

REVISIONS

Rev No.	ECO No.	Description	Checked	Approved	Date
0.01		INITIAL RELEASE - ENGINEERING MODEL 1			
1.0		ENGINEERING MODEL 2 (NOTE 1)			
A		FLIGHT RELEASE			

NOTES:

- Engineering Model 1 (EM1) contains the following board mods, which are not shown on schematic version 0.01:  
 Sheet 9: added new pin 10 to AEPPU and connected to signal "ADCA1"  
 Sheet 9: added new pin 1 to AEPPU and connected to signal "ADCA0"
- Engineering Model 2 (EM2) contains the following additional change:  
 Sheet 8: Added new pin 17 to AESEQ and connected to signal "~RSTCE"
- For additional EM2 changes, see the file em2\_changes.txt found in the control2 project directory.
- Component values are shown for reference only.  
 See parts list for controlled values.

NAME	DATE
Drawn: F. J. LaRosa	10-09-98
Checked:	
Approved:	
Released:	

MIT

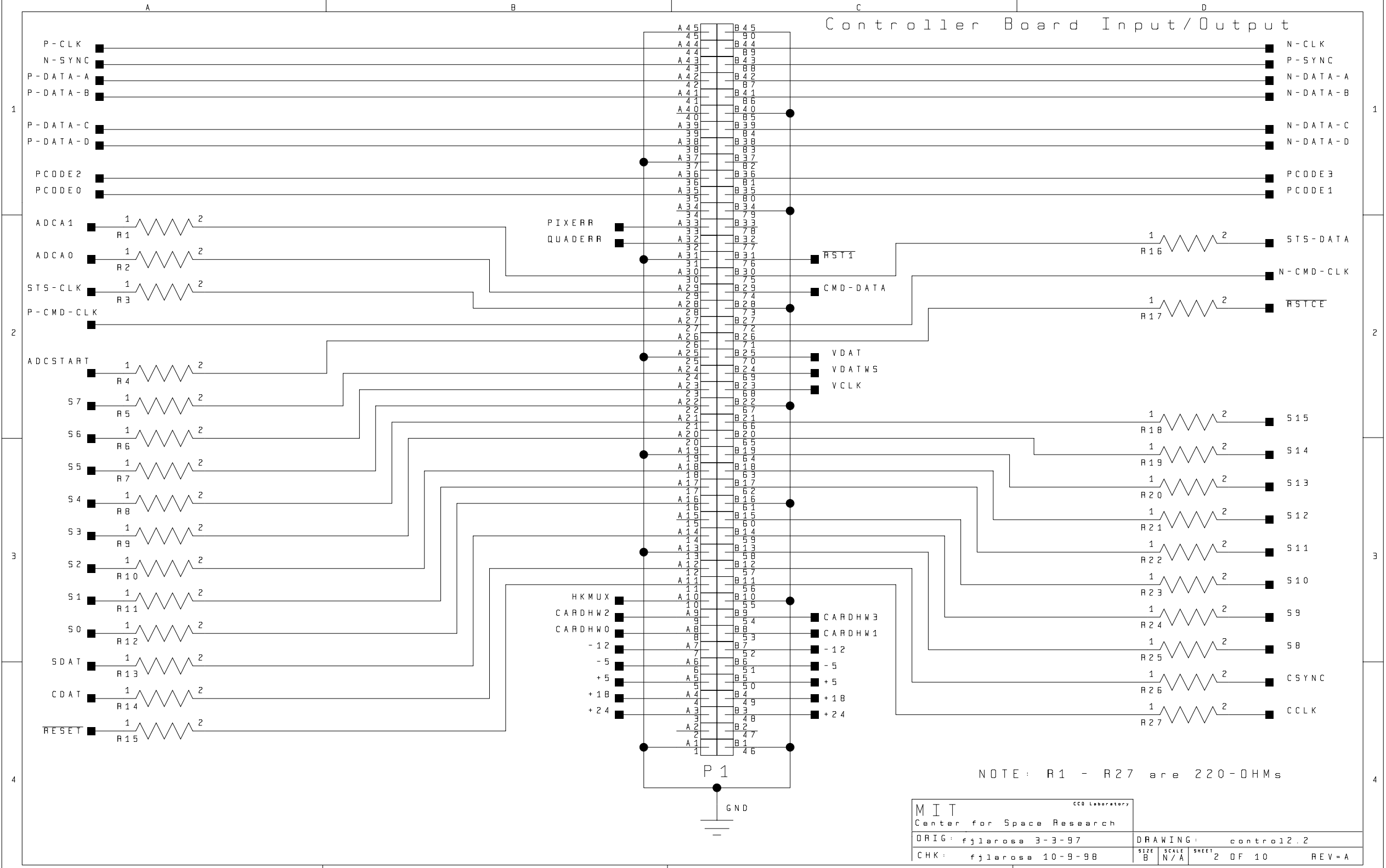
CENTER FOR SPACE RESEARCH

ASTROE-2 CONTROLLER BOARD

Sheet filename: control2.1

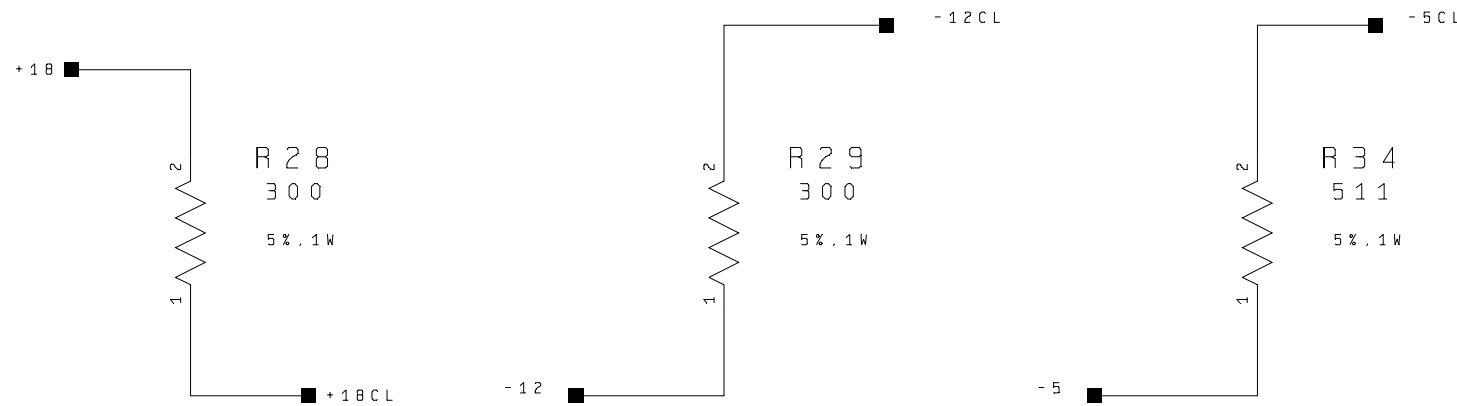
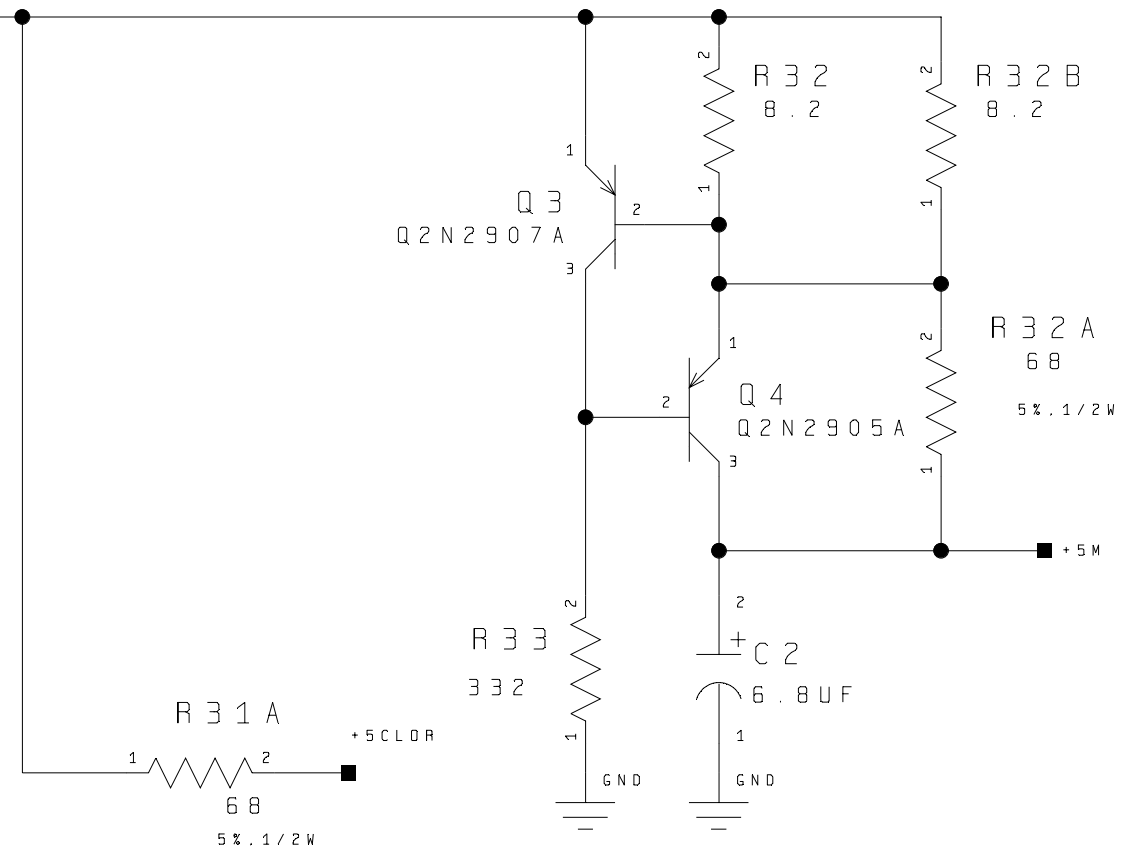
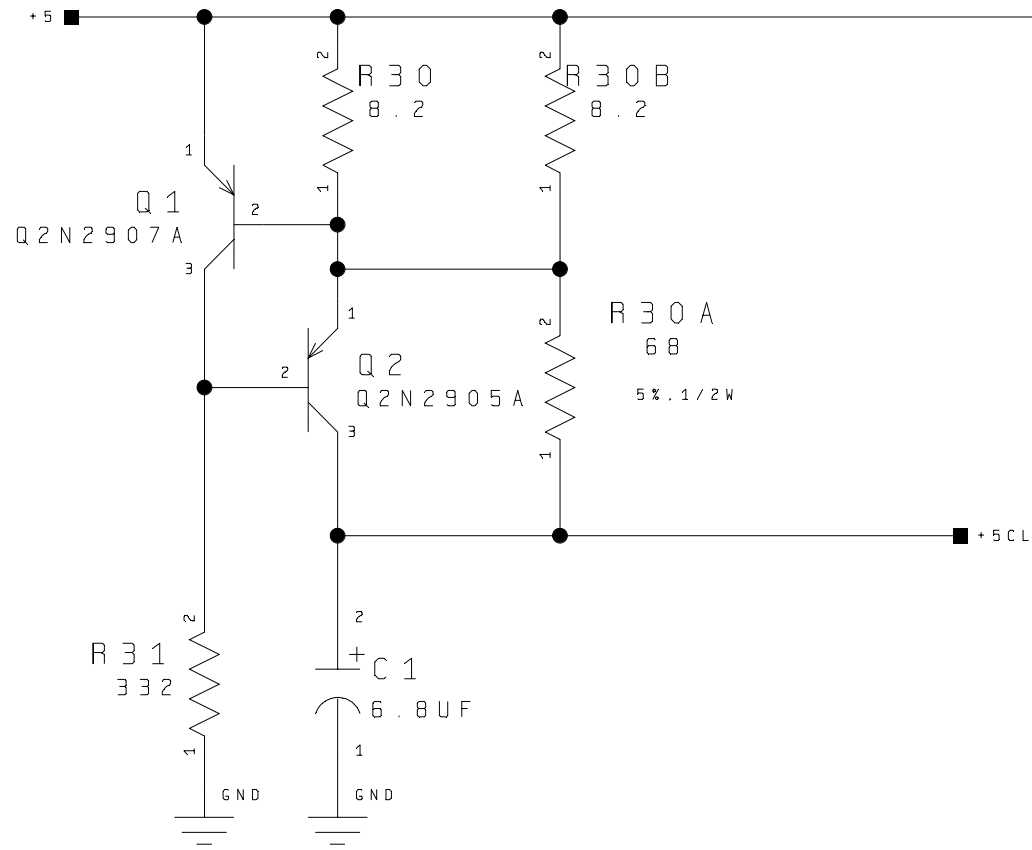
Size B	Code Identification No.	Drawing No. 30-05001.03	Rev. A
Scale:		Sheet: 1 of 10	

