/>

<http://www.sr.bham.ac.uk/research/gravity/rh.d.2.html>

[http://www.eng-external.rl.ac.uk/advligo/papers\\_public/ALUK\\_Homepage.htm](http://www.eng-external.rl.ac.uk/advligo/papers_public/ALUK_Homepage.htm)

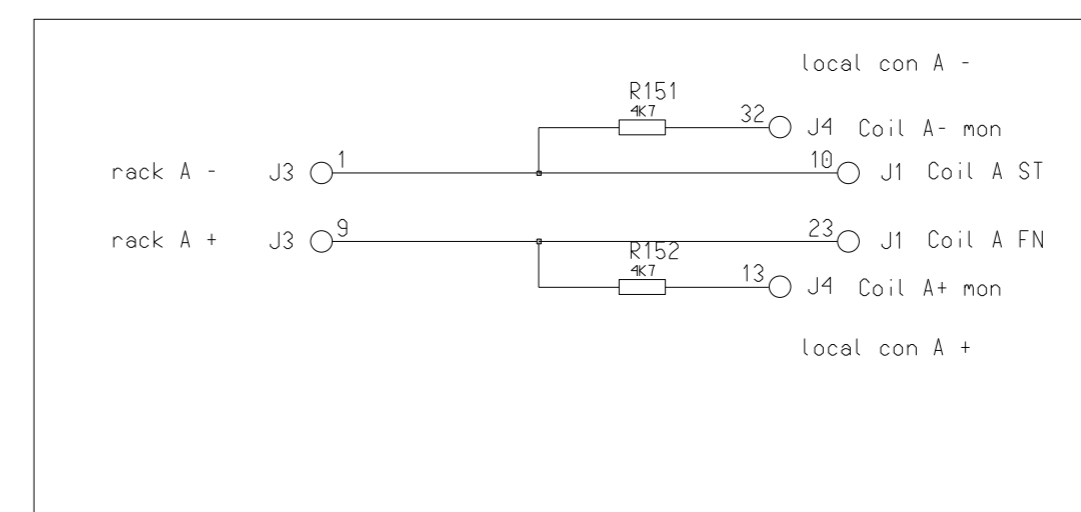


J1 = Connections to the Vacuum Tank, 25wF"D"  
 J2 = Power & PD signals, connects to the Analogue Rack, 25wM"D"  
 J3 = Coil driver inputs, connects to the Analogue Rack, 15wM"D"  
 J4 = Connections to the local diagnostics, 37wF"D"

