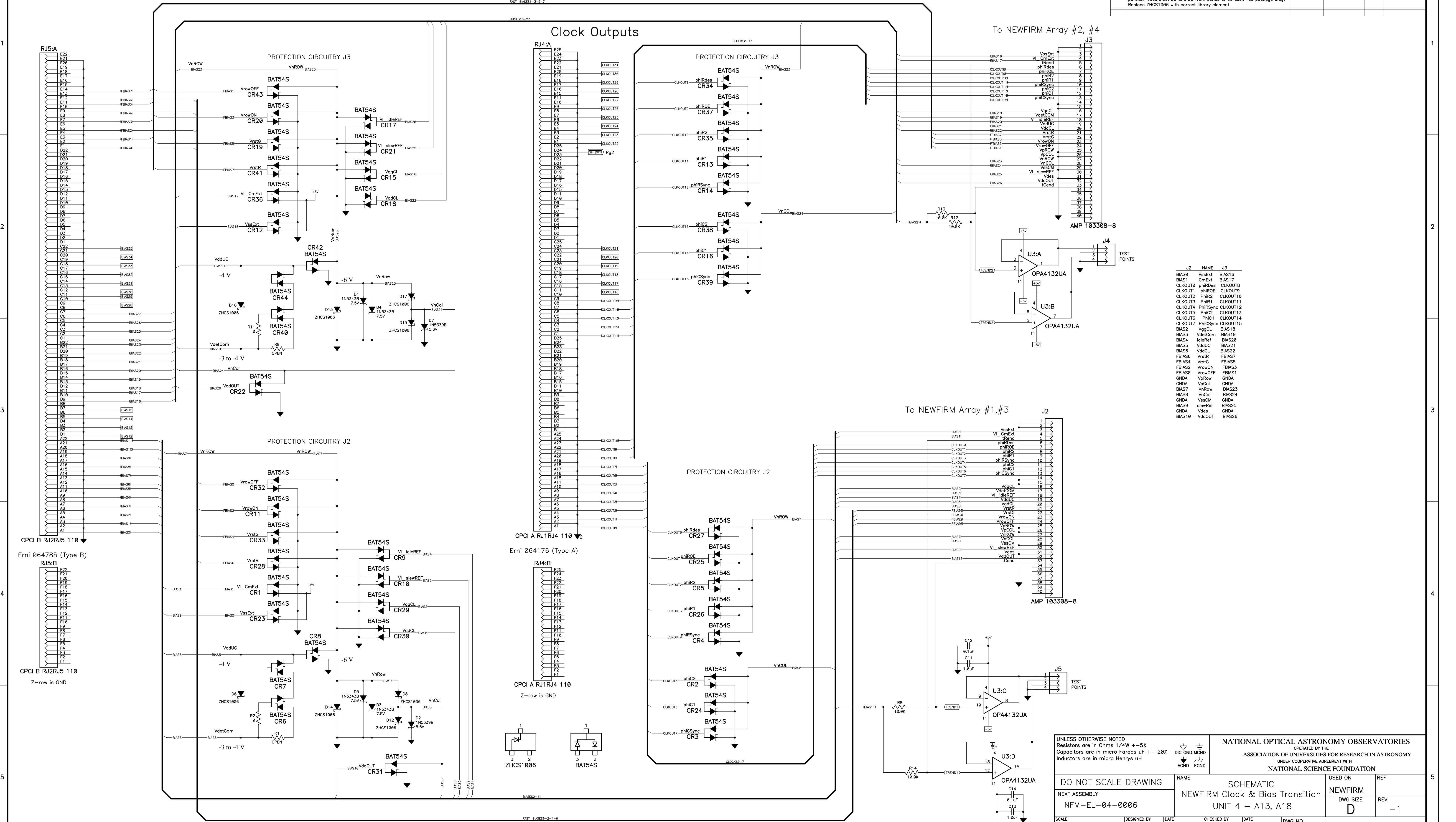


Bias and FastBias Outputs

REVISIONS					
LTR	DESCRIPTION	ECR	DATE	BY	APPVD
-1	change D1, D3, D4, D5 to 1N5343B, reconnect D1 and D4 from series to parallel, reconnect D3 and D5 from series to parallel. Add package diag. Replace ZHCS1006 with correct library element.	devel	13sep04	dms	j.garcia



