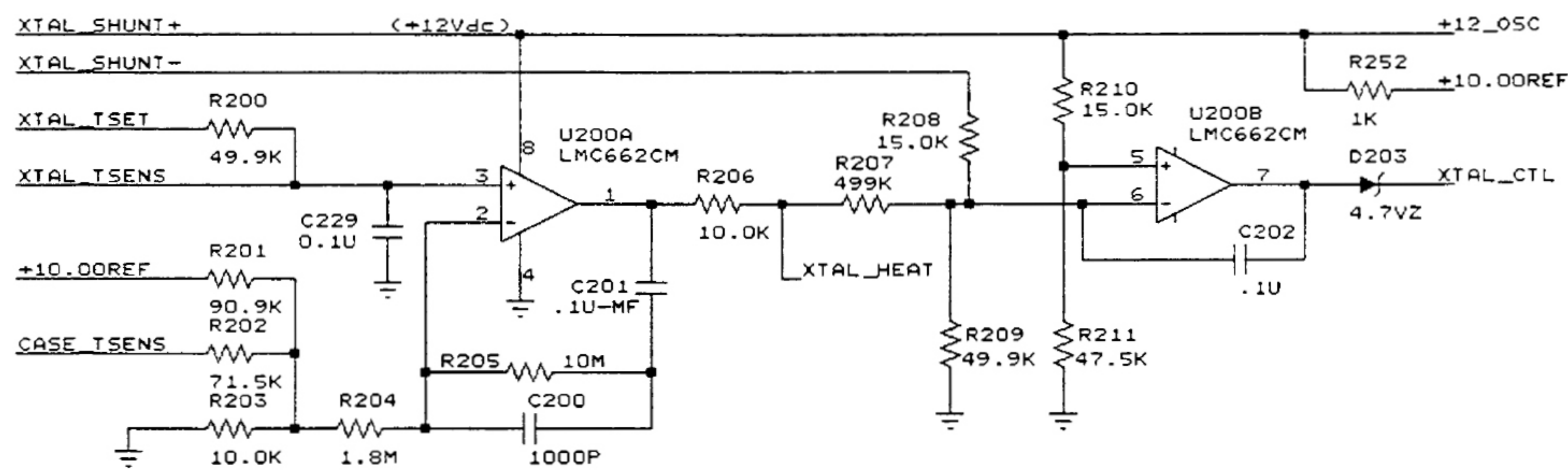
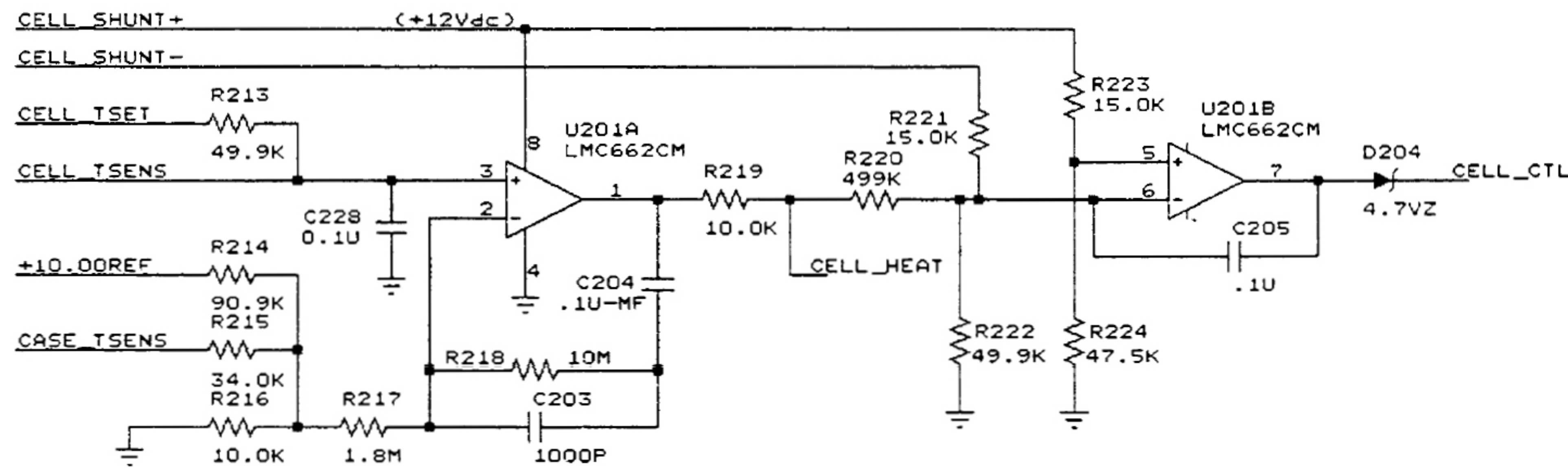


UNLESS OTHERWISE NOTED:  
 1.) ALL CAPS LESS THAN OR EQUAL TO 1000 pF ARE NPO  
 2.) CAPS BETWEEN 1000pF AND .1uF ARE X7R  
 3.) SMD SIZE 1206 (FOR 1/8W POWER RATING FOR RESISTORS)  
 S=SOURCE OF SIGNAL ON THIS PCB  
 D=DESTINATION OF SIGNAL IS THIS PCB  
 P=PASS THROUGH OF SIGNAL ON THIS PCB