# Controller Board Input/Output



NOTE: R1 - R27 are 220-0HMs

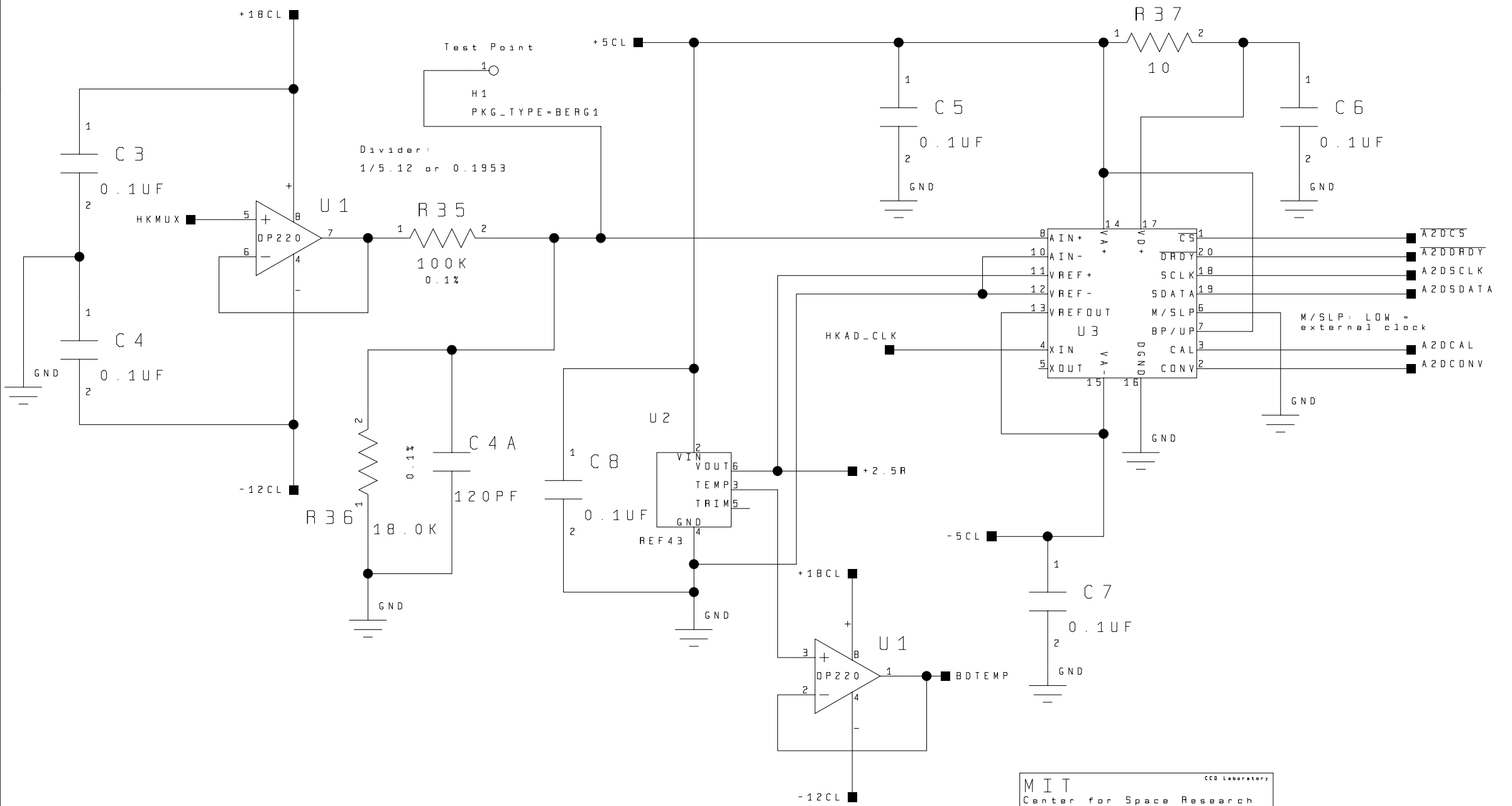
MIT Center for Space Research		CCD Laboratory	
ORIG: fjlarosa 3-3-97		DRAWING: control2.2	
CHK: fjlarosa 10-9-98	SIZE: B	SCALE: N/A	SHEET: 2 OF 10
			REV=A



