

TOP WIRES TO THIS ROW OF PINS

BOTTOM WIRES TO THESE PINS

THESE COMPONENTS FITTED FOR RATIO OPTION ONLY

440157

605070

605062

U804, U806, U808

U801, U802, U803

ADD PAD TO TOP OF C001, C004, C015

630331

920105

611016

613005

615002

602001

R002, R007

R215, R246

R408, R410

605127

TL801, TL802, TL803

TL303

400758

ONE BEAD PER LEAD

630243

C302, C303, C518, C519  
 C521, C522, C608, C618  
 C619, C714, C802, C803  
 C804, C805, C806, C807  
 C901, C904, C906, C909  
 C910, C911, C914, C915  
 R234, R235, R236, R237  
 R509, R510, R413 (X3)  
 Y701 (X1)

NOTE: C801 PIN1 IS OFFSET

ONE BEAD PER LEAD

11 630024

D012, D013, D014  
 D506, D901  
 & C201 (x1)

MOUNT C820 IN PARALLEL WITH C812

605050

540001

4 LINKS

C503

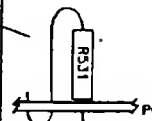
R521

R524/R548 R519

CONNECT C607 IN PARALLEL WITH R813, SIMILAR TO R521/C503 ABOVE

11 605059

U210, U203, U303, U505  
 U507, U508, U602, U702  
 U703, U708, U802



REMOVE PINS SHOWN THUS 'X'

MOUNT R247 ON COMP CARRIER 618015

COMPONENTS MARKED THIS † ARE NOT TO BE FITTED  
 R502, R505, R530, R542, R543  
 C513, 0502, 0507

COMPONENTS MARKED THIS \* DENOTES COMPONENTS NOT FITTED IN SOCKETS  
 U302, U402, U403, U405, U407, U408  
 U501, U502, U503, U504, U506