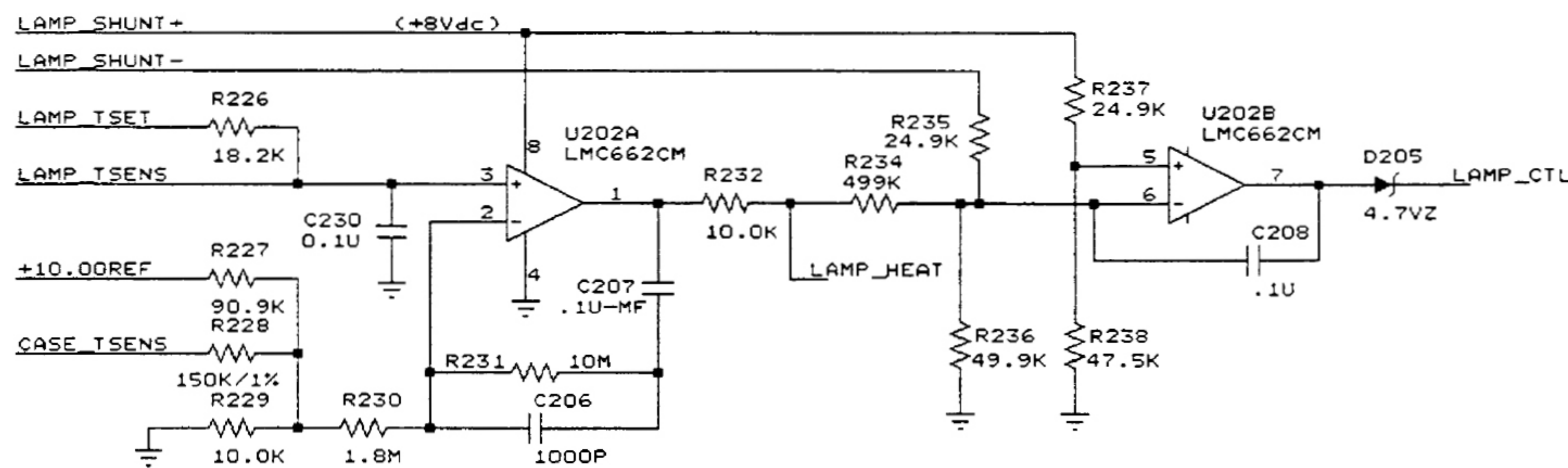
CRYSTAL TEMPERATURE CONTROL



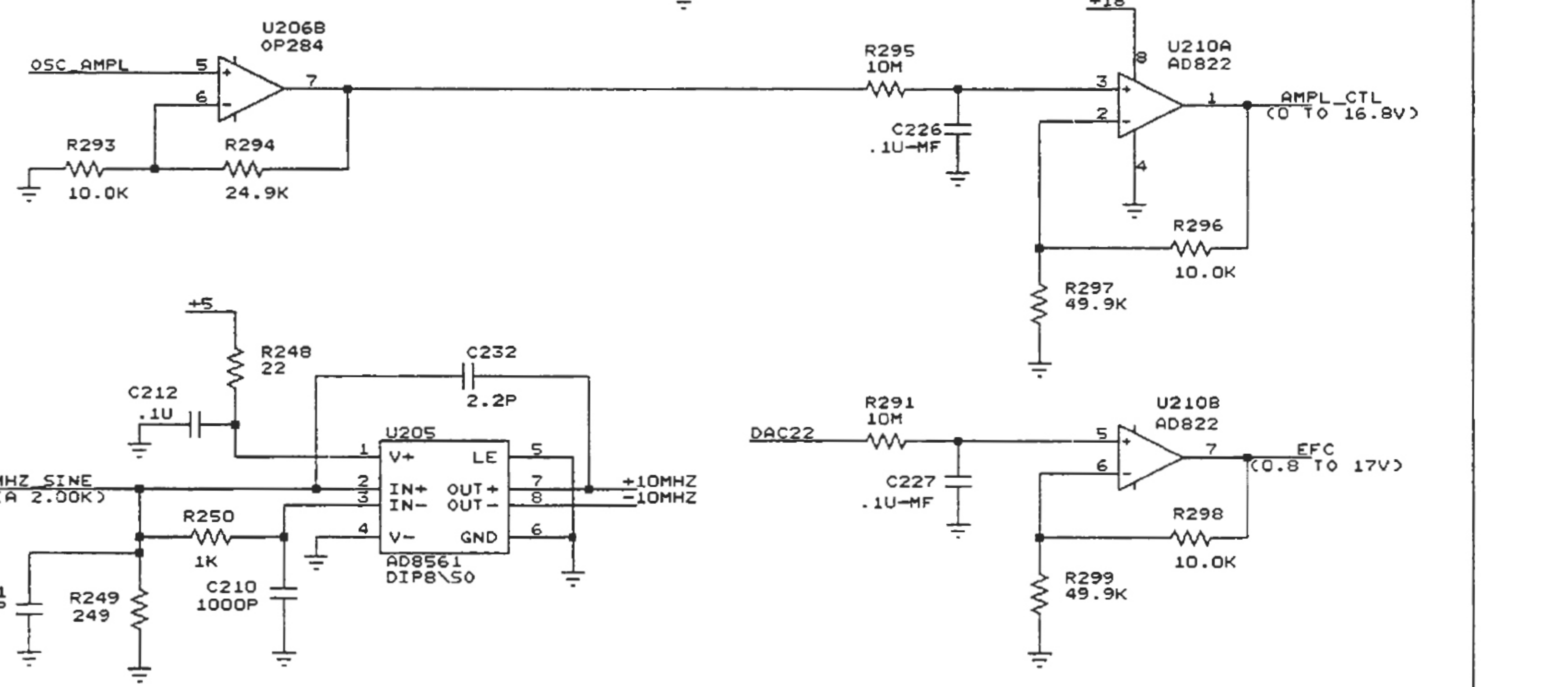
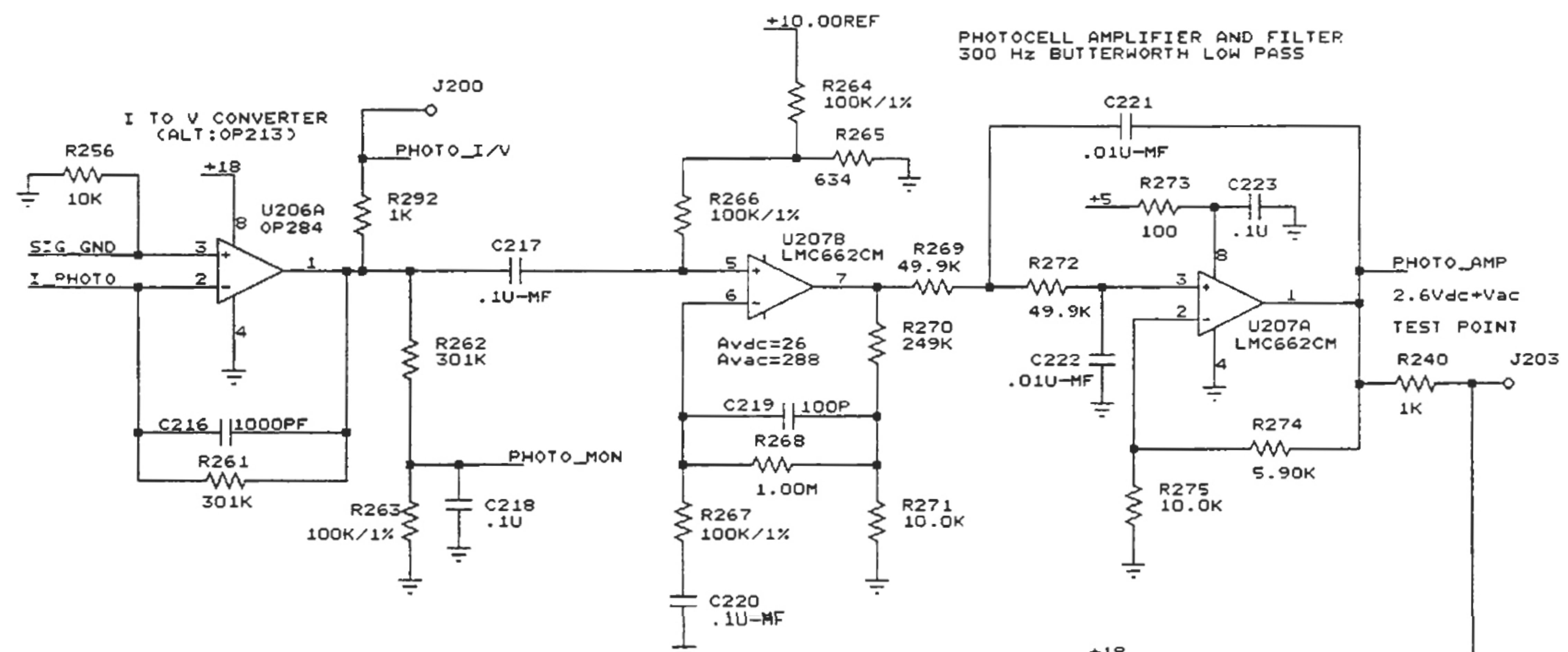
CELL TEMPERATURE CONTROL