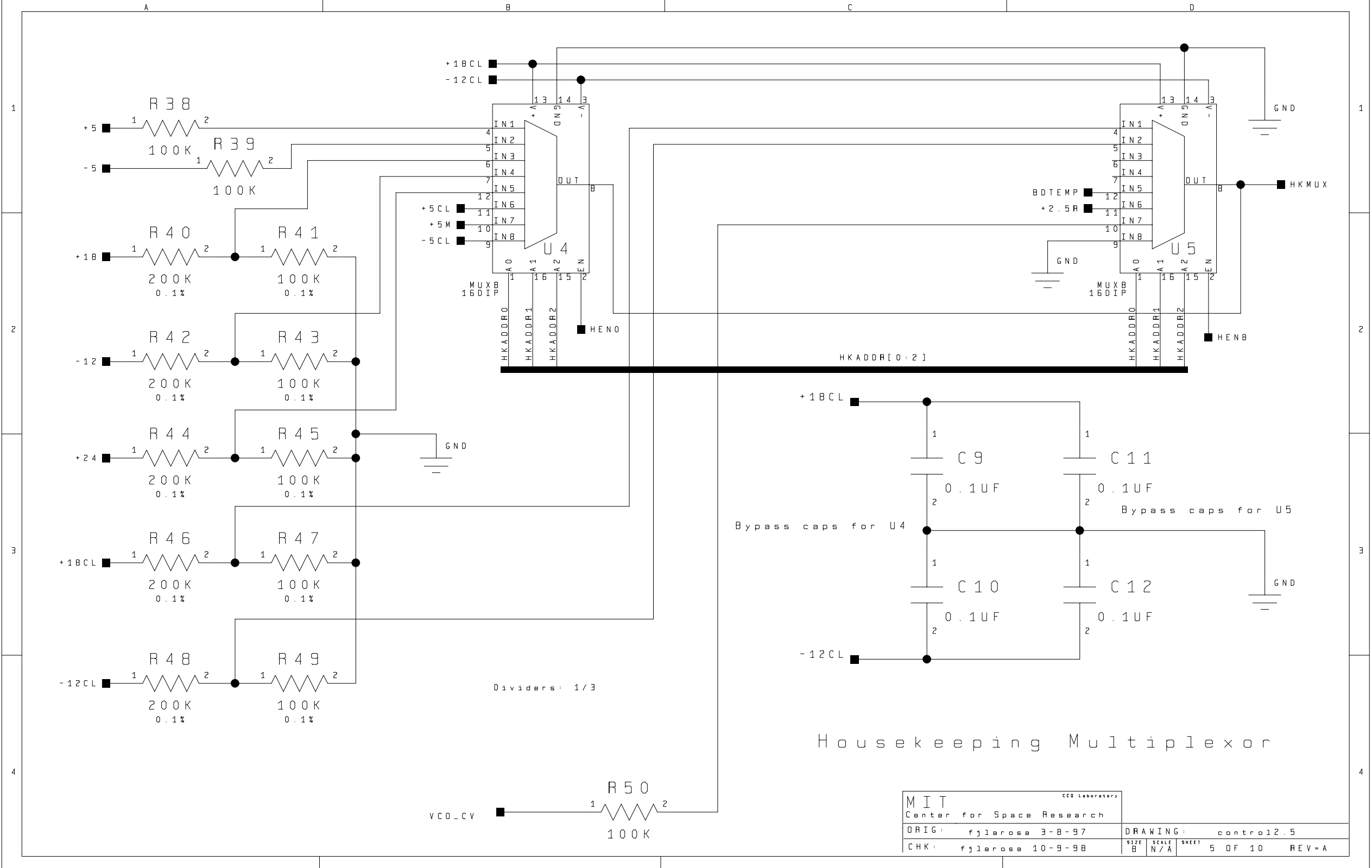
Power Control

MIT Center for Space Research		CCD Laboratory	
ORIG: John Doty 5/6/93		DRAWING: control2.3	
CHK: fjl1arosa 10-9-98	SIZE: B	SCALE: N/A	SHEET: 3 OF 10 REV: A

# Housekeeping ADC



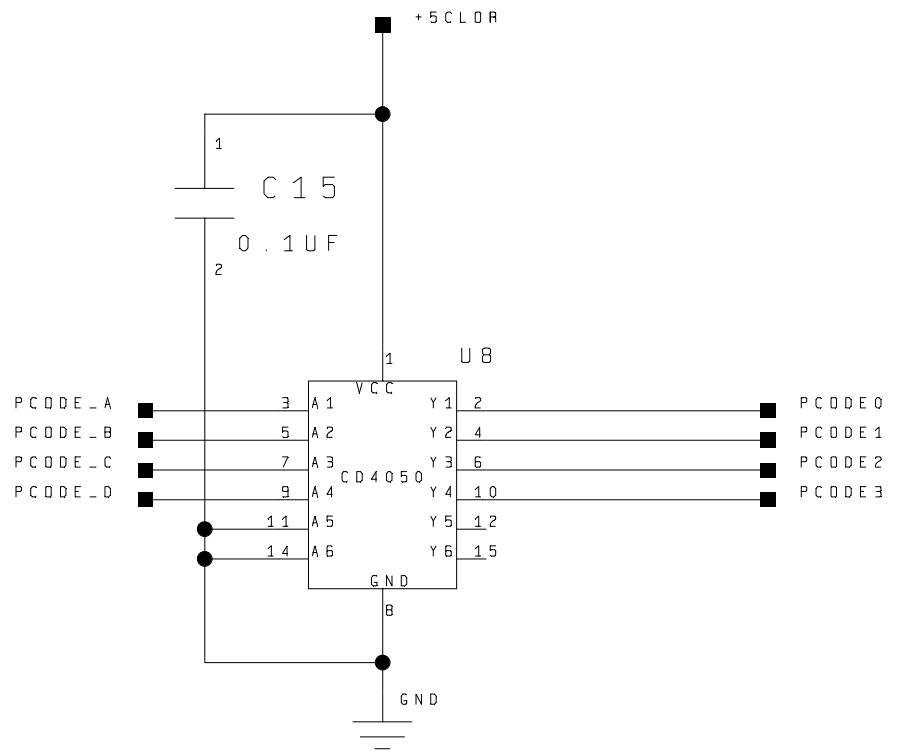