J2	NAME	J3
BIAS0	VssExt	BIAS16
BIAS1	CmExt	BIAS17
CLKOUT0	phIRdes	CLKOUT08
CLKOUT1	phIROE	CLKOUT09
CLKOUT2	phIR2	CLKOUT10
CLKOUT3	phIR1	CLKOUT11
CLKOUT4	phIRSync	CLKOUT12
CLKOUT5	phIC2	CLKOUT13
CLKOUT6	phIC1	CLKOUT14
CLKOUT7	phICSync	CLKOUT15
BIAS2	VddUC	BIAS18
BIAS3	VdetCom	BIAS19
BIAS4	idleRef	BIAS20
BIAS5	VddUC	BIAS21
BIAS6	VddCL	BIAS22
FBIA56	VrstR	FBIA57
FBIA54	VrstG	FBIA55
FBIA52	VrowON	FBIA53
FBIA50	VrowOFF	FBIA51
GND4	VpRow	GND4
GND4	VpCol	GND4
BIAS7	VnRow	BIAS23
BIAS8	VnCol	BIAS24
GND4	VssCM	GND4
BIAS9	slewREF	BIAS25
GND4	Vdes	GND4
BIAS10	VddOUT	BIAS26

UNLESS OTHERWISE NOTED
Resistors are in Ohms 1/4W +/- 5%
Capacitors are in micro Farads uF +/- 20%
Inductors are in micro Henrys uH

NATIONAL OPTICAL ASTRONOMY OBSERVATORIES
OPERATED BY THE
ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY
UNDER COOPERATIVE AGREEMENT WITH
NATIONAL SCIENCE FOUNDATION

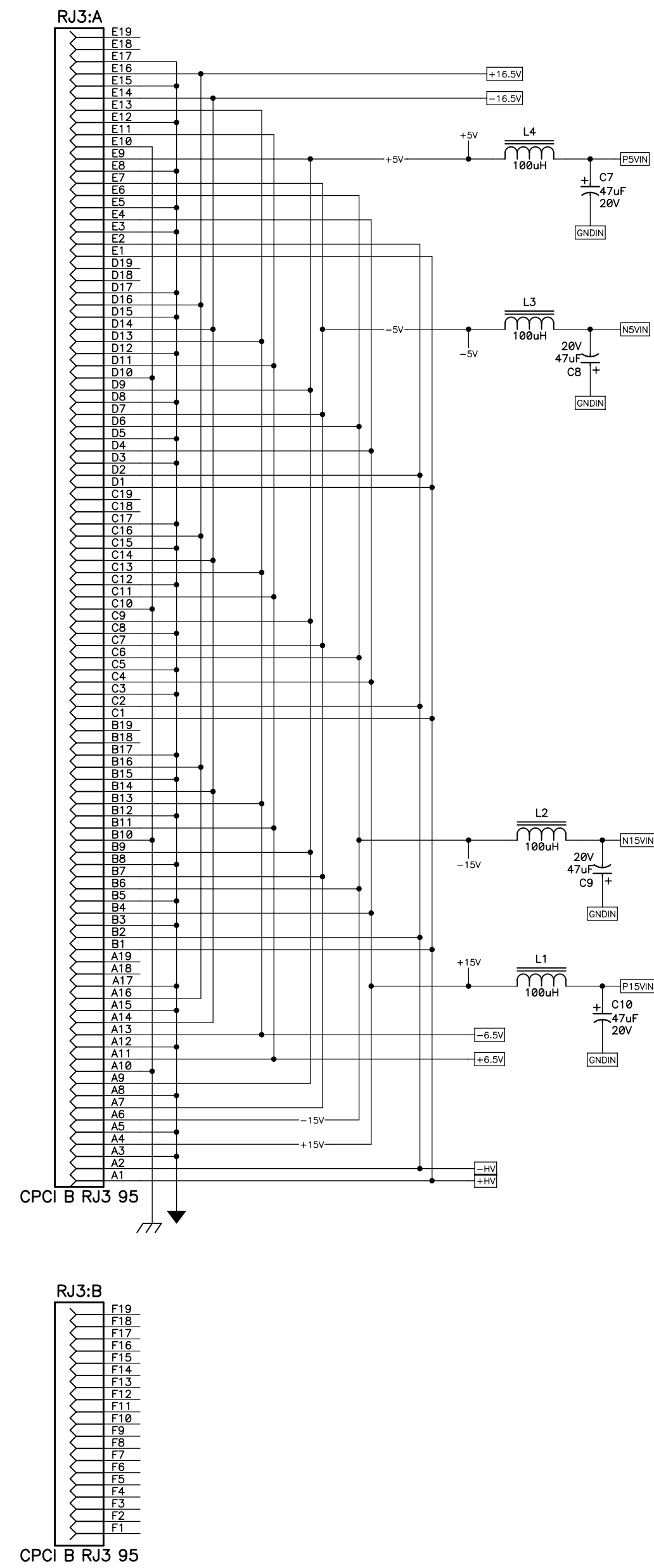
DO NOT SCALE DRAWING	NAME	USED ON	REF
NEXT ASSEMBLY	SCHEMATIC	NEWFIRM	
NFM-EL-04-0006	NEWFIRM Clock & Bias Transition	DWG SIZE	REV
	UNIT 4 - A13, A18	D	-1