LAMP TEMPERATURE CONTROL



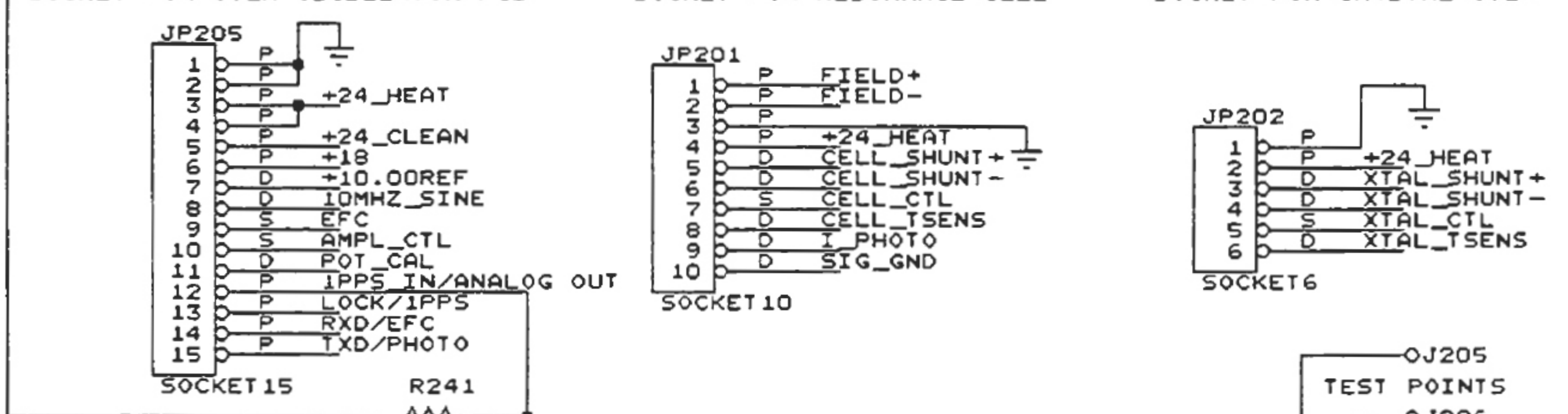
PHOTOCELL AMPLIFIER AND FILTER  
300 Hz BUTTERWORTH LOW PASS



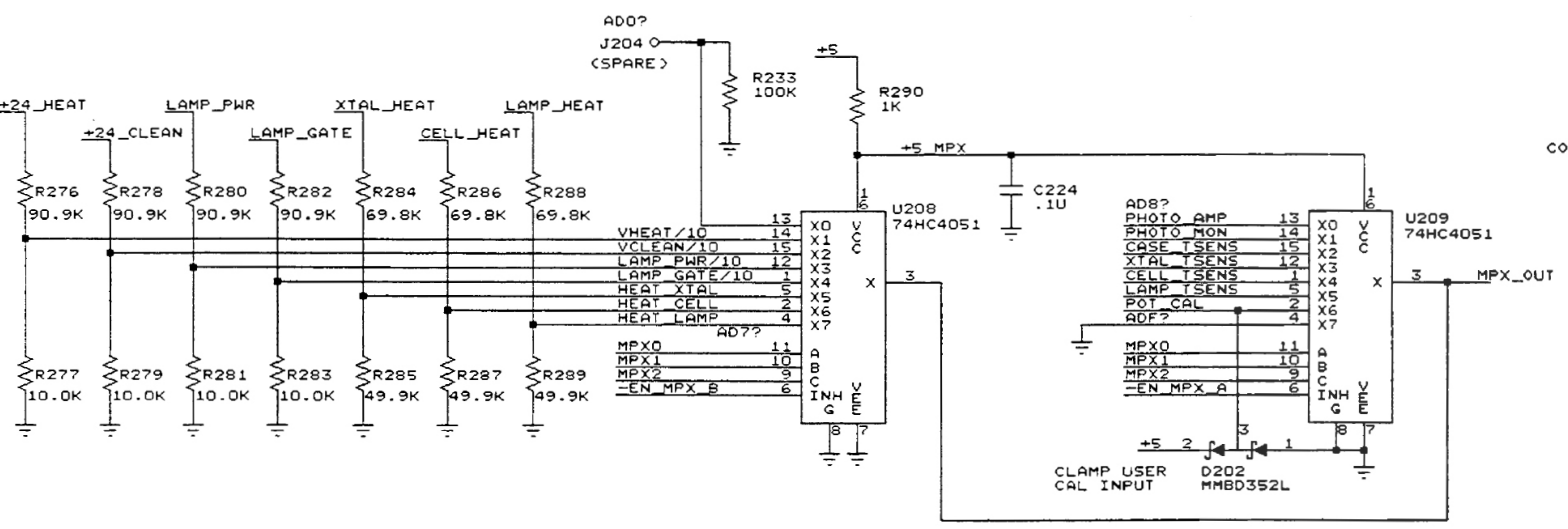
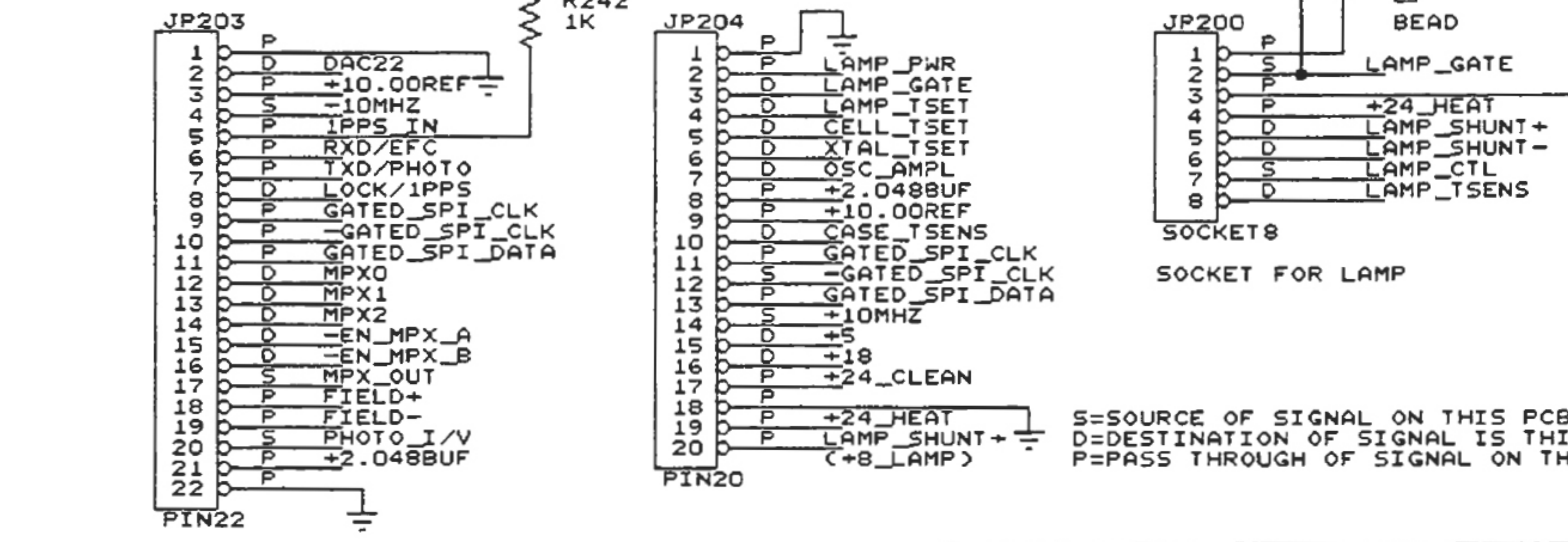
SOCKET FOR OVEN OSCILLATOR PCB