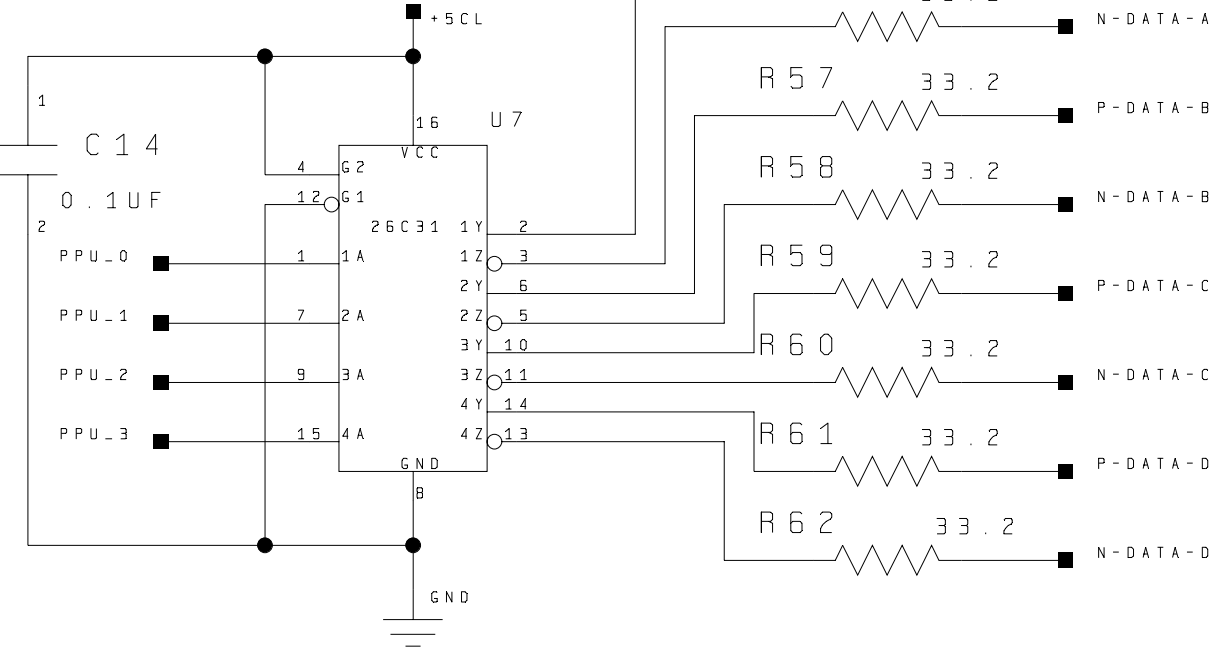
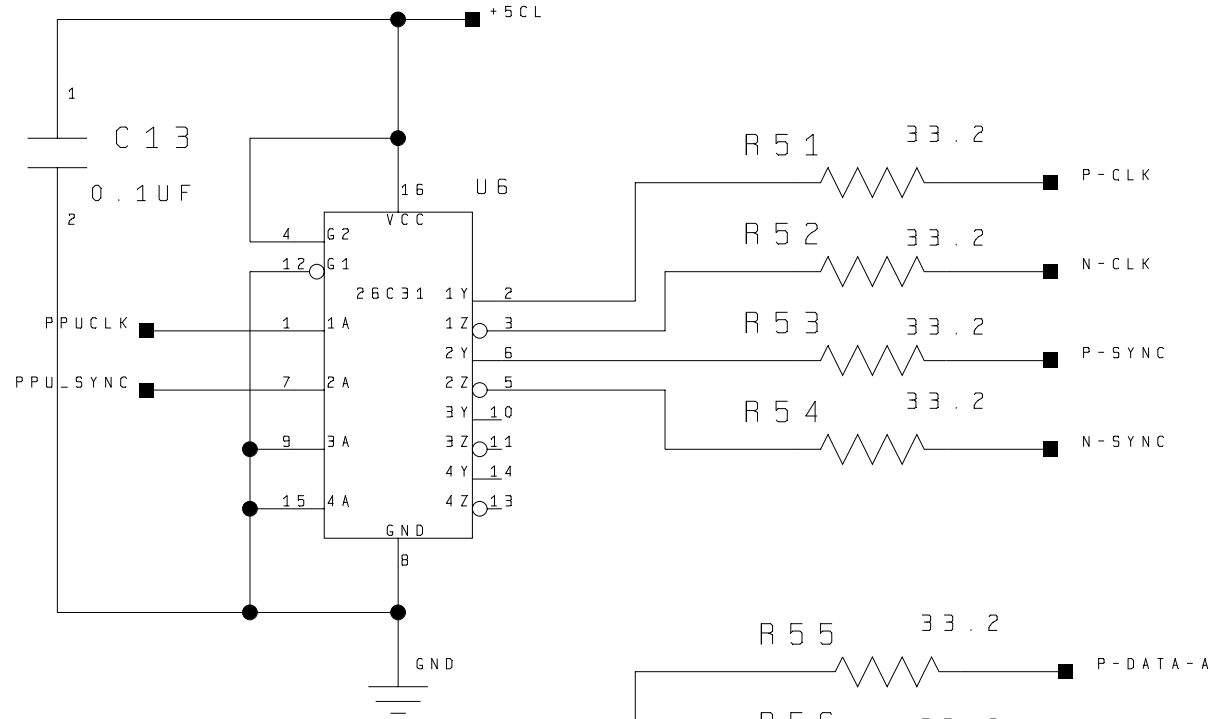
MIT		CCD Laboratory	
Center for Space Research			
ORIG:	John Doty 5/7/93	DRAWING:	control2.4
CHK:	fjlarosa 10-9-98-98	SIZE	SCALE
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			REV=A