SCALE:	DESIGNED BY	DATE	CHECKED BY	DATE	DWG NO
	Mark Hunten	4/22/04			
DWG PRODUCED USING	DRAWN BY	DATE	APPROVED BY	DATE	RELEASED
PCAD 2001	Mark Hunten				
PRINT ISSUED	DATE	APPROVED BY	DATE	RELEASED	

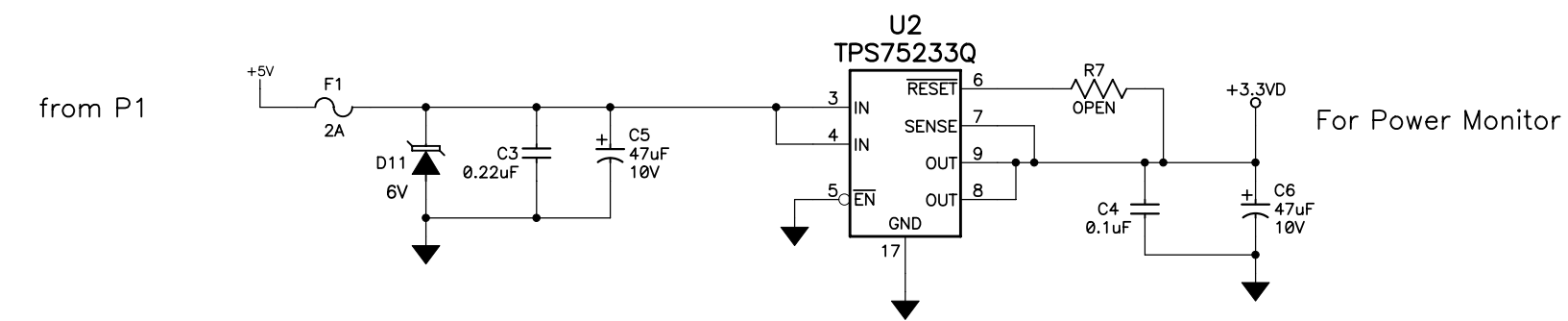
Modified Date: Wed Aug 10, 2005
Print Date: Thu Mar 25, 2006

Sheet 1 of 2

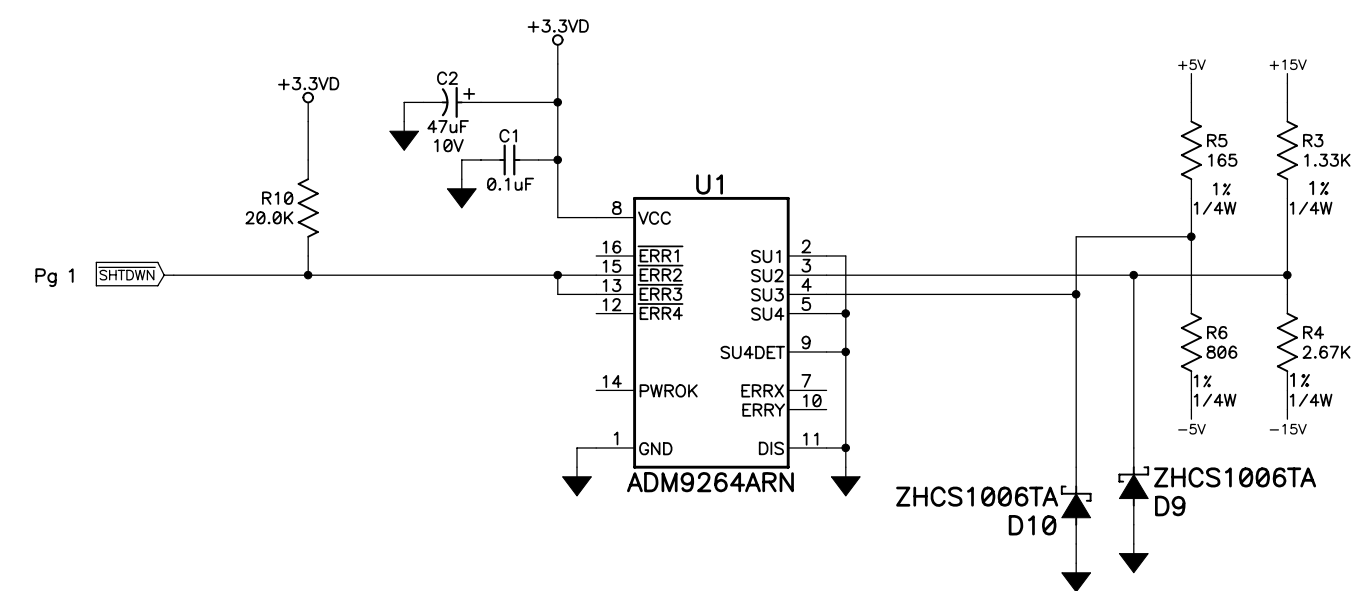
ANALOG POWER
CLK & BIAS BOARD
Power Connector