605061

U202, U301, U401, U404  
 U604, U701, U704  
 U705, U708, U709, U807  
 U904, U905, U907  
 U801+U803, U805+U806

605060

U304, U801, U805  
 U707, U710, U711  
 U806

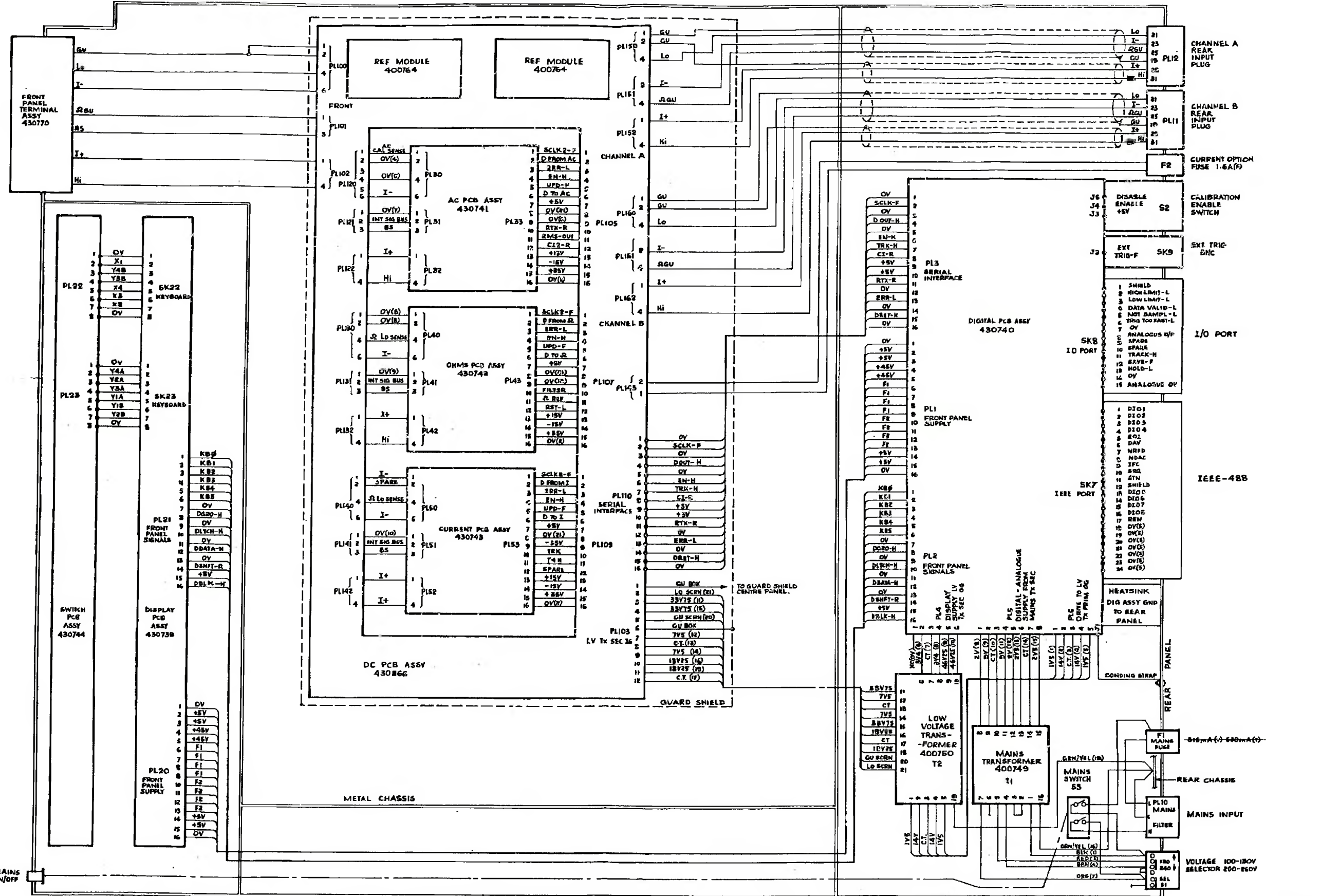