SOCKET FOR RESONANCE CELL

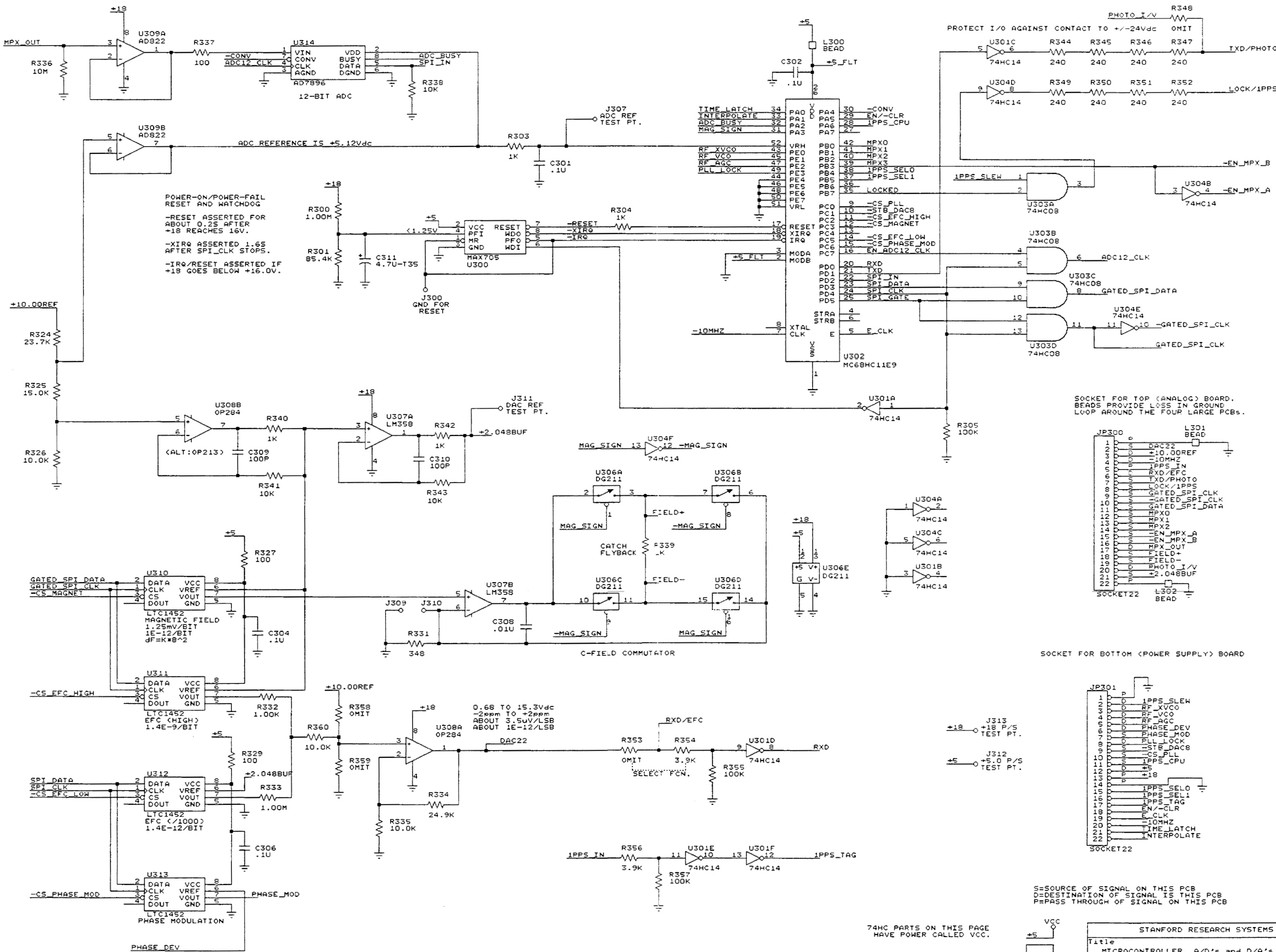
SOCKET FOR CRYSTAL OVEN



CONFIGURE FOR ANALOG OUT OR IPPS IN

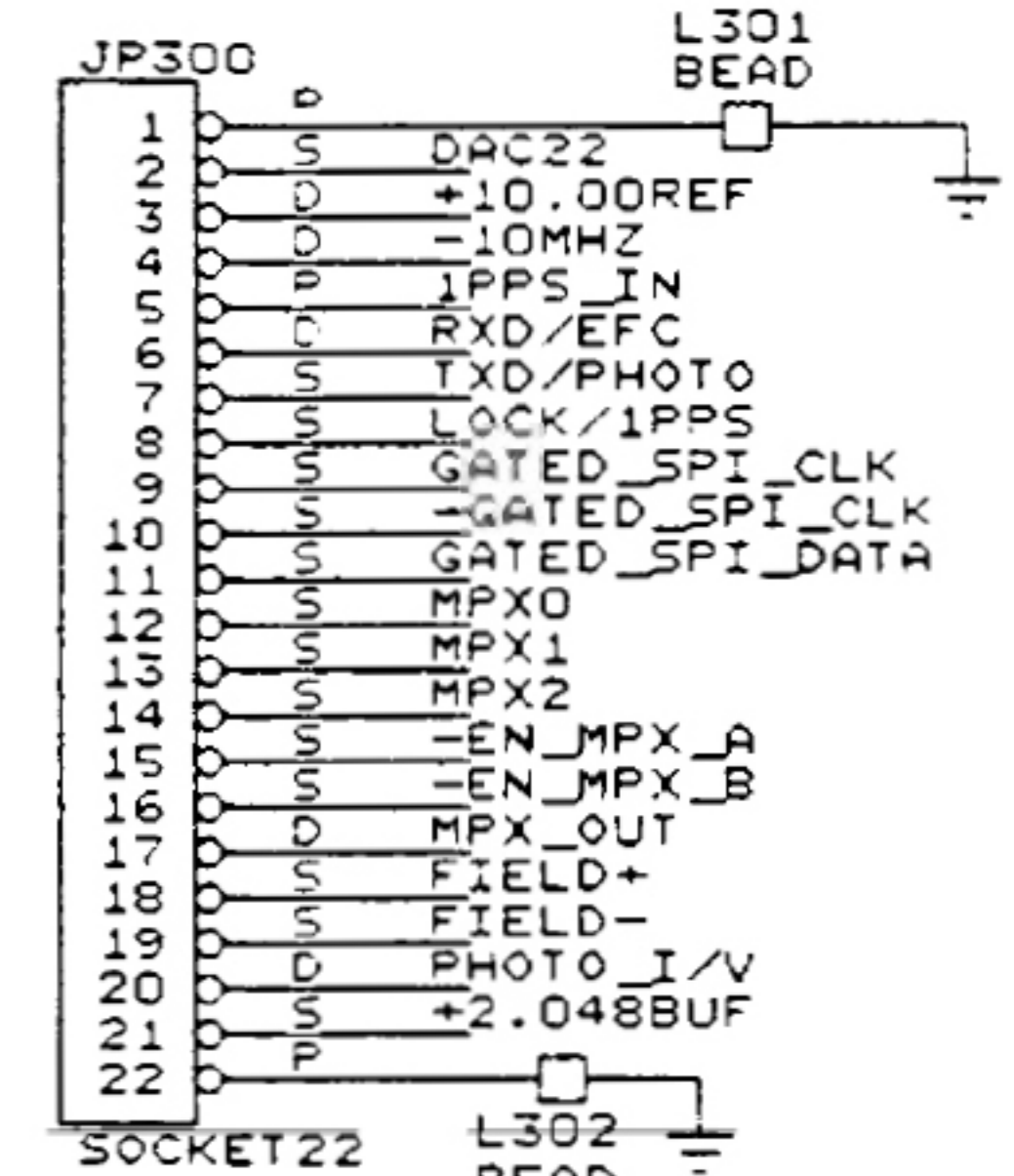


NOTE: ADDED C231 AND C232 AND CHANGED VALUE OF C210 AS OF 9/26/01.

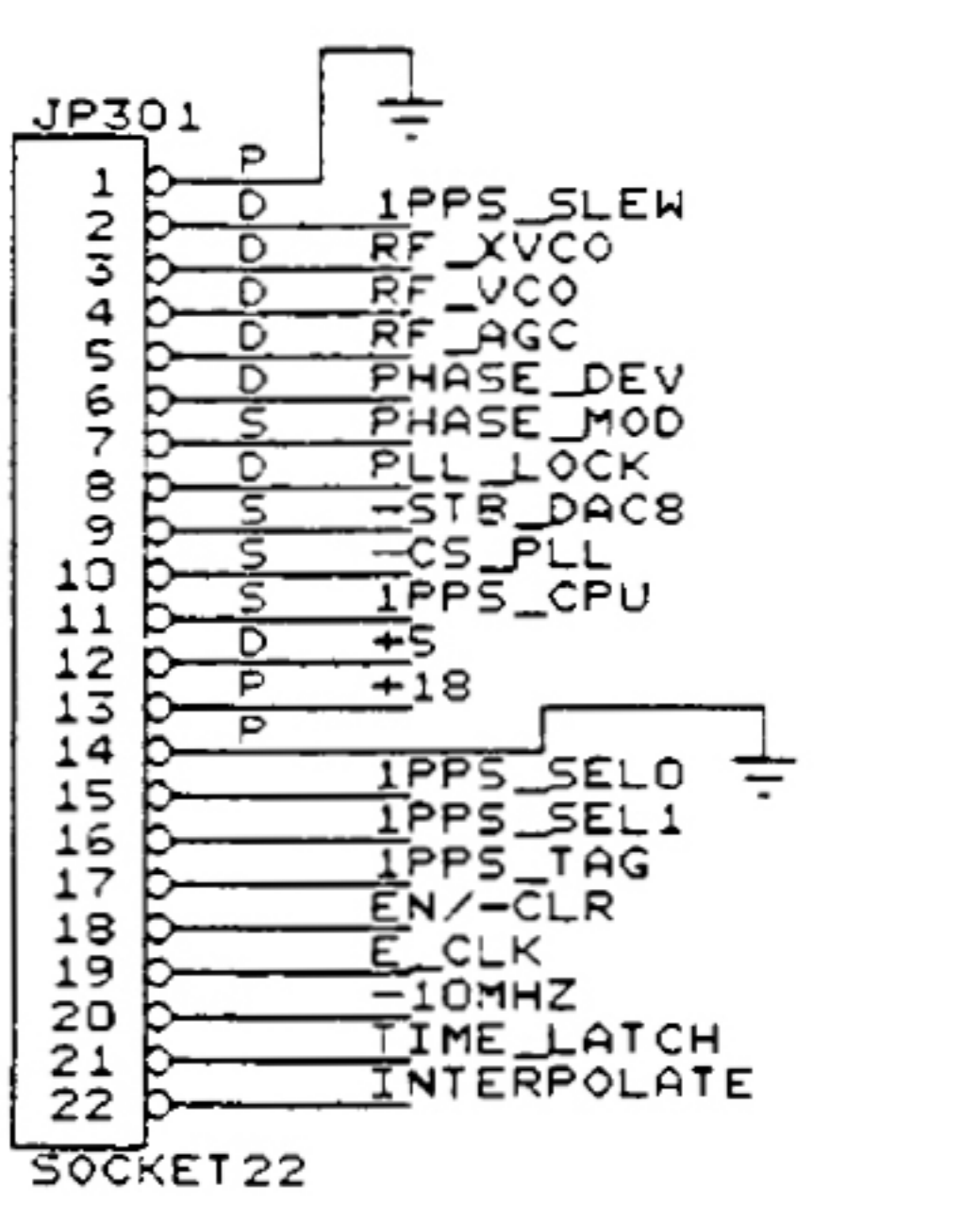


POWER-ON/POWER-FAIL  
RESET AND WATCHDOG  
-RESET ASSERTED FOR  
ABOUT 0.25 AFTER  
+18 REACHES 16V.  
-XIRQ ASSERTED 1.65  
AFTER SPI\_CLK STOPS.  
-IRQ/RESET ASSERTED IF  
+18 GOES BELOW +16.0V.

SOCKET FOR TOP (ANALOG) BOARD.  
BEADS PROVIDE LOSS IN GROUND  
LOOP AROUND THE FOUR LARGE PCBs.