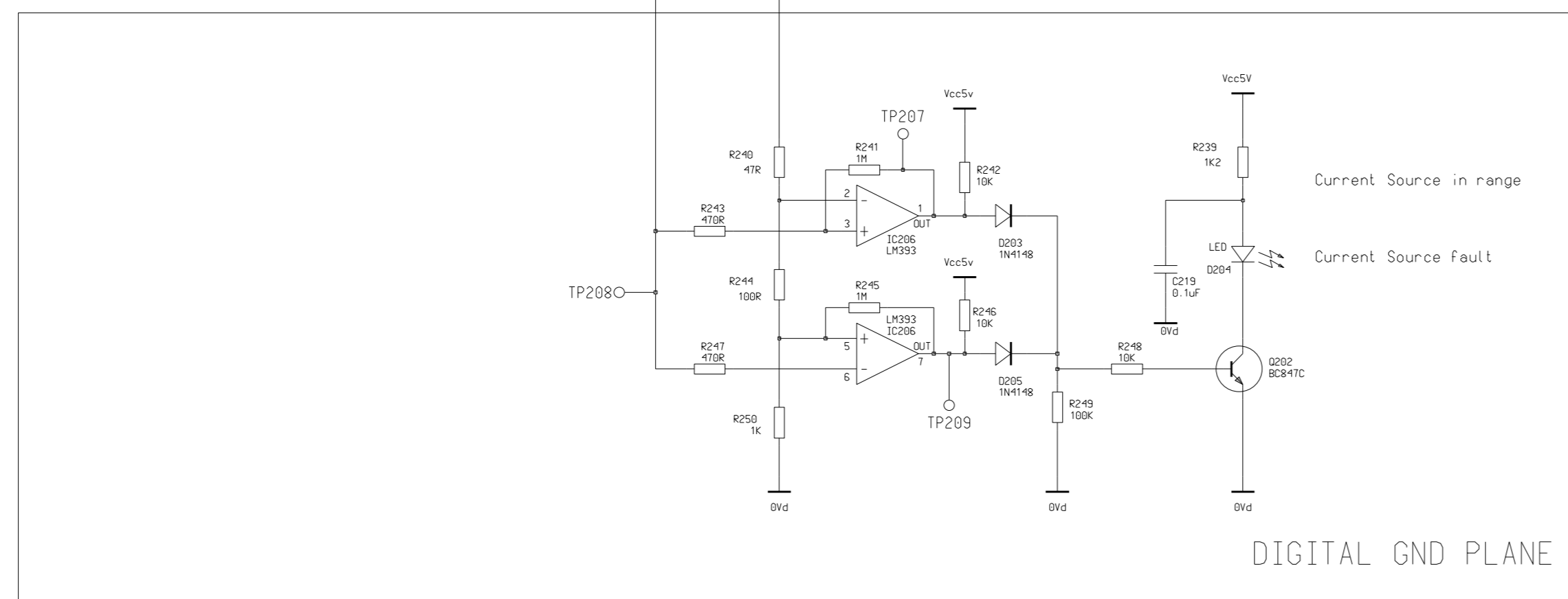
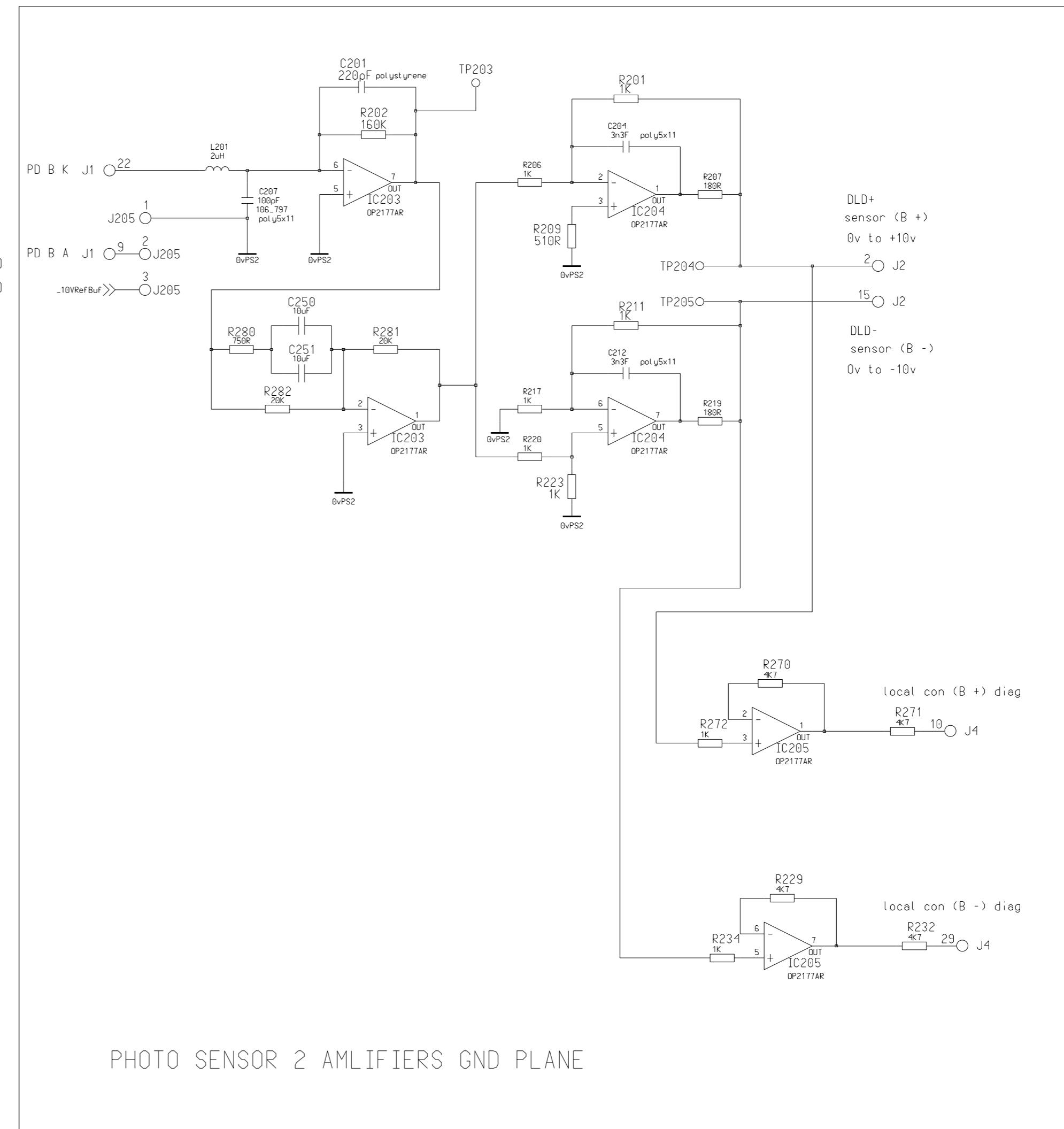
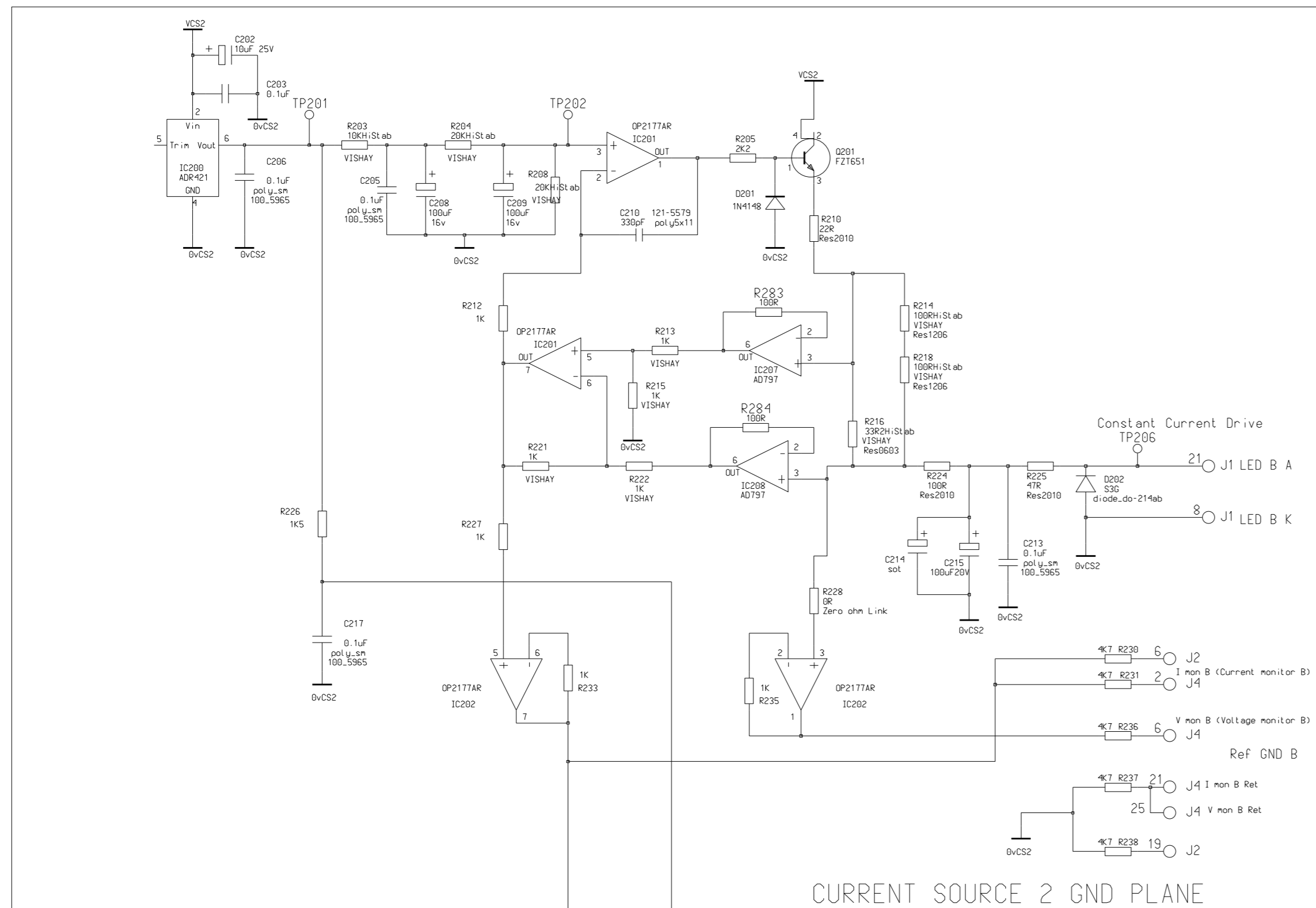
Resistors to 1206 (except output resistors (2010))