611028

613052

TIGHTEN TO A TORQUE OF 1.5Nm

410429-1

NOTE ORIENTATION OF C502, D907, D908



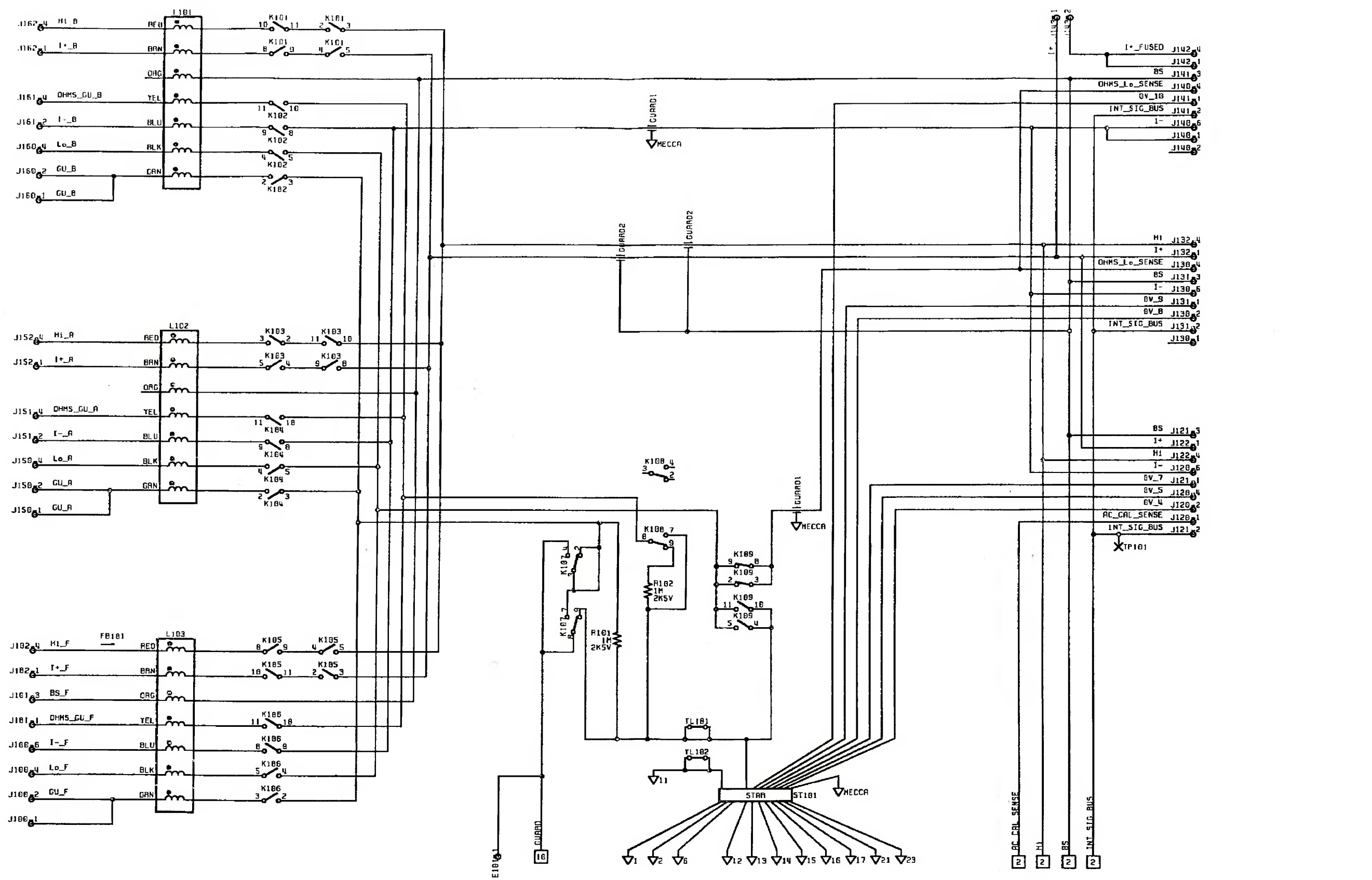
**INTERCONNECTION DIAGRAM**

Drawing No. DC400891 Sheet 1

1271