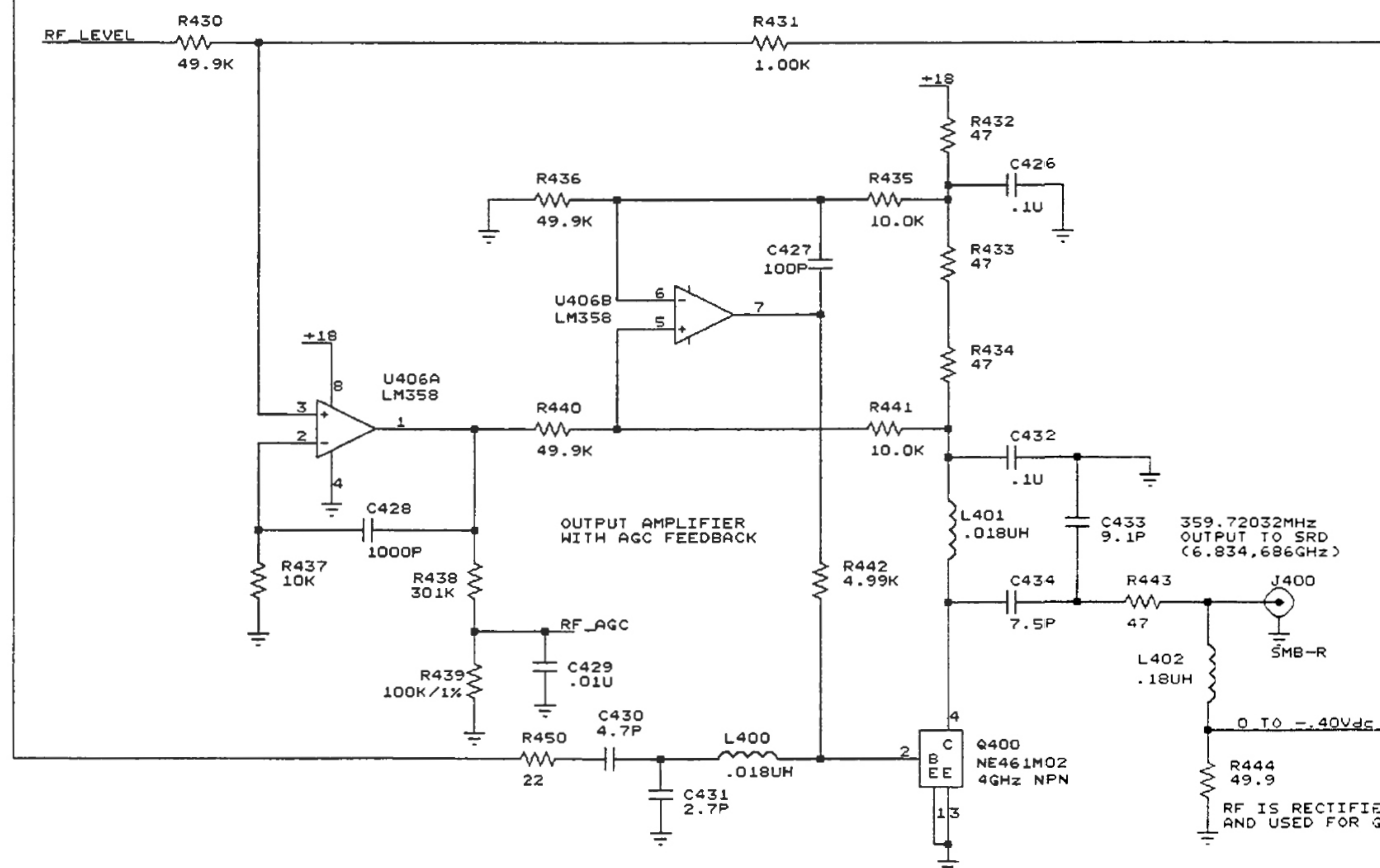
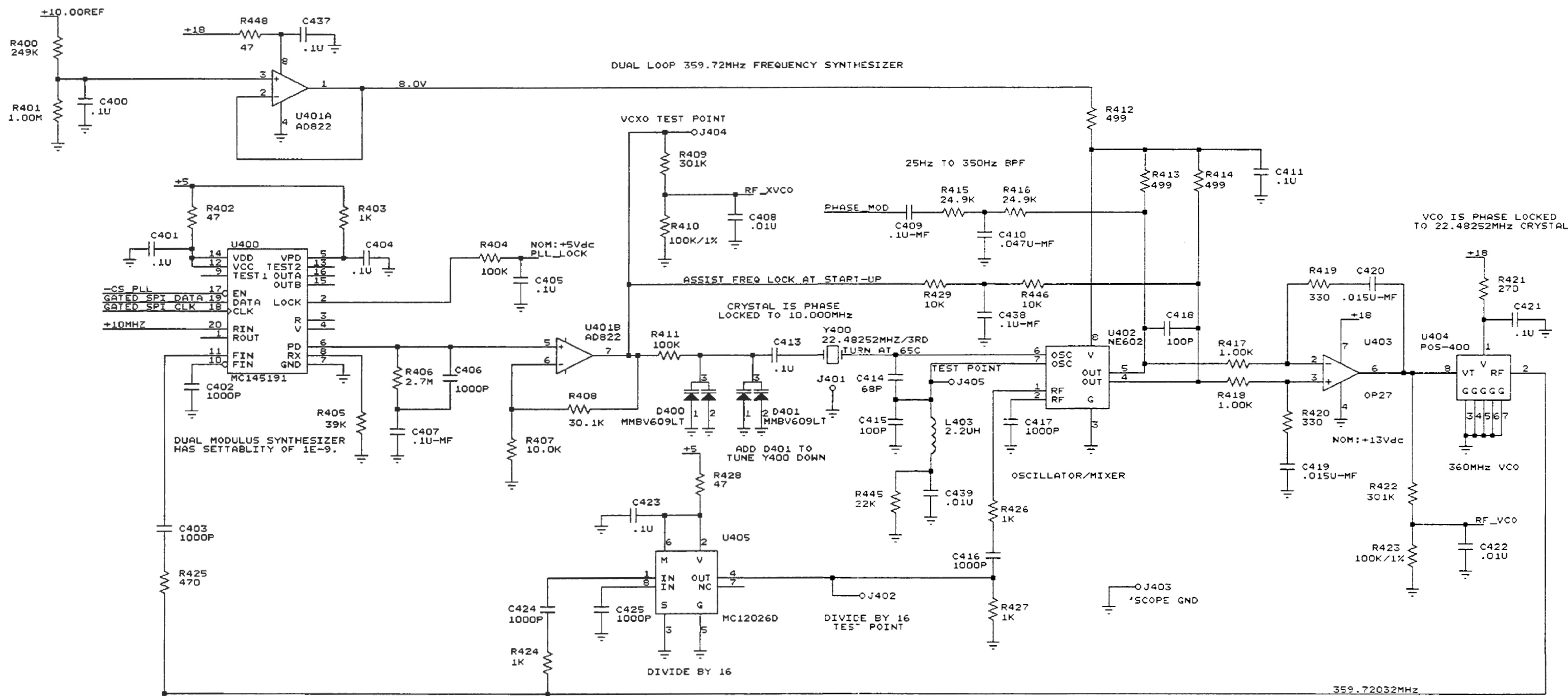
SOCKET FOR BOTTOM (POWER SUPPLY) BOARD



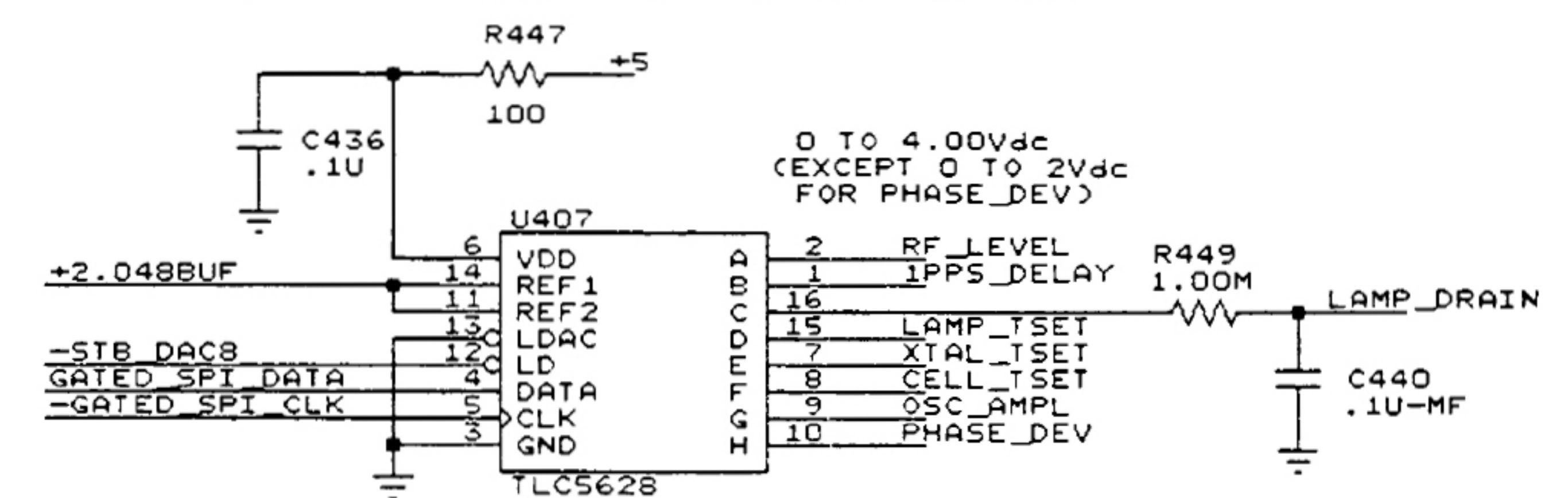
S=SOURCE OF SIGNAL ON THIS PCB  
D=DESTINATION OF SIGNAL IS THIS PCB  
P=PASS THROUGH OF SIGNAL ON THIS PCB

74HC PARTS ON THIS PAGE  
HAVE POWER CALLED VCC.