### RWP LAYOUT

11th June 2008



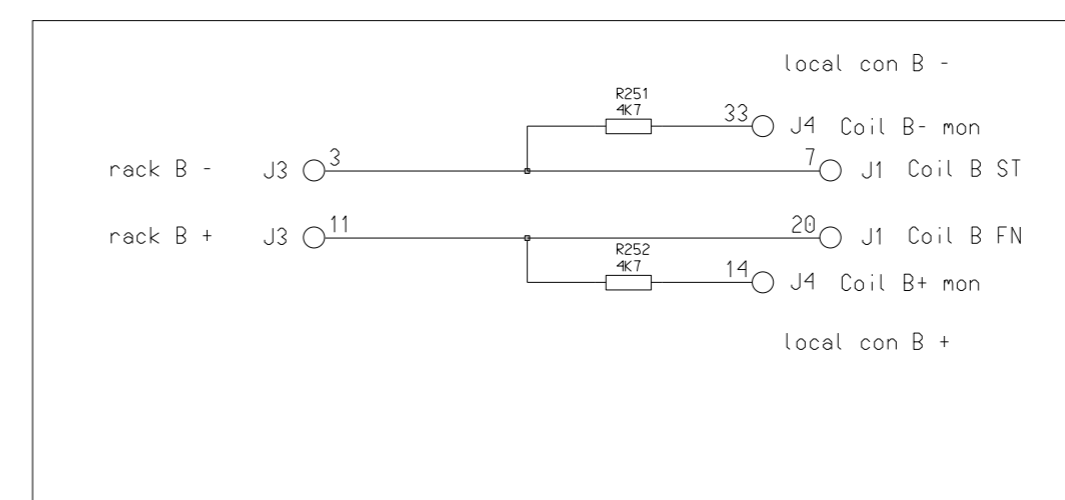
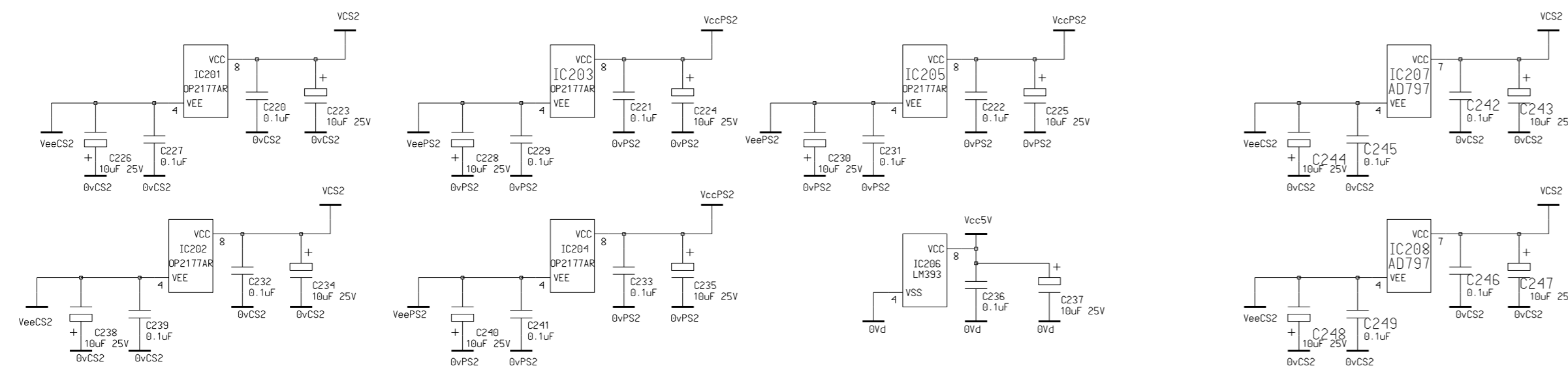
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SUBSYSTEM:	OSEM Drive	UNIT: Prototype
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DRAWN BY:	RWP	DATE: 11/06/08
APP'D BY:	RMC	DATE: -
THE UNIVERSITY OF BIRMINGHAM		
DEPT OF ASTROPHYSICS AND SPACE RESEARCH		
DRAWING NUMBER	LIGO-D0901284-v1	
		AL0010rwp_2 SHEET 1 OF 5



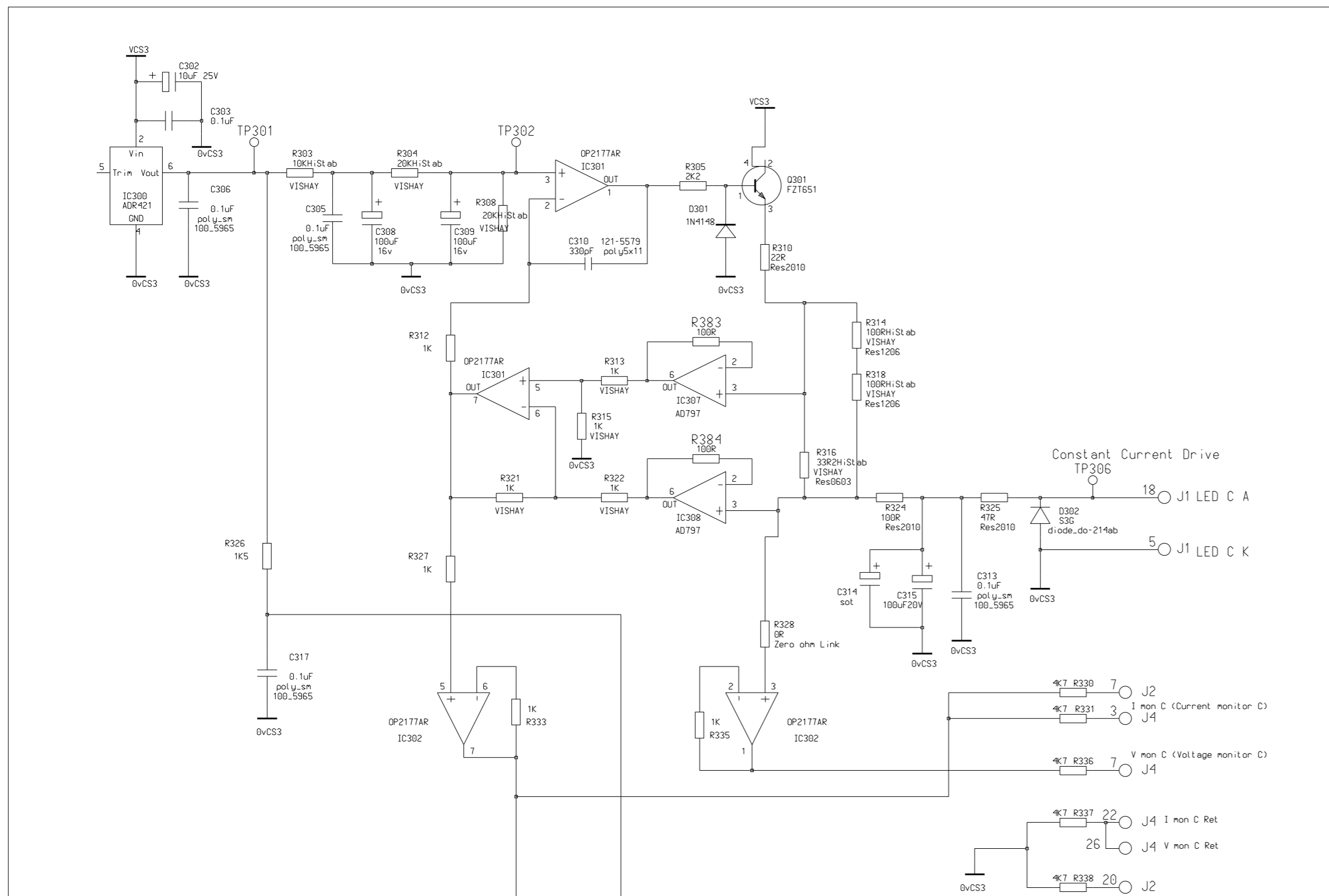
J1 = Connections to the Vacuum Tank, 25wF"D"  
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Resistors to 1206 (except output resistors (2010))