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D.C. ASSEMBLY

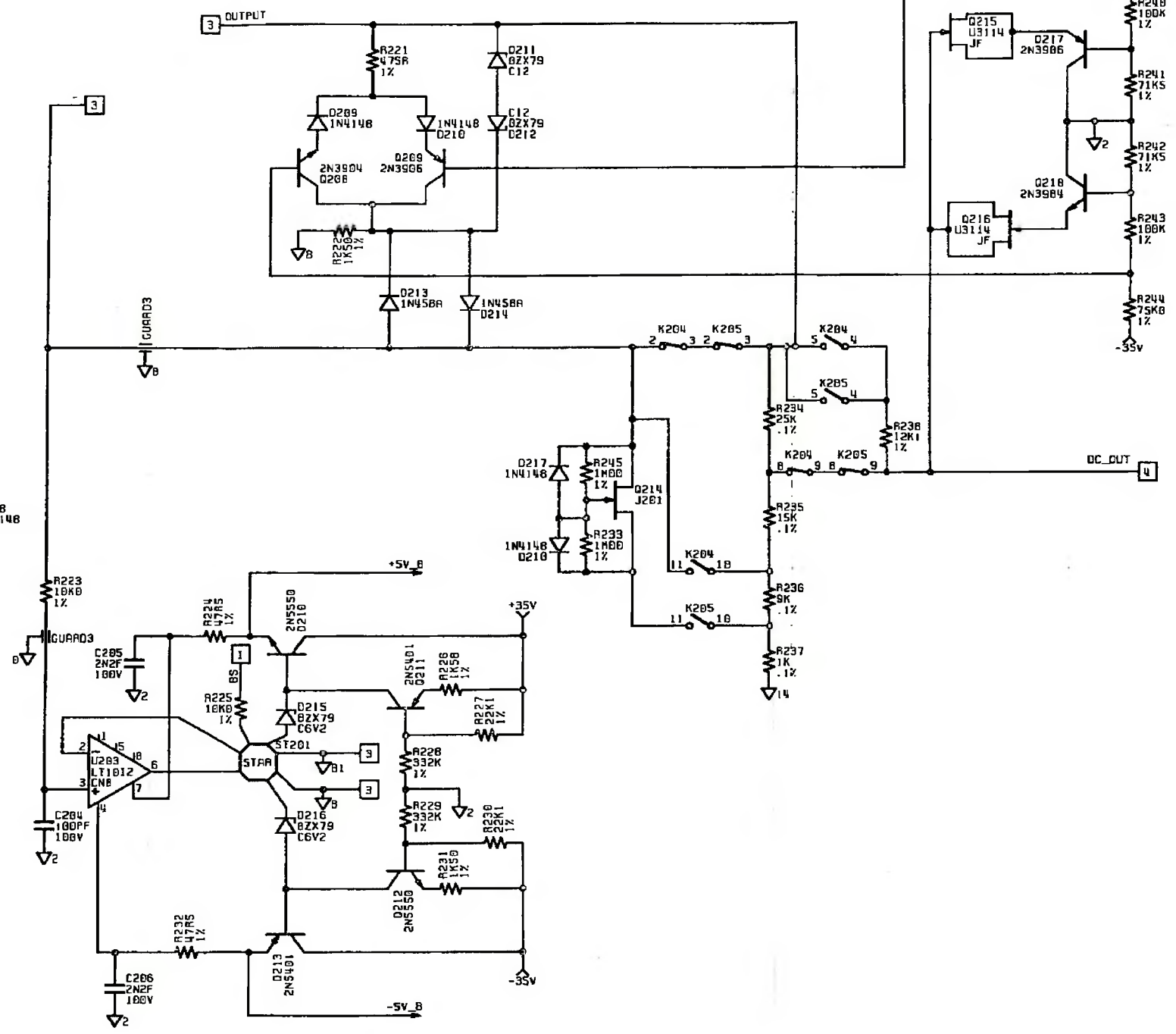
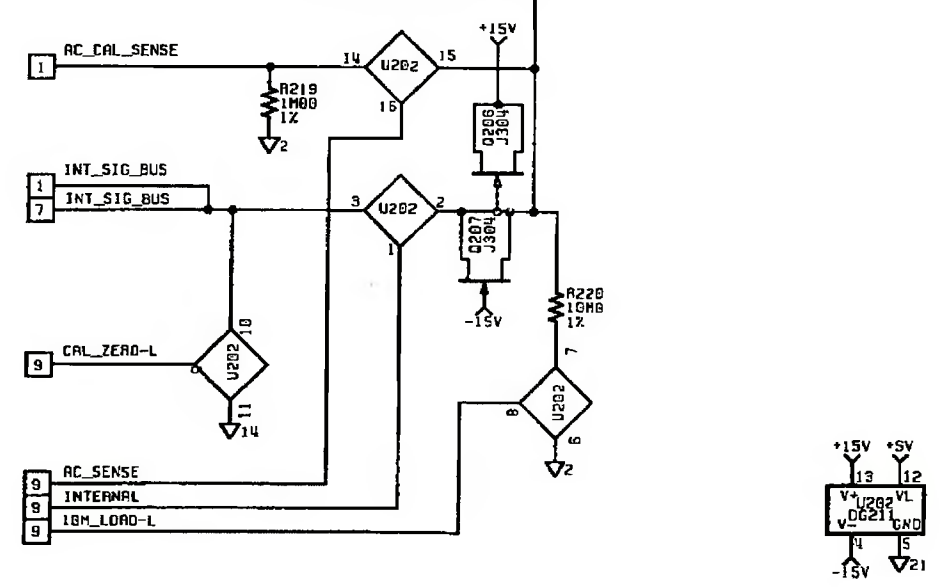
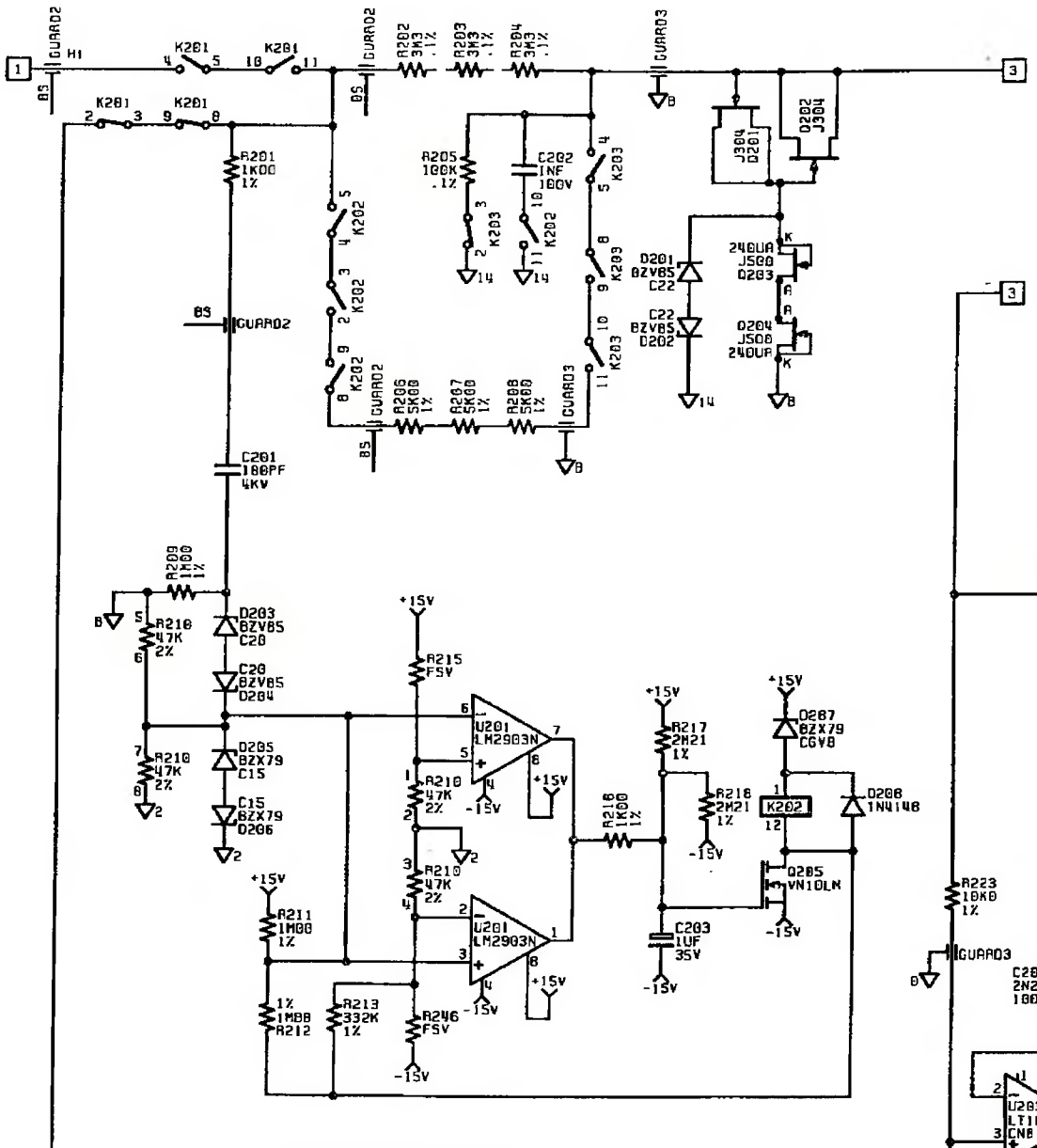
Input Signal Switching