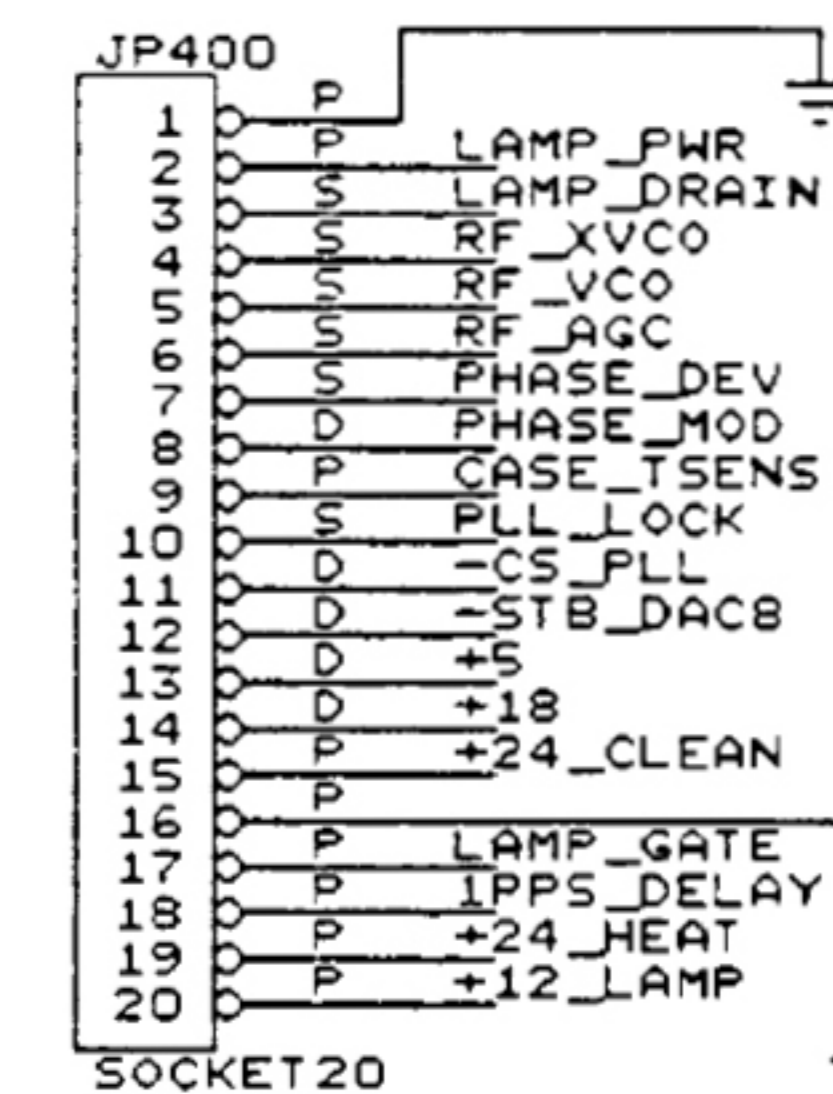
STANFORD RESEARCH SYSTEMS		
Title	MICROCONTROLLER, A/D's and D/A's (SIDE)	
Size	Document Number	REV
C	RB_H3	H
Date:	August 12, 1999	Sheet 3 of 6