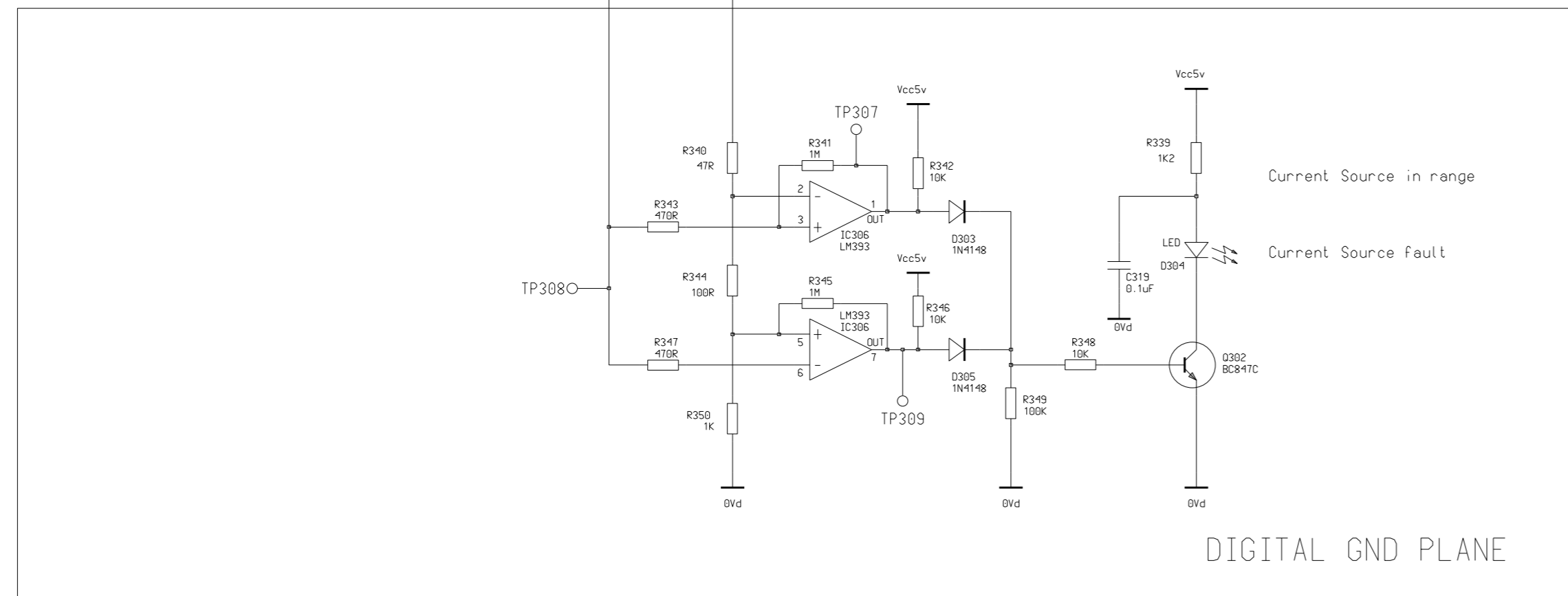
RWP LAYOUT  
 26th Oct. 2006



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DRAWN BY:	DL	DATE:		30/6/06	
APP'D BY:	-	DATE:		-	
THE UNIVERSITY OF BIRMINGHAM					
DEPT OF ASTROPHYSICS AND SPACE RESEARCH					
DRAWING NUMBER	LIGO-D0901284-v1				
			AL0010rwp SHEET 2 OF 5		