Dividers: 1/3

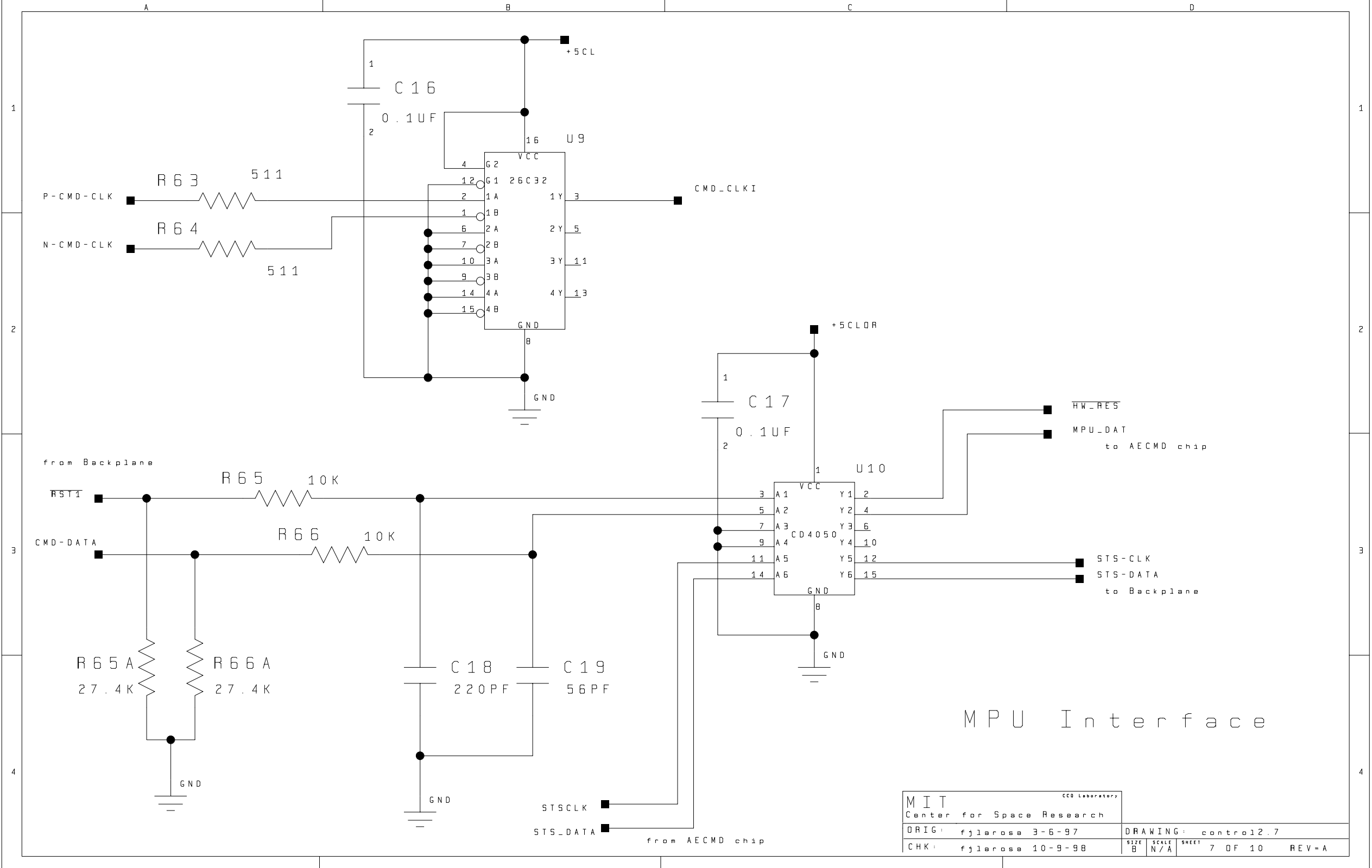
Housekeeping Multiplexor

MIT Center for Space Research		CCD Laboratory	
DRIG:	fjlarosa 3-8-97	DRAWING:	control2.5
CHK:	fjlarosa 10-9-98	SIZE:	B N/A
		SHEET:	5 OF 10
		REV:	A



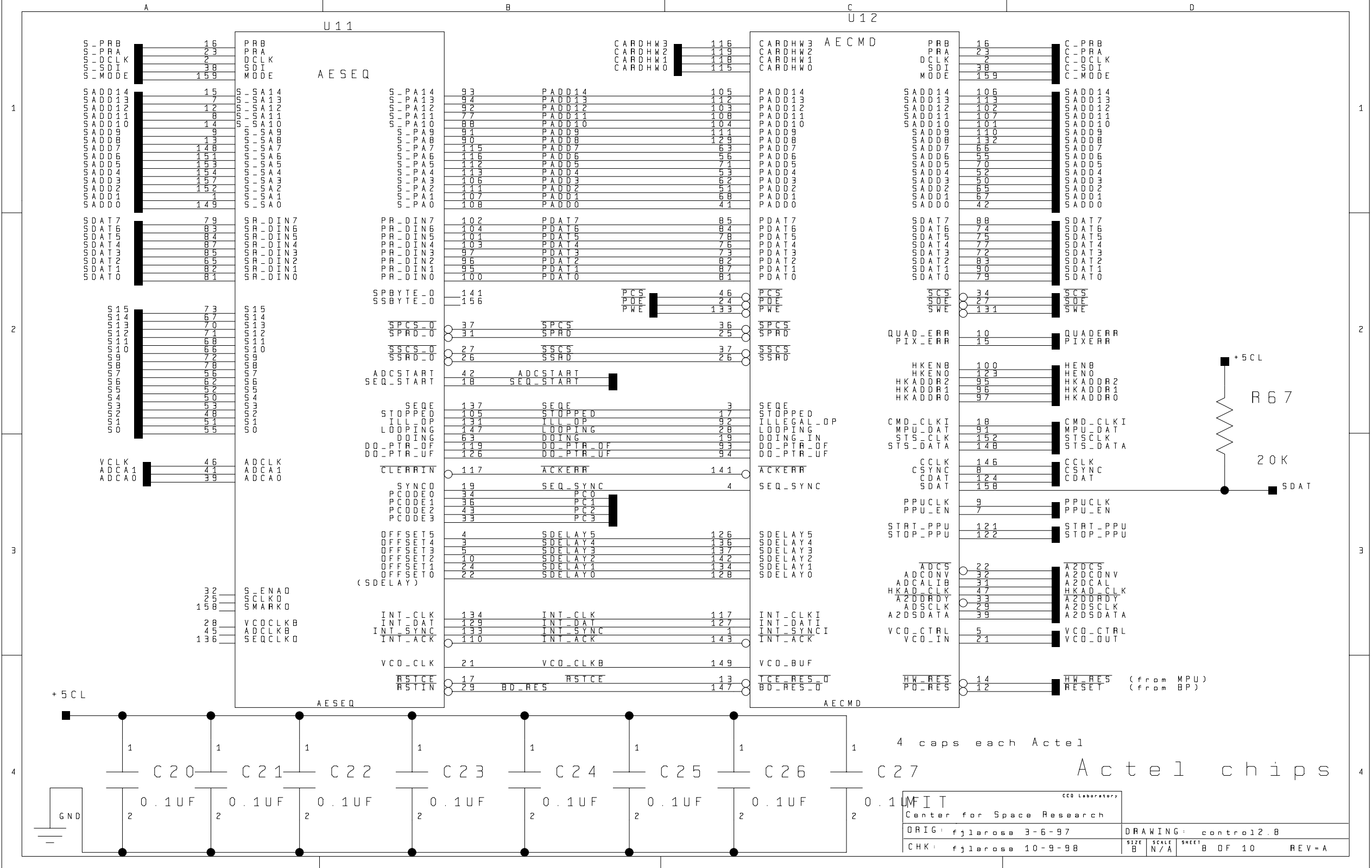
PPU Interface

MIT		CCD Laboratory	
Center for Space Research			
ORIG:	fjlarosa 3-6-97	DRAWING:	control2.6
CHK:	fjlarosa 10-9-98	SIZE	B
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		SHEET	6 OF 10
		REV	A