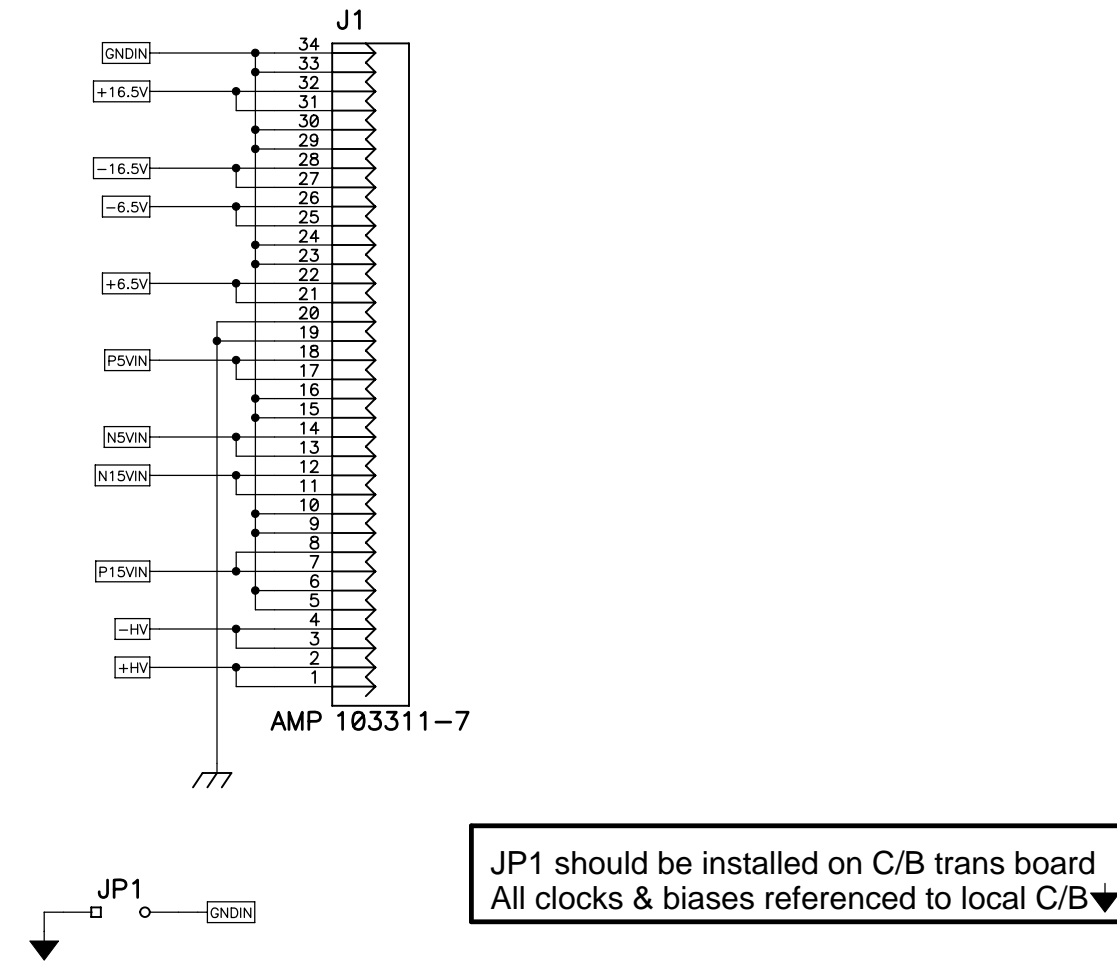
INPUT POWER CONDITIONING



SHUT DOWN OVER/UNDER VOLTAGE



Interface Card
Power Input



- NOTES:
1. Install Jumper JP1 only on the board that supplies the entire system.
2. See MNSN-AD-01-xxxx and MNSN-AD-01-XXXX for electrical and mechanical specifications of transition boards.

NATIONAL OPTICAL ASTRONOMY OBSERVATORIES			
NAME SCHEMATIC			
NEWFIRM Clock & Bias Transition			
UNIT 4 - A13, A18			
DWG NO	SIZE	REF	REV
NFM-EL-04-2006	D		-1
Modified Date: Wed Aug 10, 2005		Print Date: Thu Mar 23, 2006	
Sheet 2		of 2	