CURRENT SOURCE 3 GND PLANE



DIGITAL GND PLANE

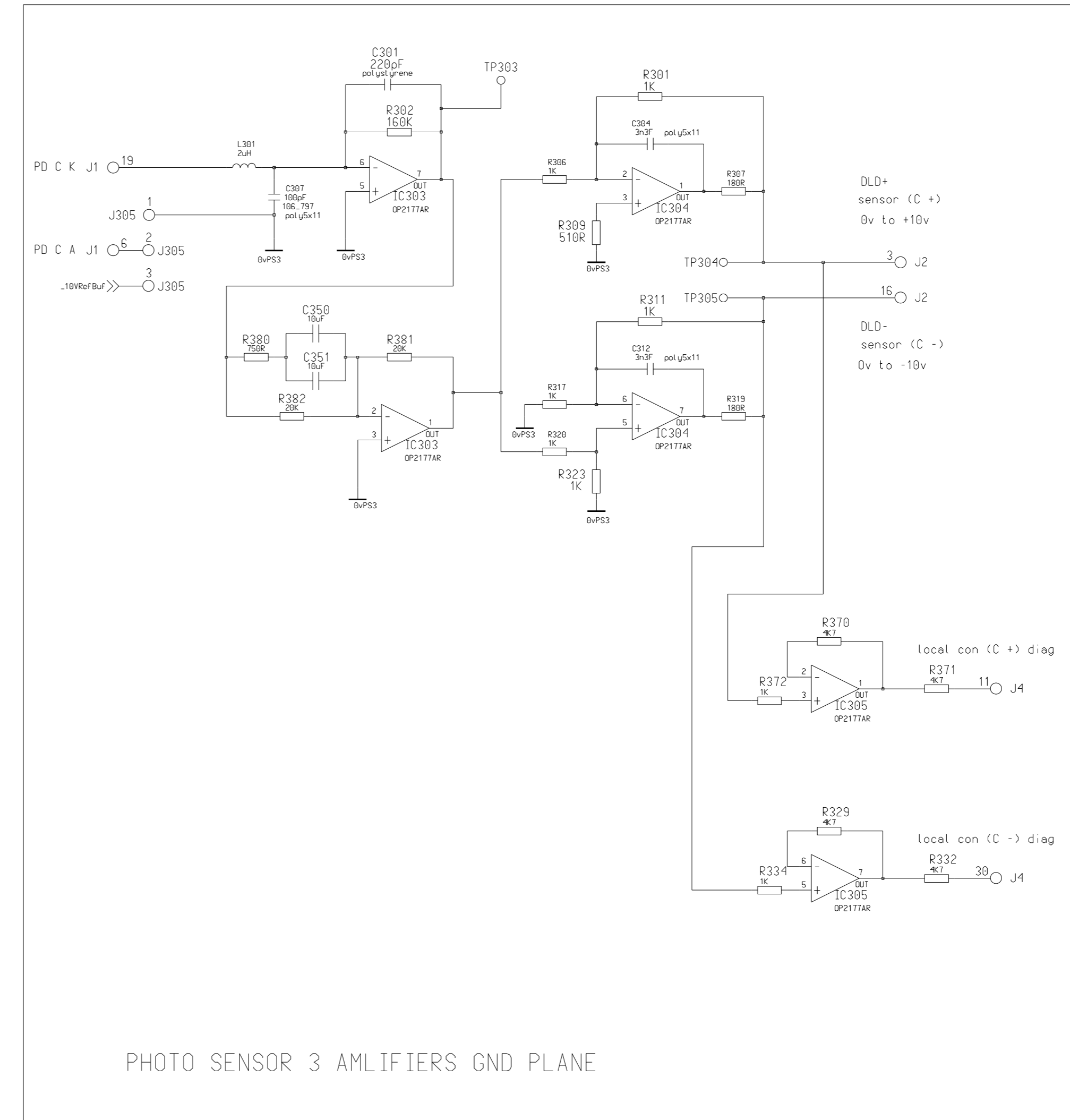
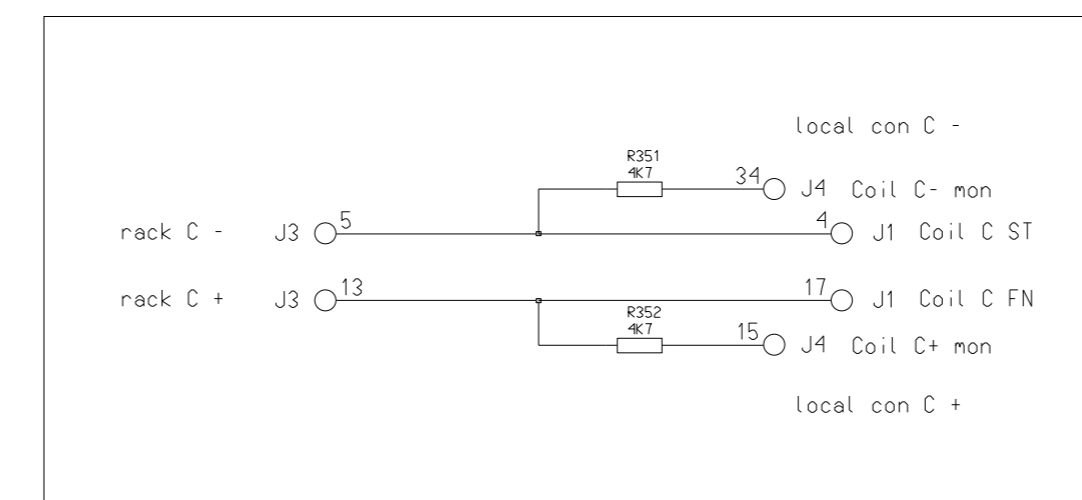