# MPU Interface

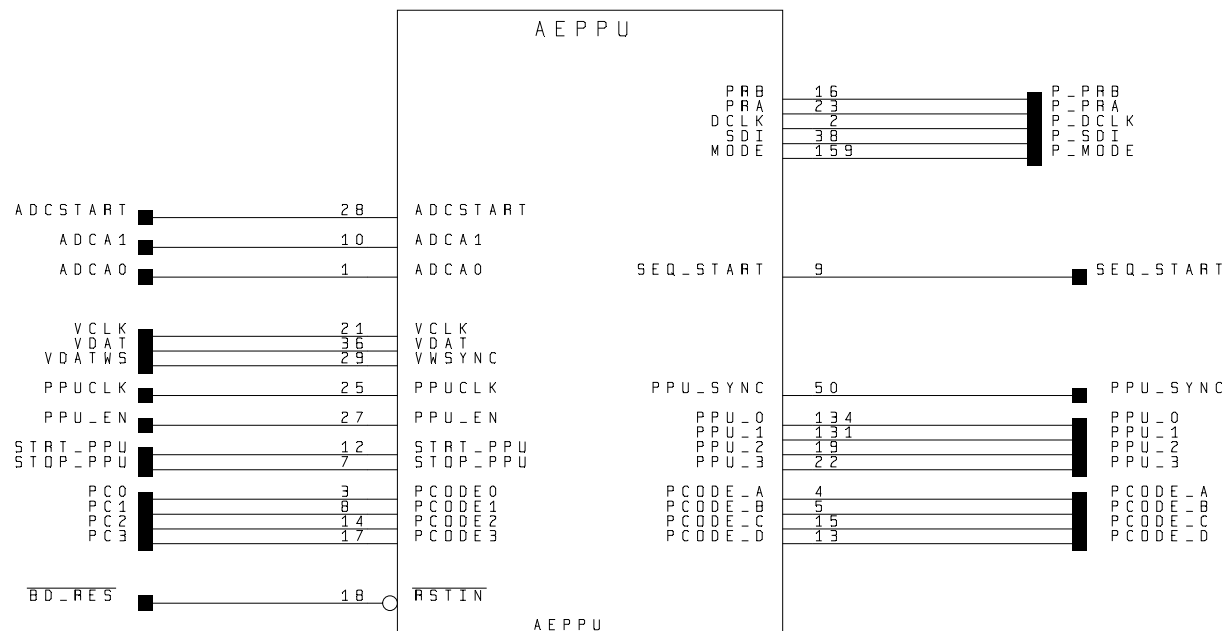
MIT		CCD Laboratory	
Center for Space Research			
ORIG:	fjlarosa 3-6-97	DRAWING:	control2.7
CHK:	fjlarosa 10-9-98	SIZE	B
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		SHEET	7 OF 10
		REV	A



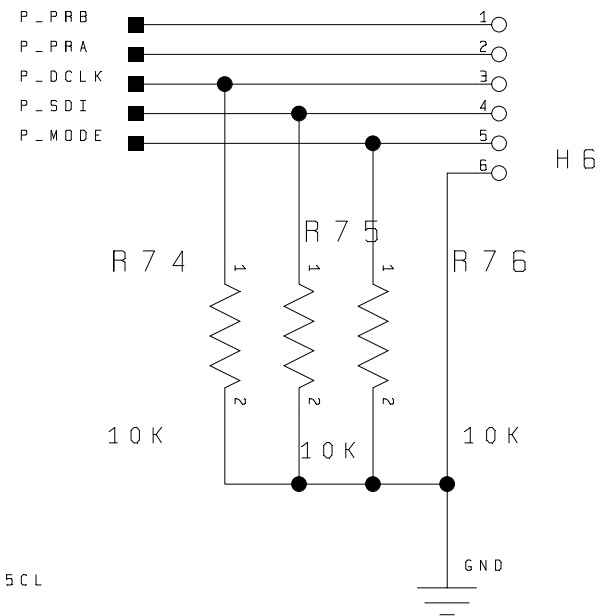


A E P P U & Actel debug headers

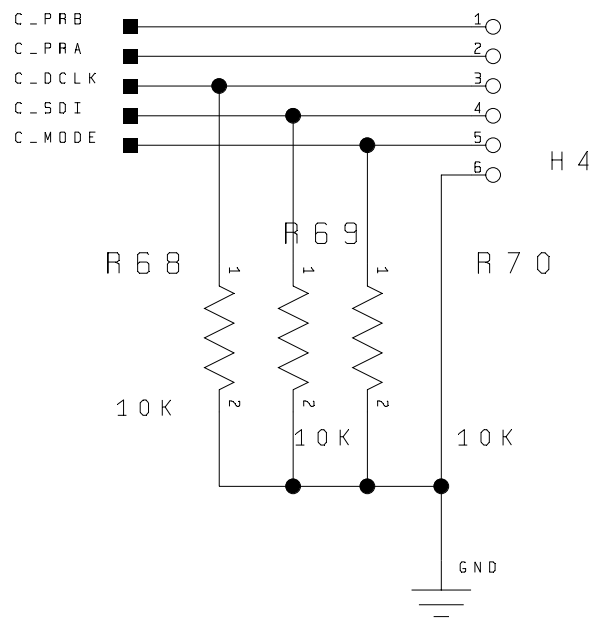
U 13



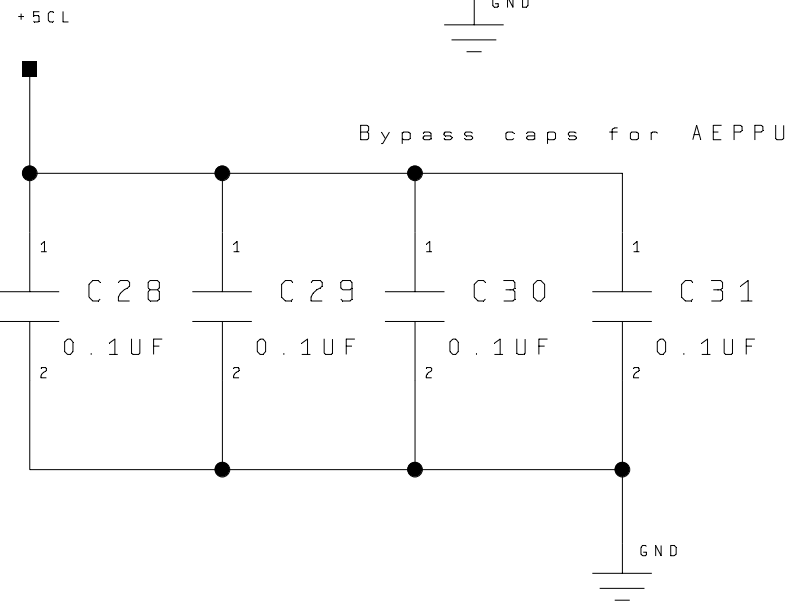
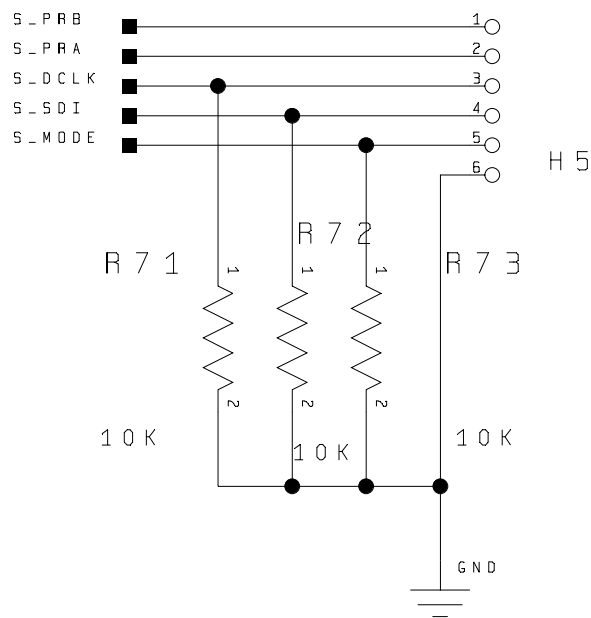
A E P P U Debug Header