Drawing No. DC400866 Sheet 1 of 10



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D.C. ASSEMBLY

D.C. Pre-amplifier

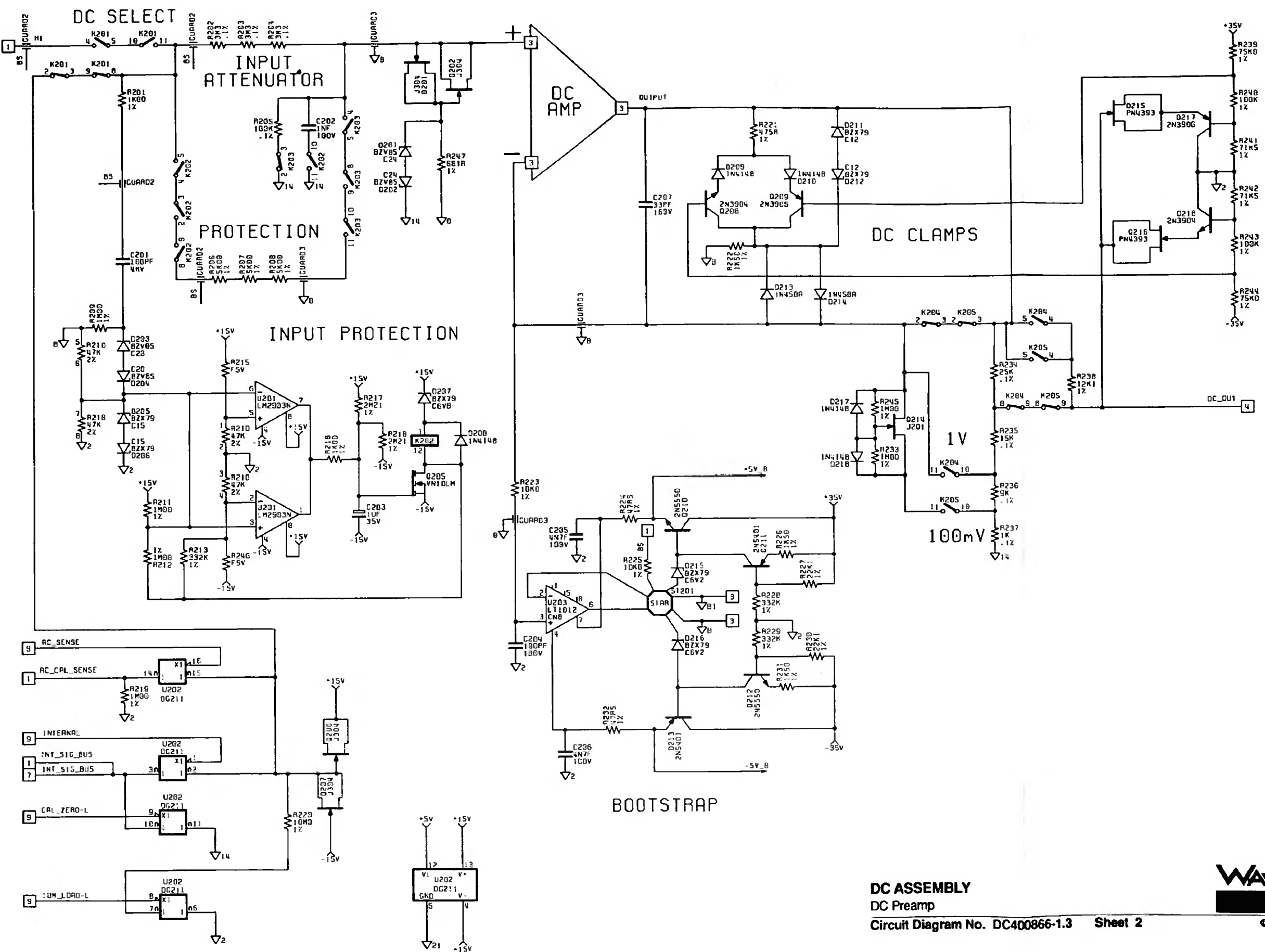
Drawing No. DC400866

Sheet 2 of 10



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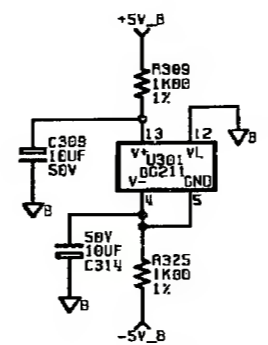
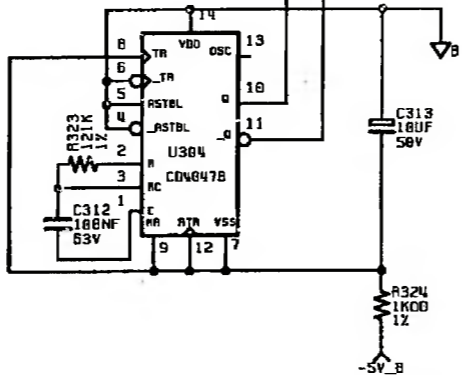
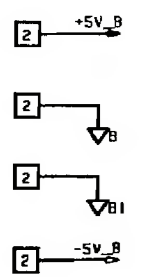
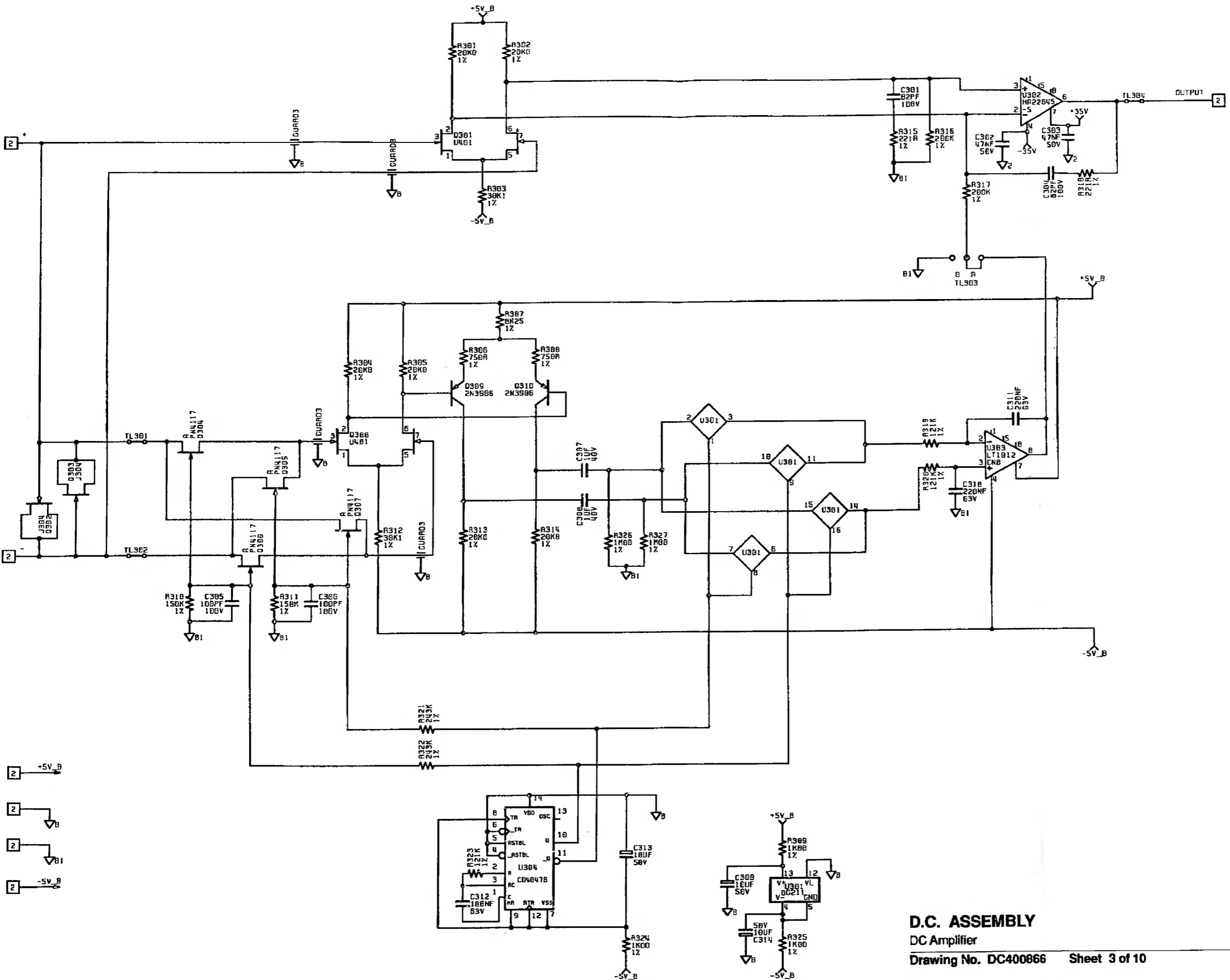