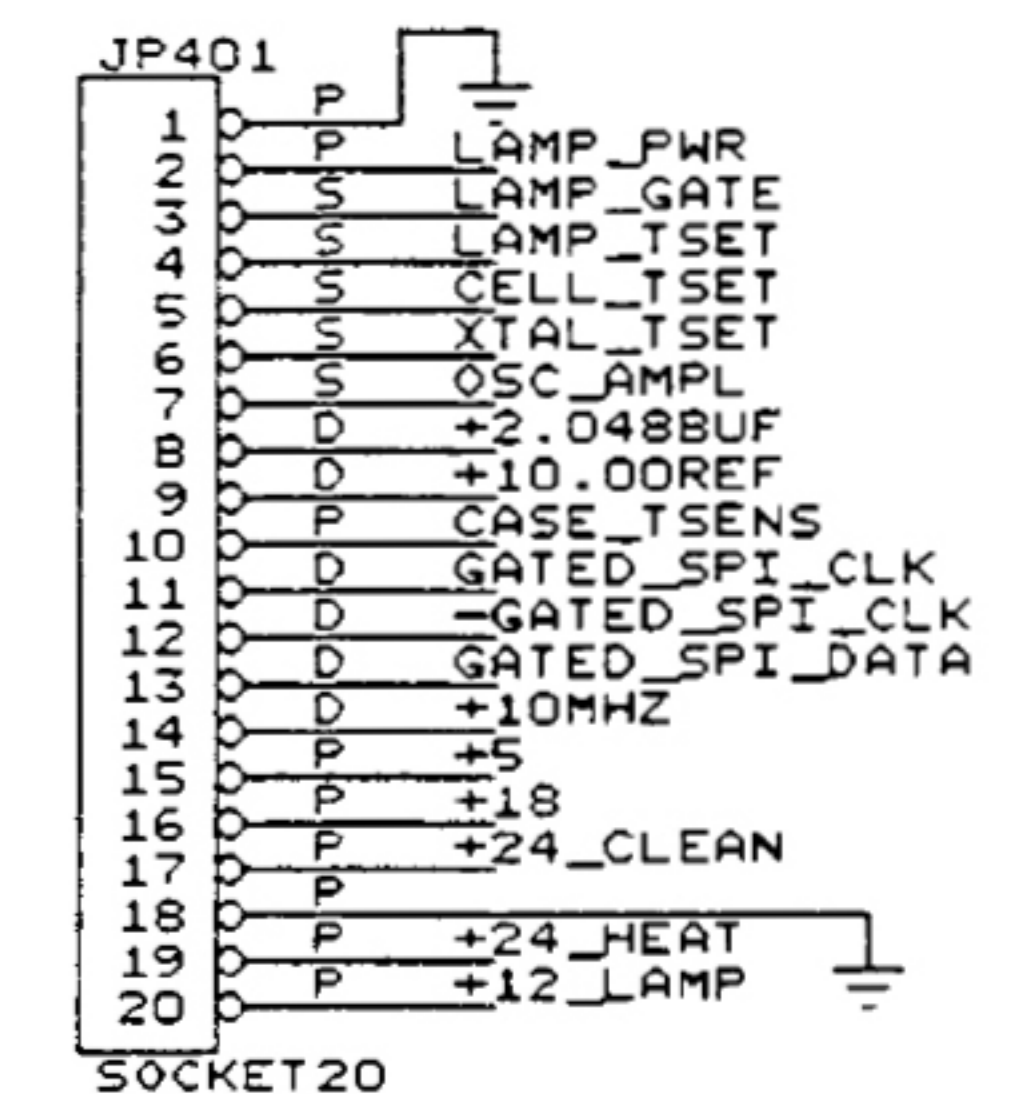
OCTAL 8-BIT DAC PROVIDES ANALOG CONTROL VOLTAGES



SOCKET TO BOTTOM (P/S) PCB

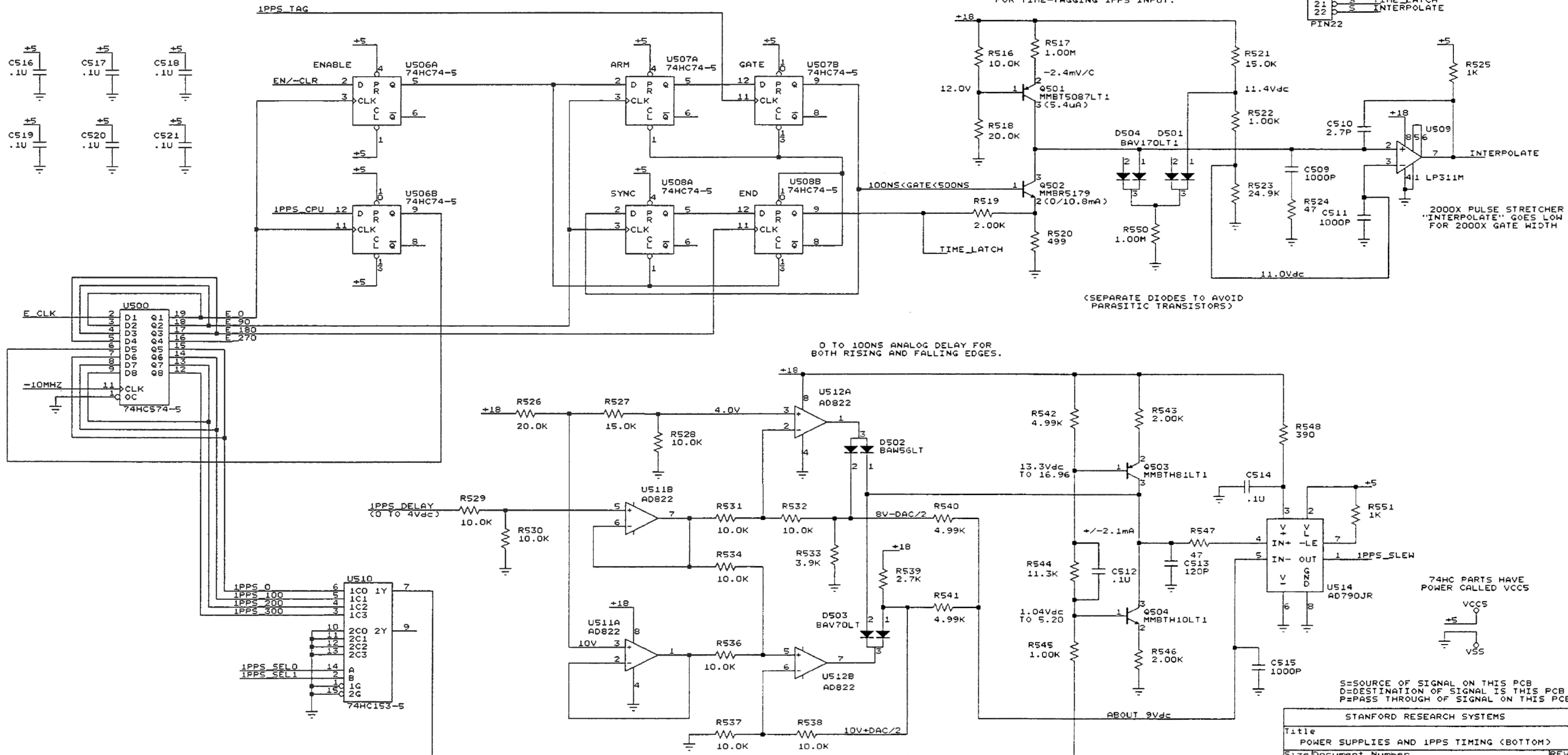
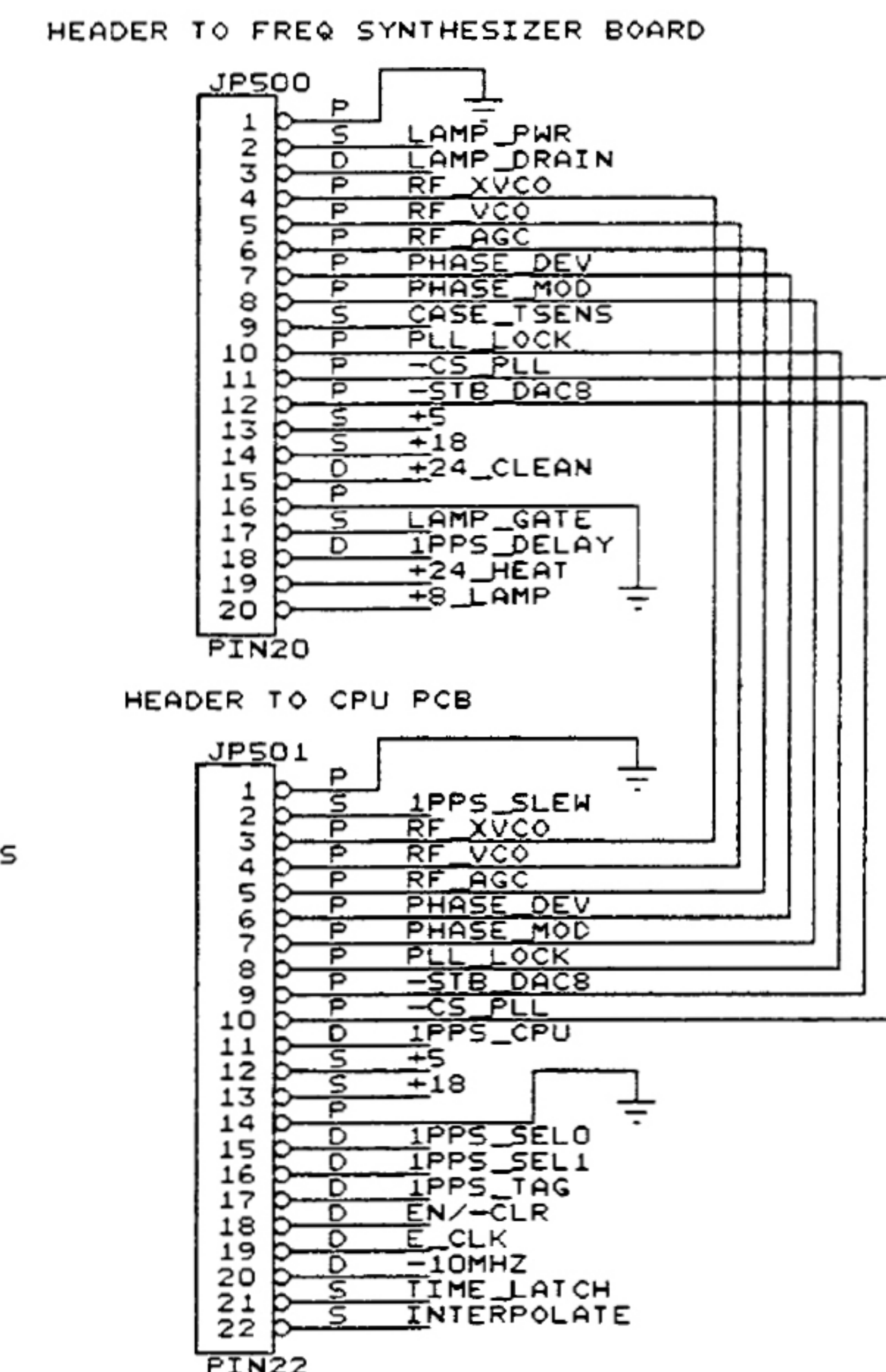
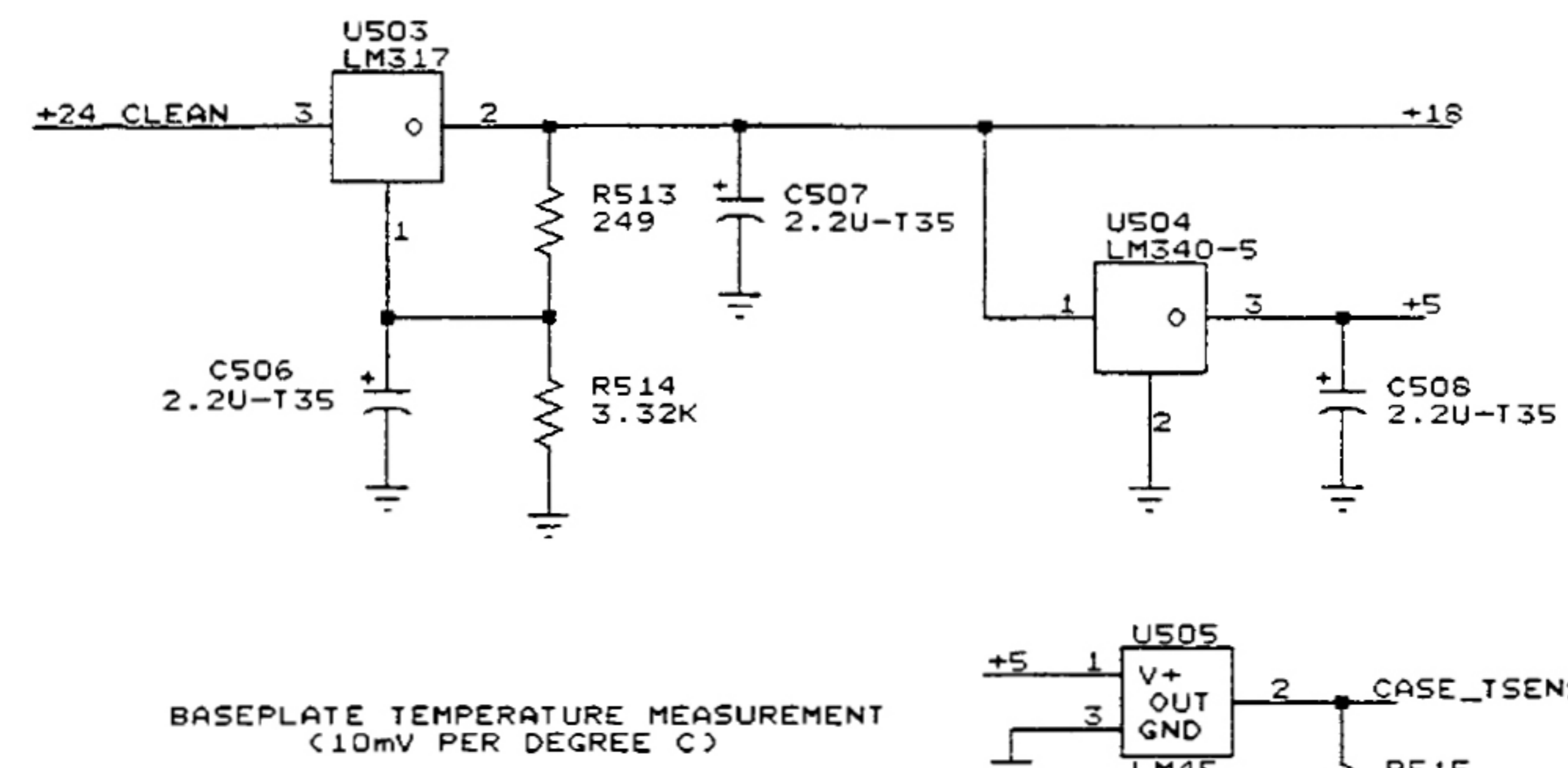
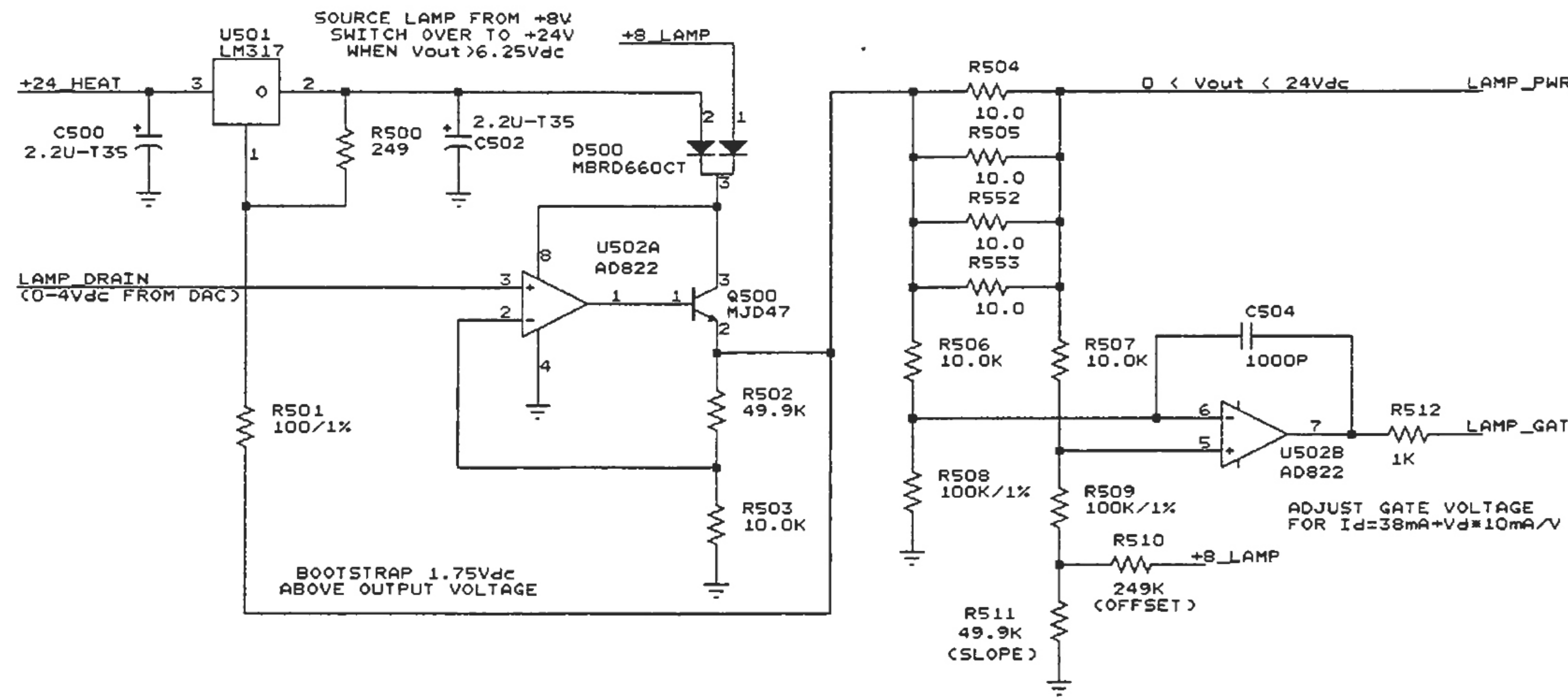