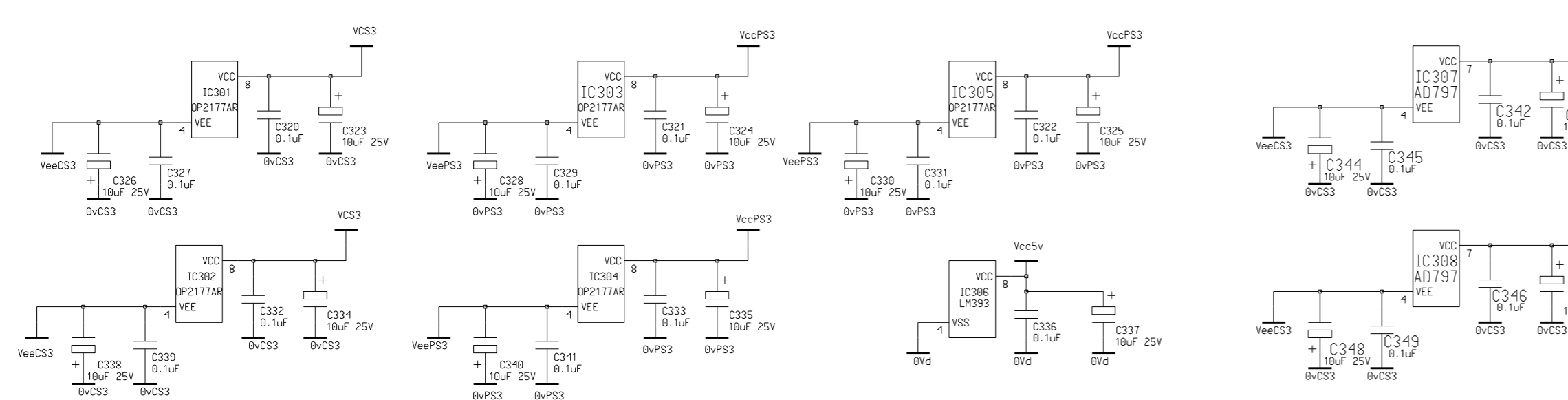
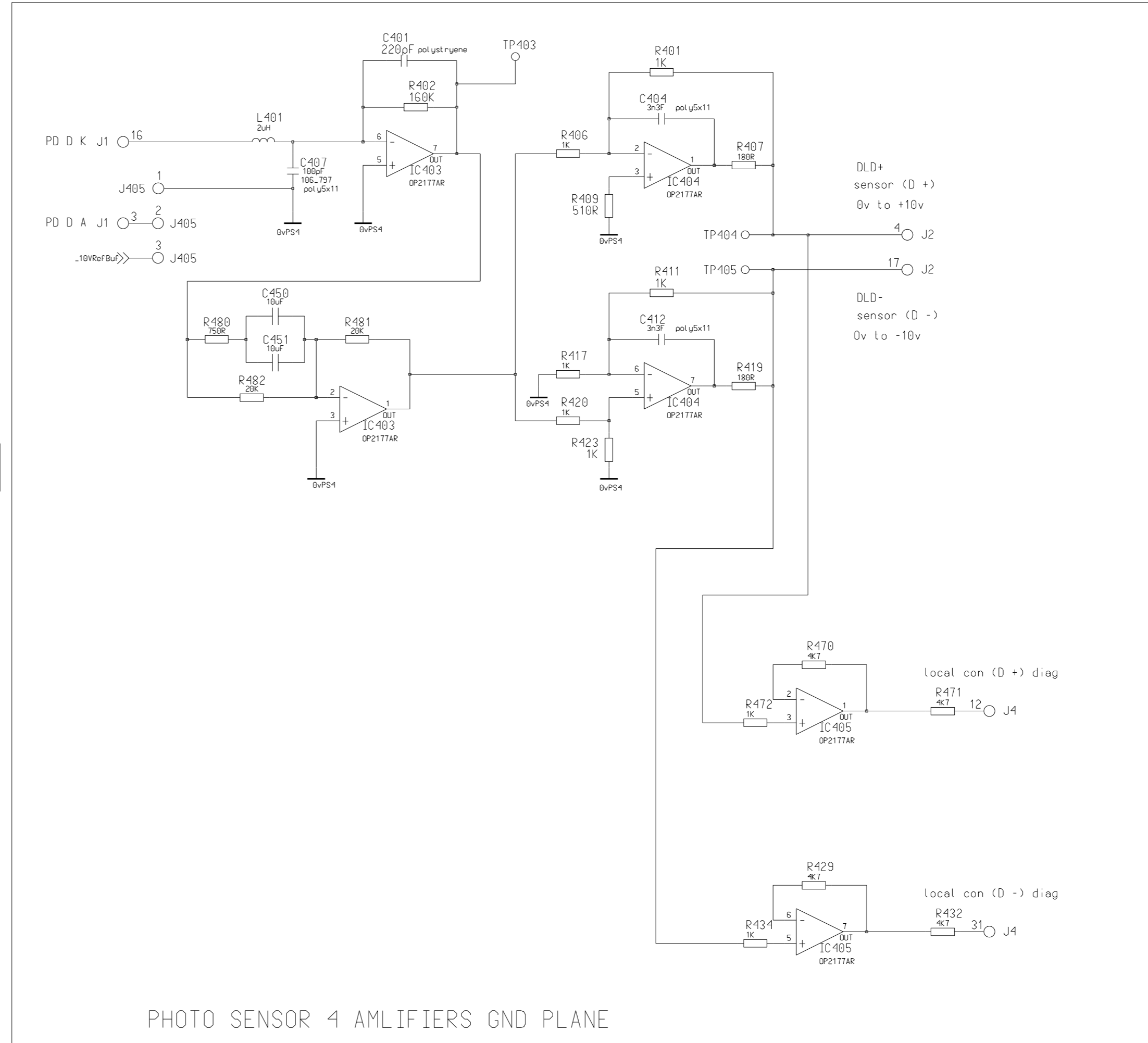
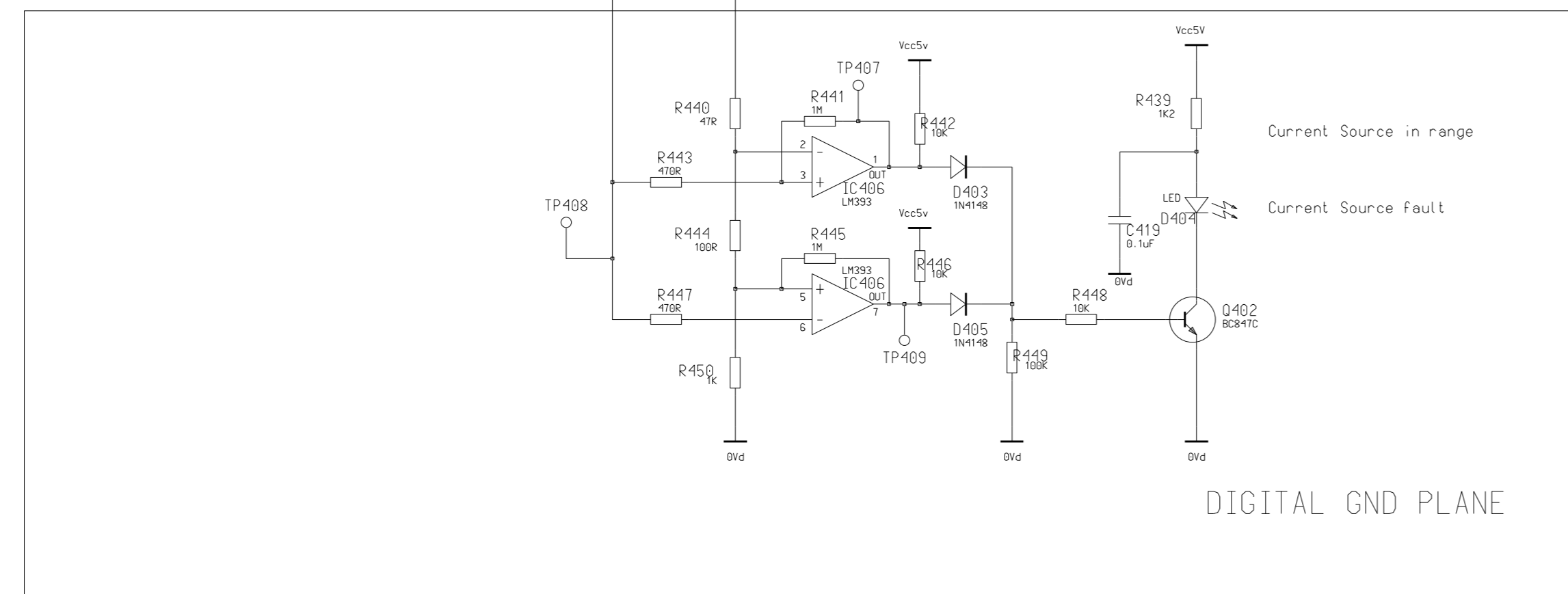
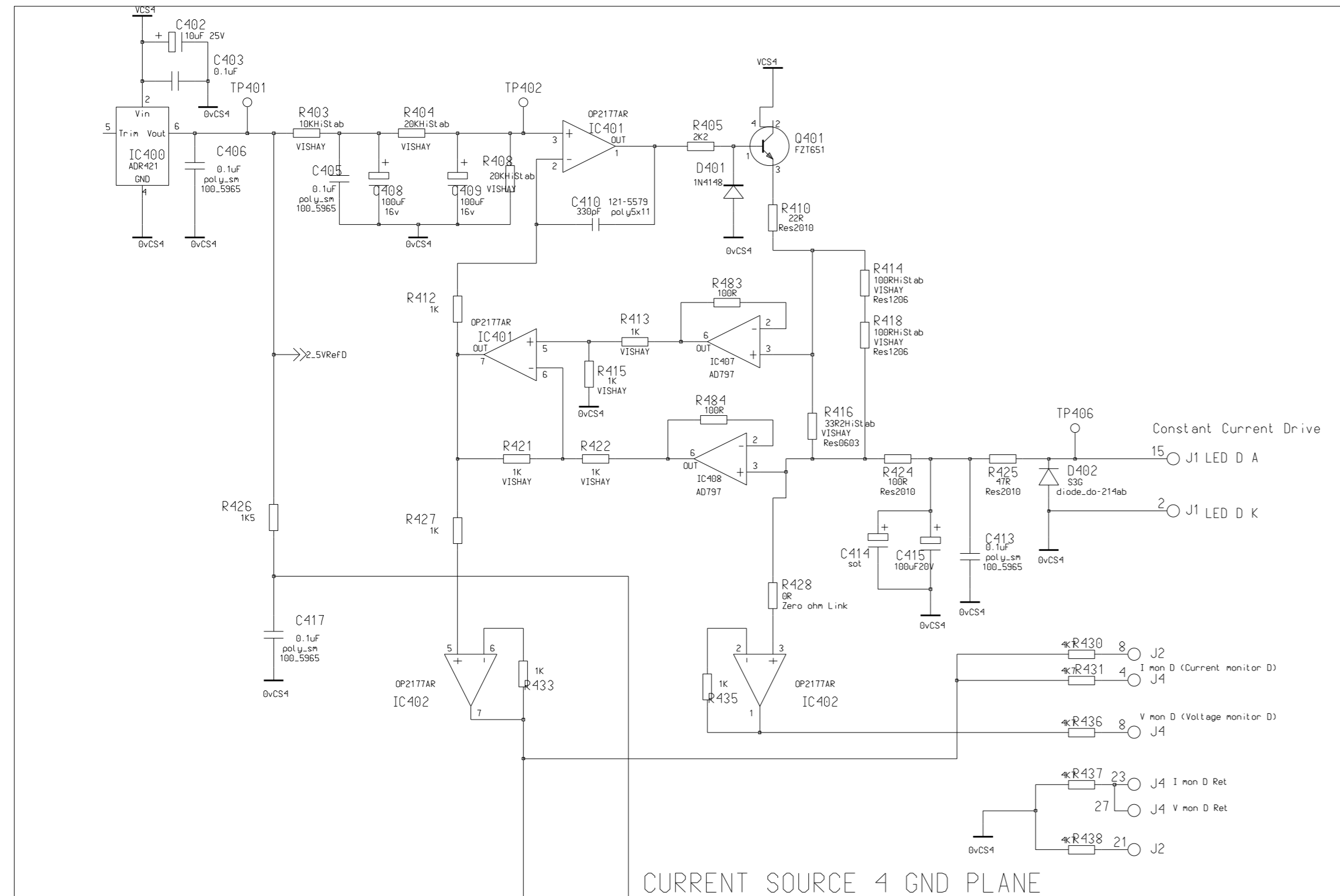