**DC ASSEMBLY**  
DC Preamp

Circuit Diagram No. DC400866-1.3 Sheet 2



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**D.C. ASSEMBLY**

DC Amplifier

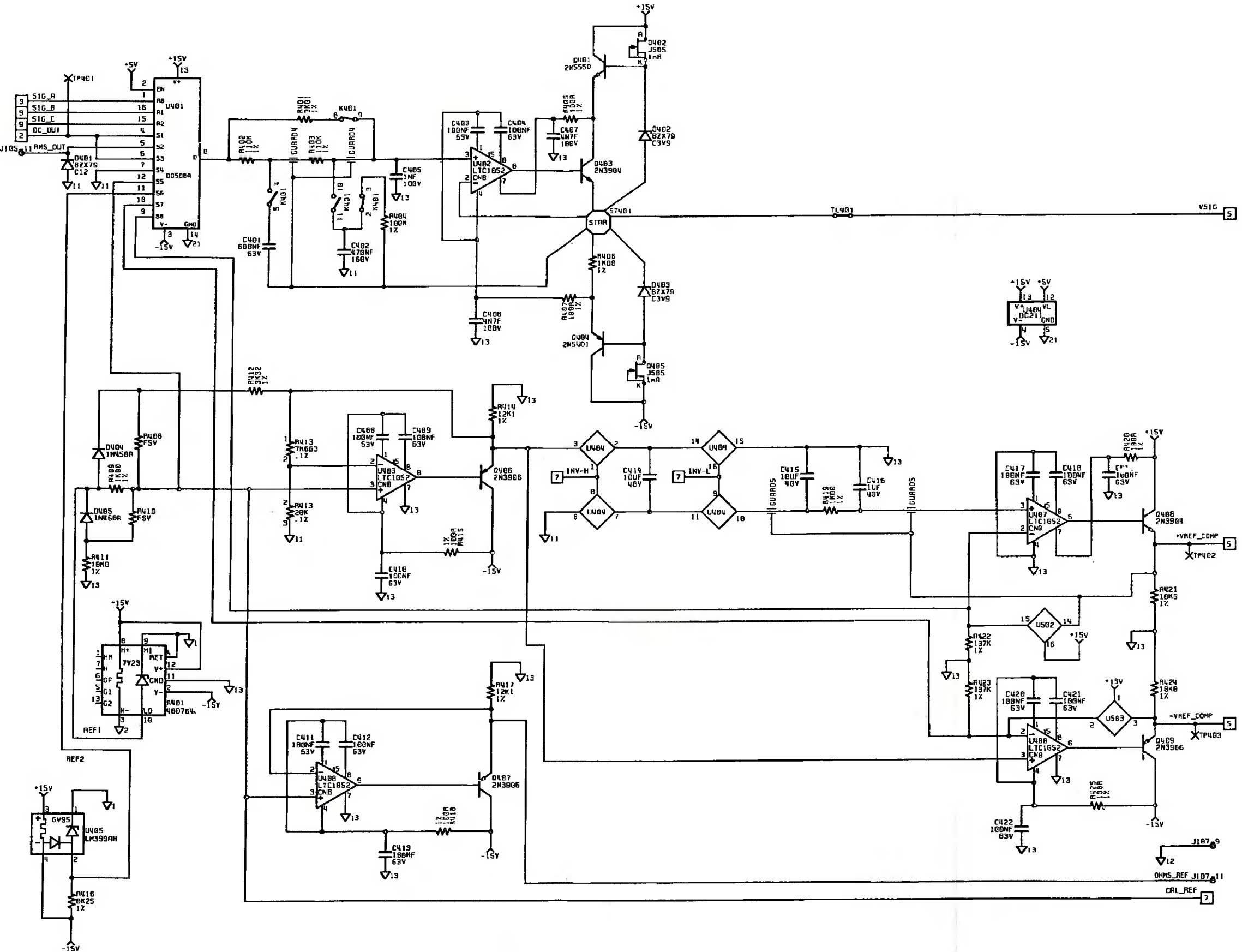
Drawing No. DC400866 Sheet 3 of 10



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D.C. ASSEMBLY  
 References and Signal Switching  
 Drawing No. DC400866 Sheet 4 of 10