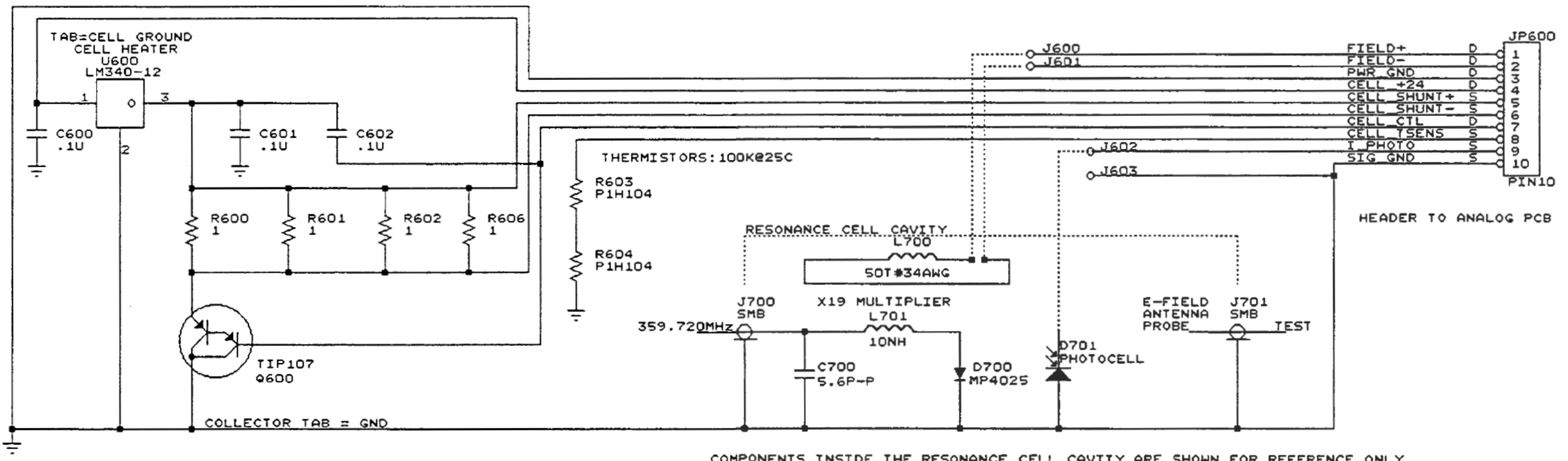
SOCKET TO TOP (ANALOG) PCB



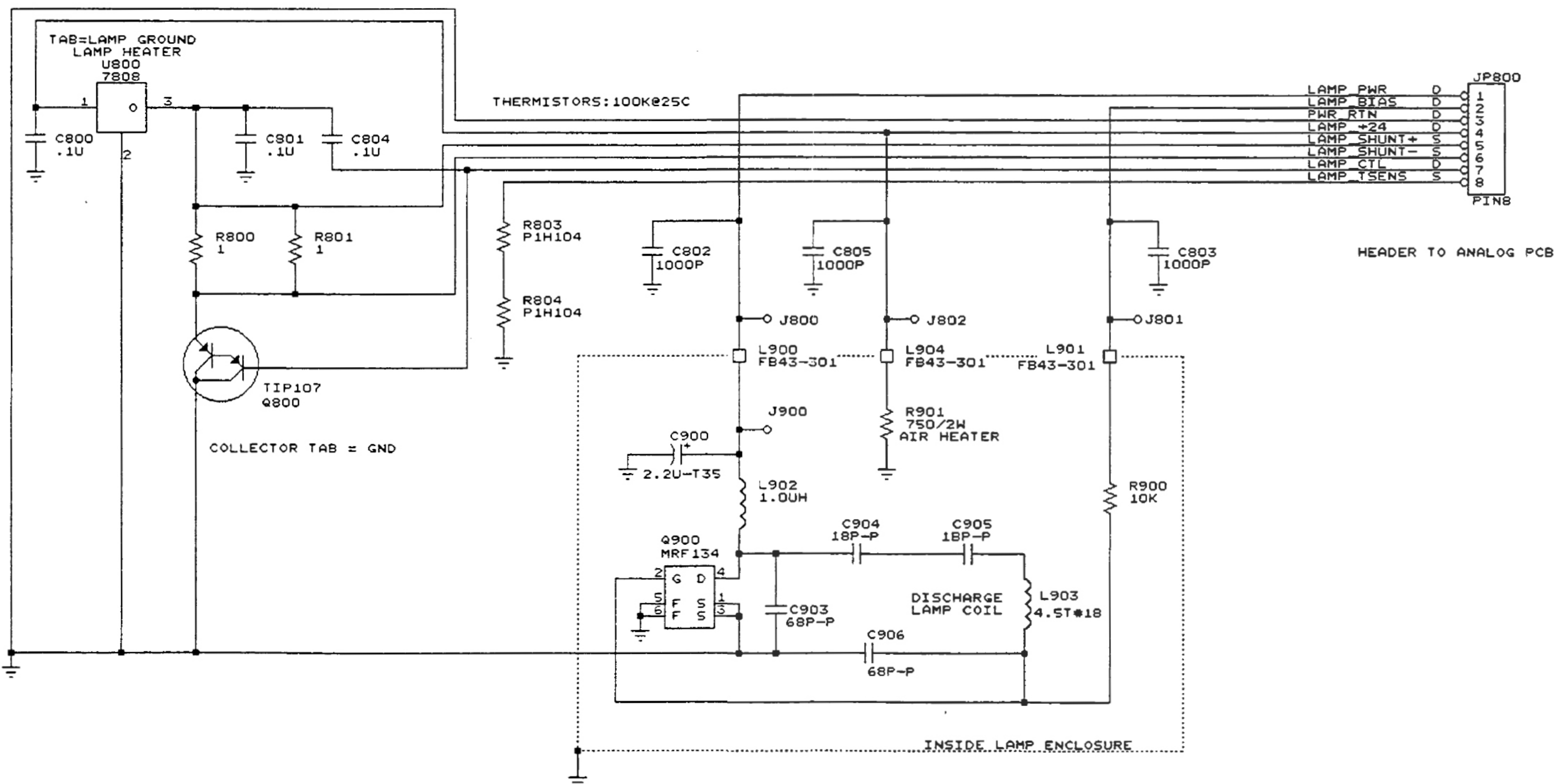
S=SOURCE OF SIGNAL ON THIS PCB  
D=DESTINATION OF SIGNAL IS THIS PCB  
P=PASS THROUGH OF SIGNAL ON THIS PCB

STANFORD RESEARCH SYSTEMS	
Title	359.72032MHz FREQUENCY SYNTHESIZER (SIDE)
Size	Document Number
C	RB_H4
Date:	August 12, 1999 Sheet 4 of 6





COMPONENTS INSIDE THE RESONANCE CELL CAVITY ARE SHOWN FOR REFERENCE ONLY AND DO NOT RESIDE ON ANY PRINTED CIRCUIT BOARD



REFERENCE DESIGNATORS:  
 600's ARE PART OF CELL HEATER  
 700's ARE INSIDE RESONANCE CELL  
 800's ARE PART OF LAMP HEATER  
 900's ARE PART OF DISCHARGE CIRCUIT  
 S=SOURCE OF SIGNAL ON THIS PCB  
 D=DESTINATION OF SIGNAL IS THIS PCB  
 P=PASS THROUGH OF SIGNAL ON THIS PCB