PHOTO SENSOR 3 AMPLIFIERS GND PLANE



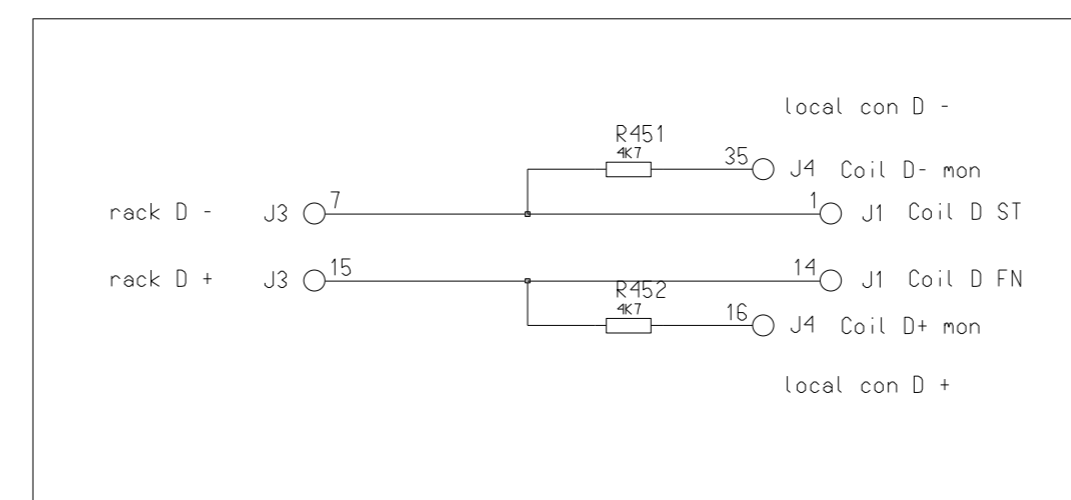
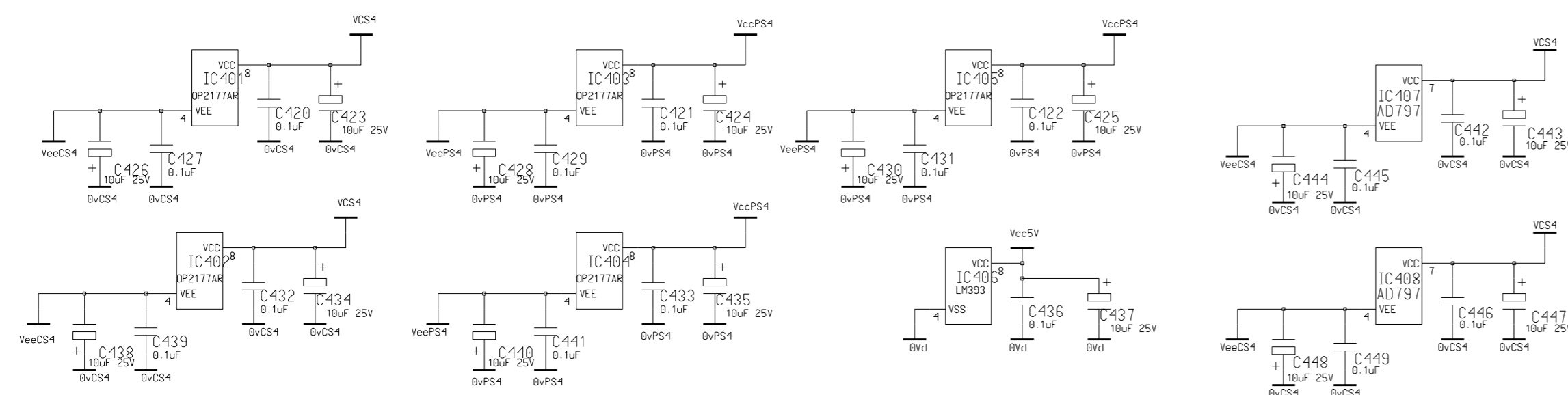
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THE UNIVERSITY OF BIRMINGHAM				
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DRAWING NUMBER LIGO-D0901284-v1				
AL0010rwp SHEET 3 OF 5				



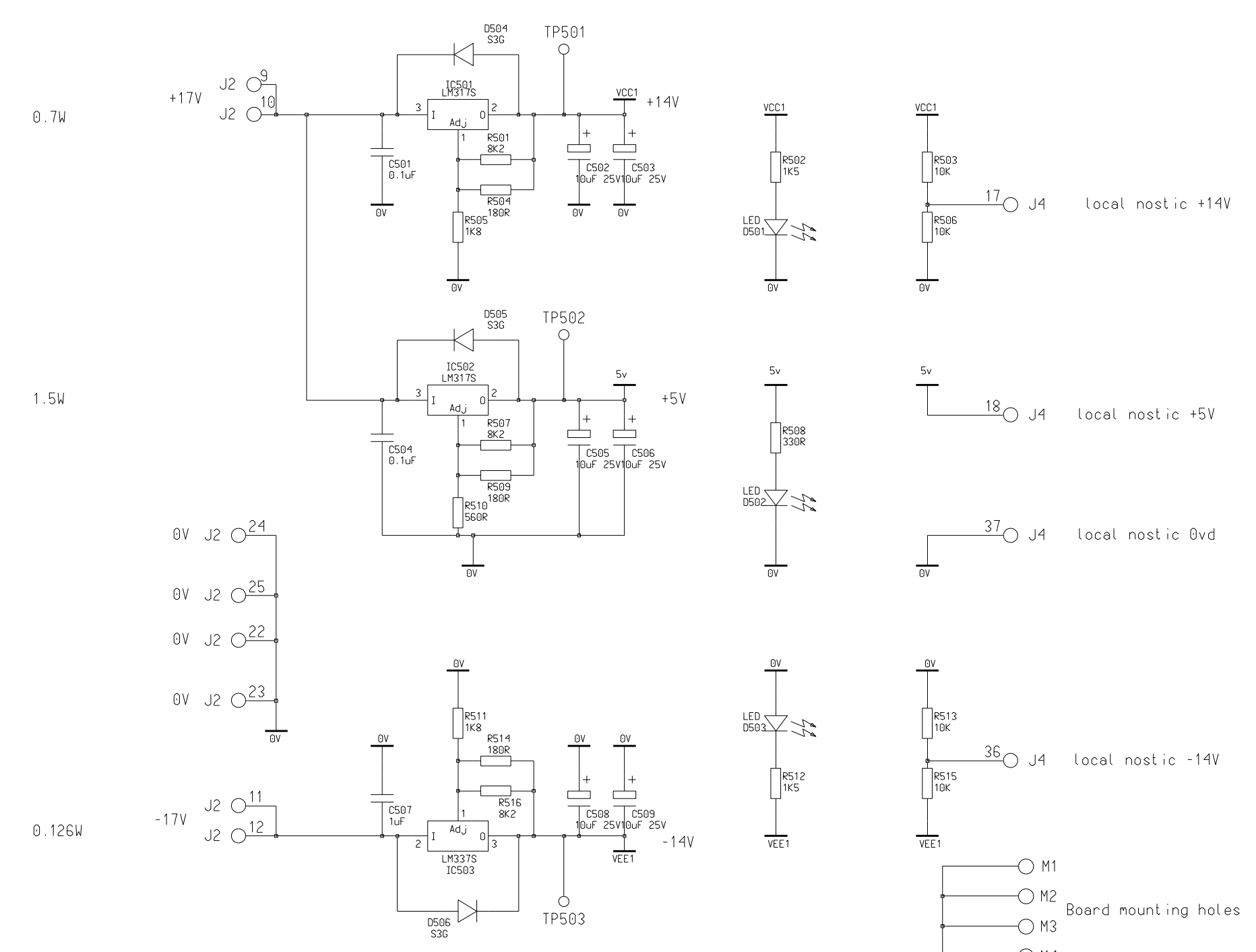
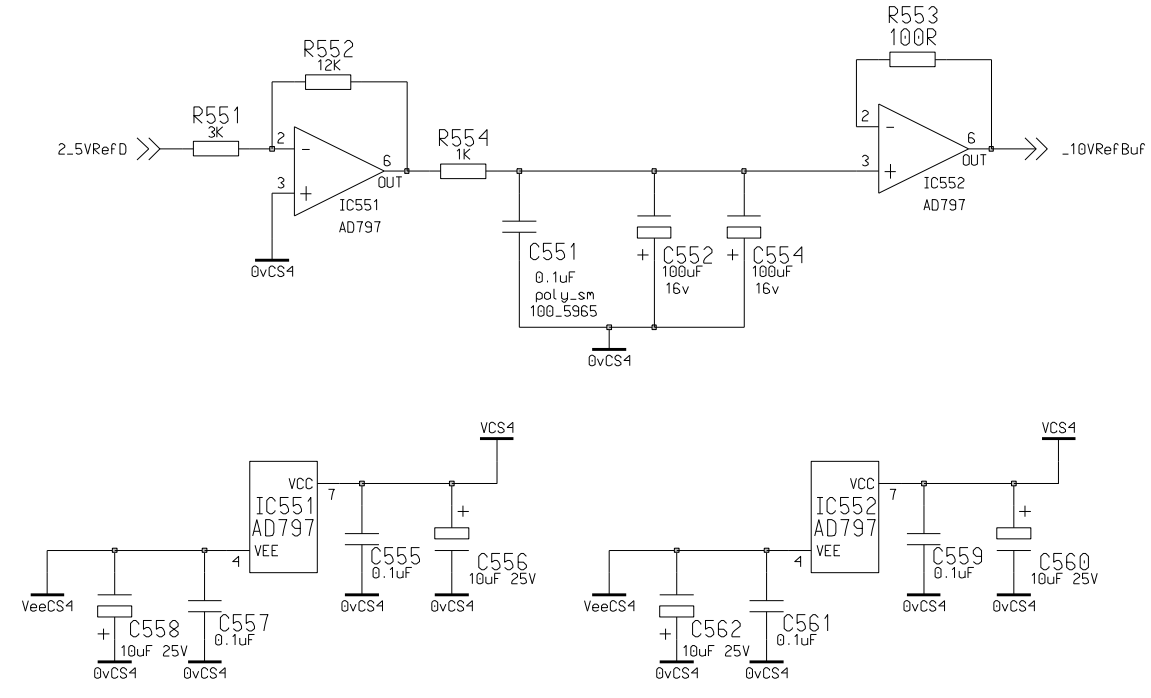
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Resistors to 1206 (except output resistors (2010))