# SIG MULTIPLEXER

## DC FILTER

## SIG BUFFER

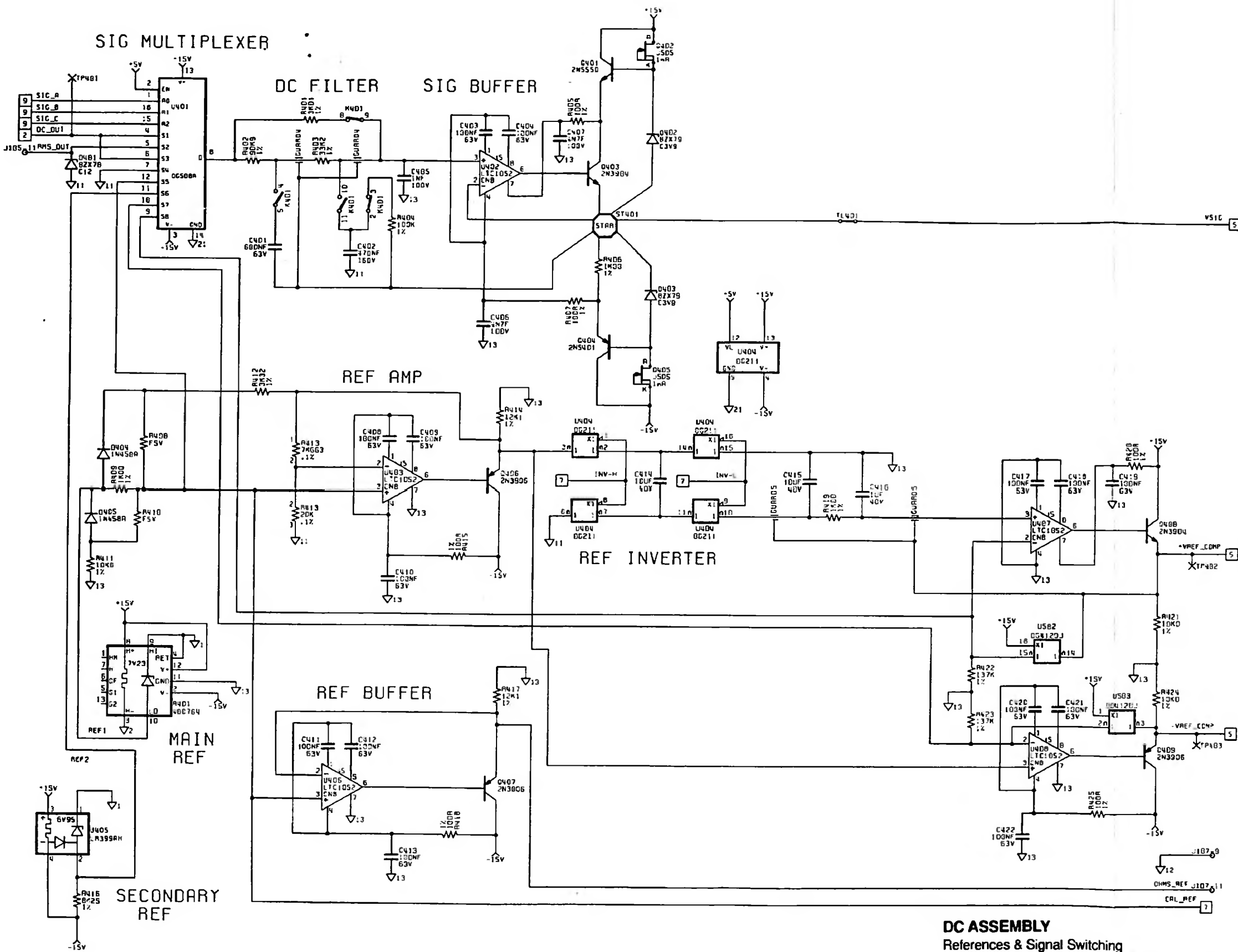
## REF AMP

## REF INVERTER

## REF BUFFER

## MAIN REF

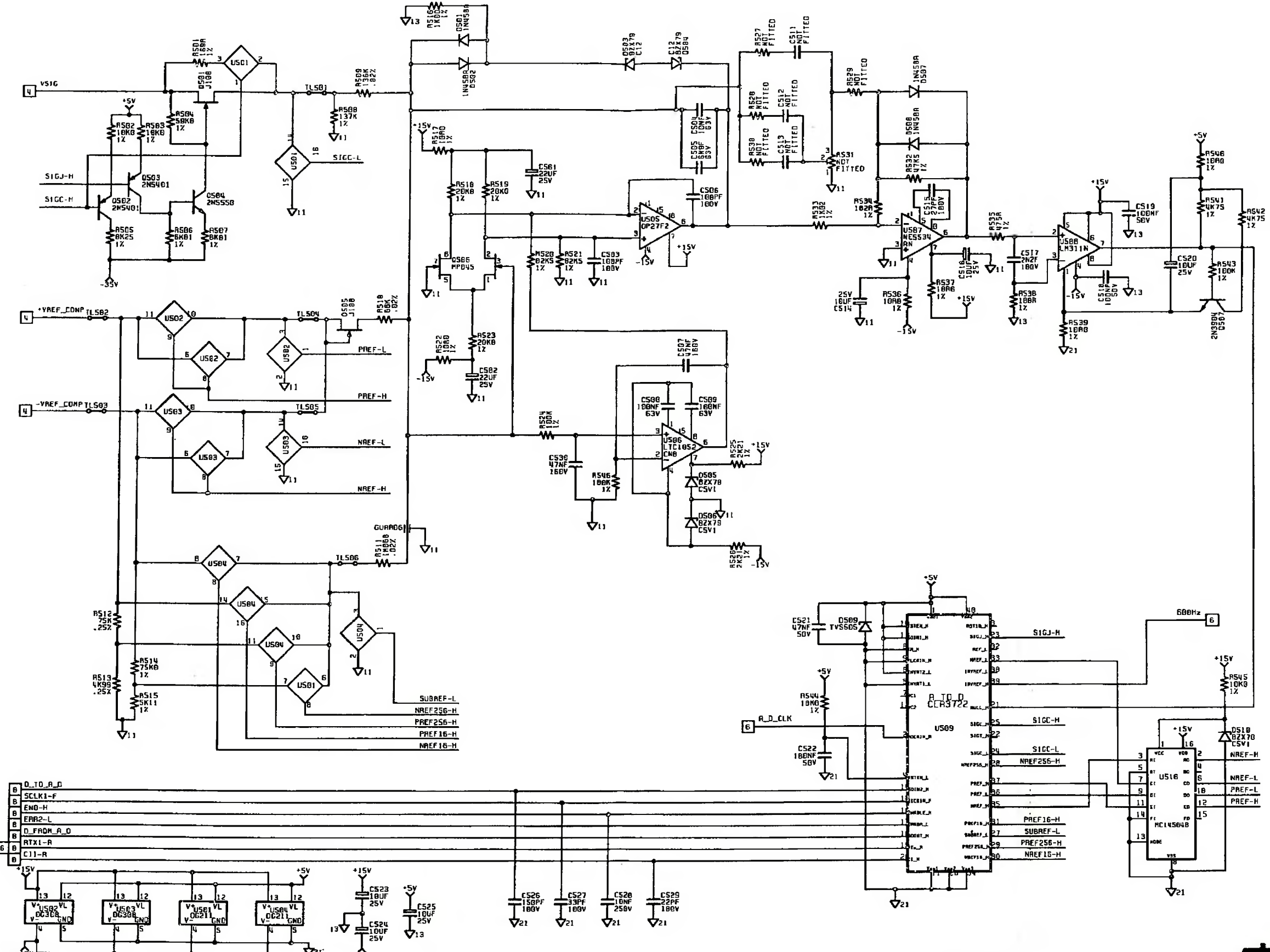
## SECONDARY REF



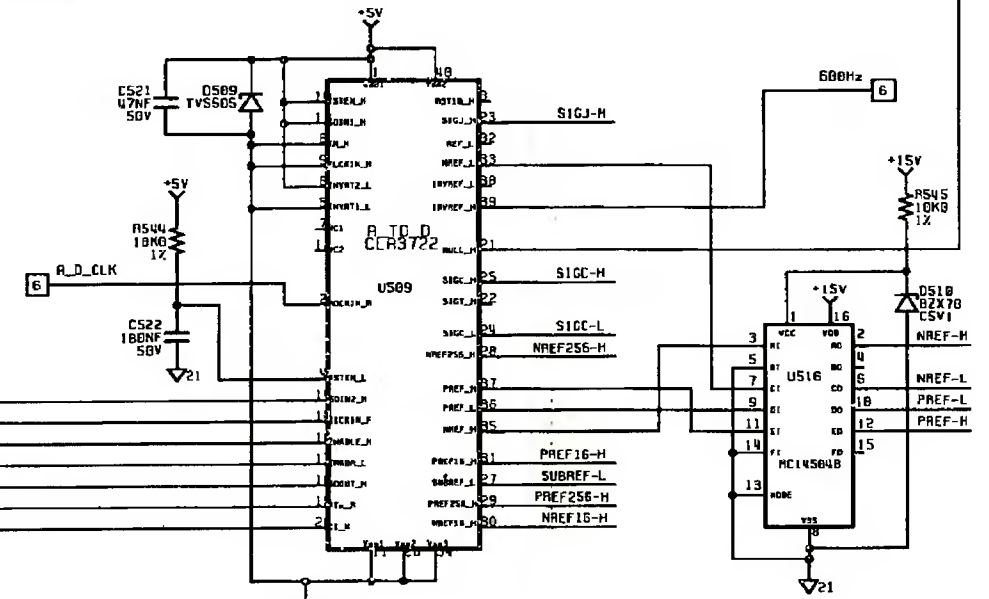