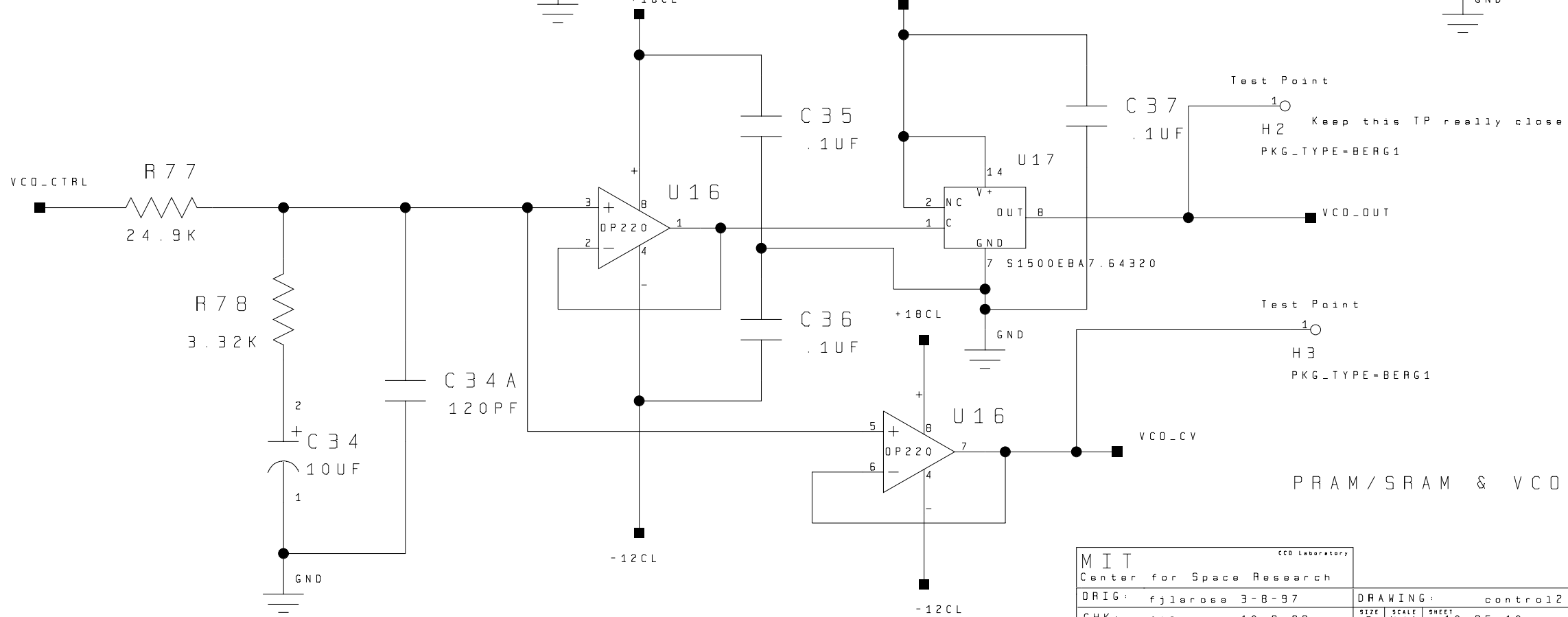
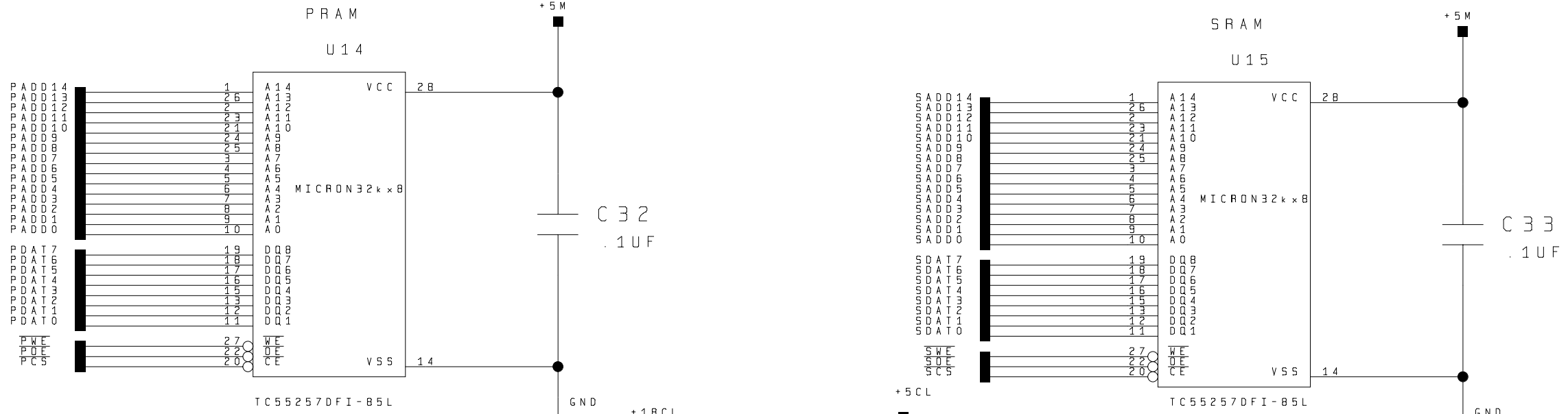
A E C M D Debug Header



A E S E Q Debug Header



MIT		CCB Laboratory	
Center for Space Research			
ORIG:	FJLAROSA 3-8-97	DRAWING:	control2.9
CHK:	fjlarosa 10-9-98	SIZE	SCALE
		B	N/A
		SHEET	9 OF 10
			REV=A



PRAM / SRAM & VCO

MIT Center for Space Research		CCO Laboratory	
ORIG: fjl1arosa 3-8-97	DRAWING: control2.10		
CHK: fjl1arosa 10-9-98	SIZE: B	SCALE: N/A	SHEET: 10 OF 10 REV=A