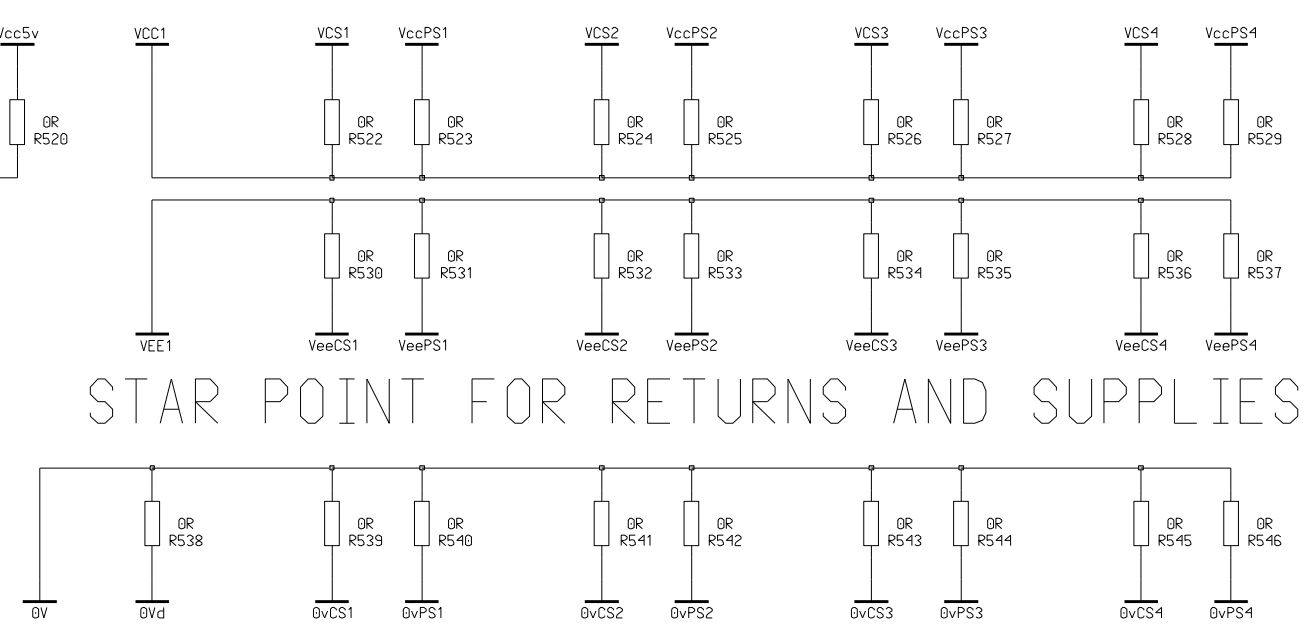
RWP LAYOUT  
 07th Nov. 2006



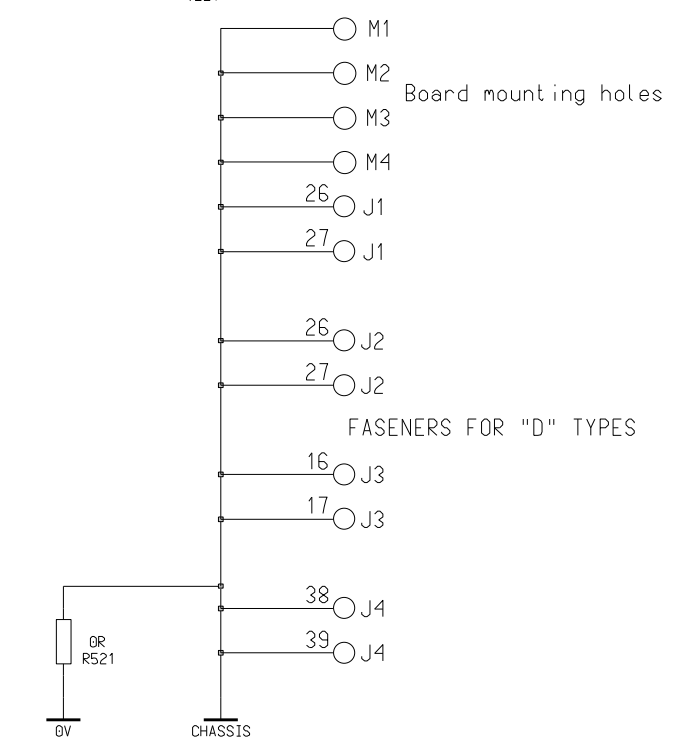
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SUBSYSTEM: OSEM Drive		UNIT: Prototype	
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DRAWING NUMBER LIGO-D0901284-v1		AL0010rwp SHEET 4 OF 5	



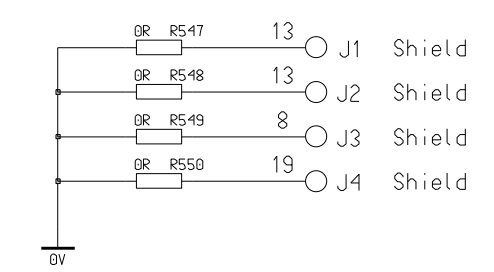
STAR POINT LINKS TO BE ADDED TO ALL CHANNELS



supply Links are "res1206"



- 2 O J3 NC
- 4 O J3 NC
- 6 O J3 NC
- 10 O J3 NC
- 12 O J3 NC
- 14 O J3 NC



RWP LAYOUT  
08\_09\_2006

A	Initial Release		
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APP'D BY:	-	DATE:	-
THE UNIVERSITY OF BIRMINGHAM			
DEPT OF ASTROPHYSICS AND SPACE RESEARCH			
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	AL0010rwp SHEET 5 OF 5		