### DC ASSEMBLY

References & Signal Switching

Circuit Diagram No. DC400866-1.1 Sheet 4



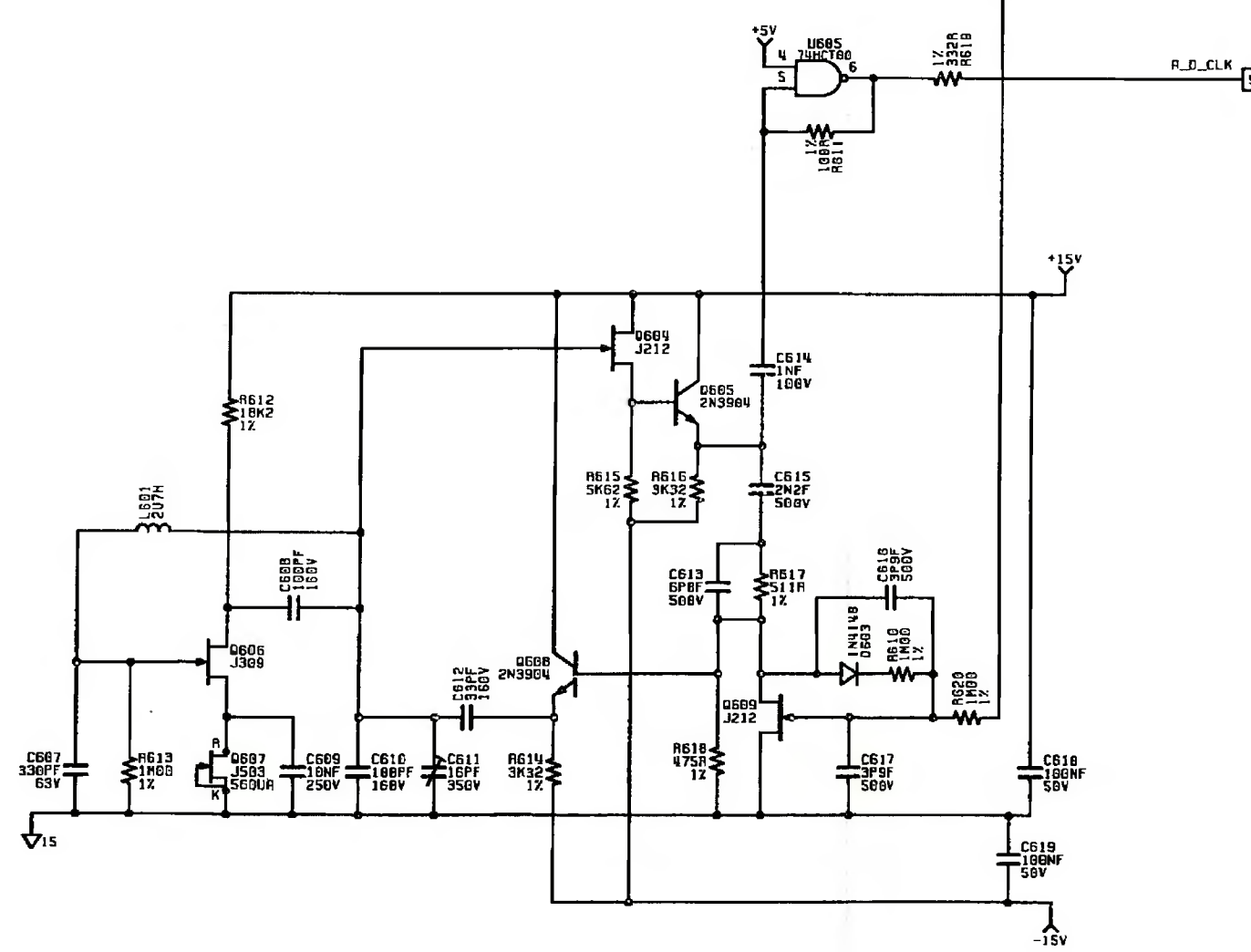
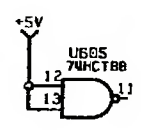
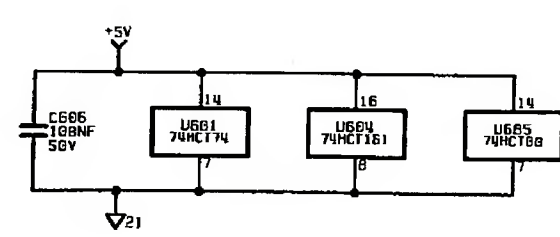
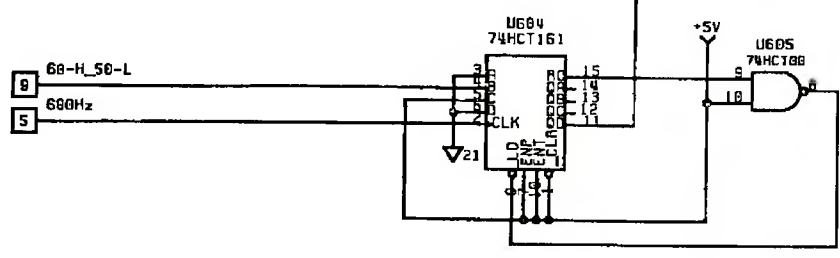
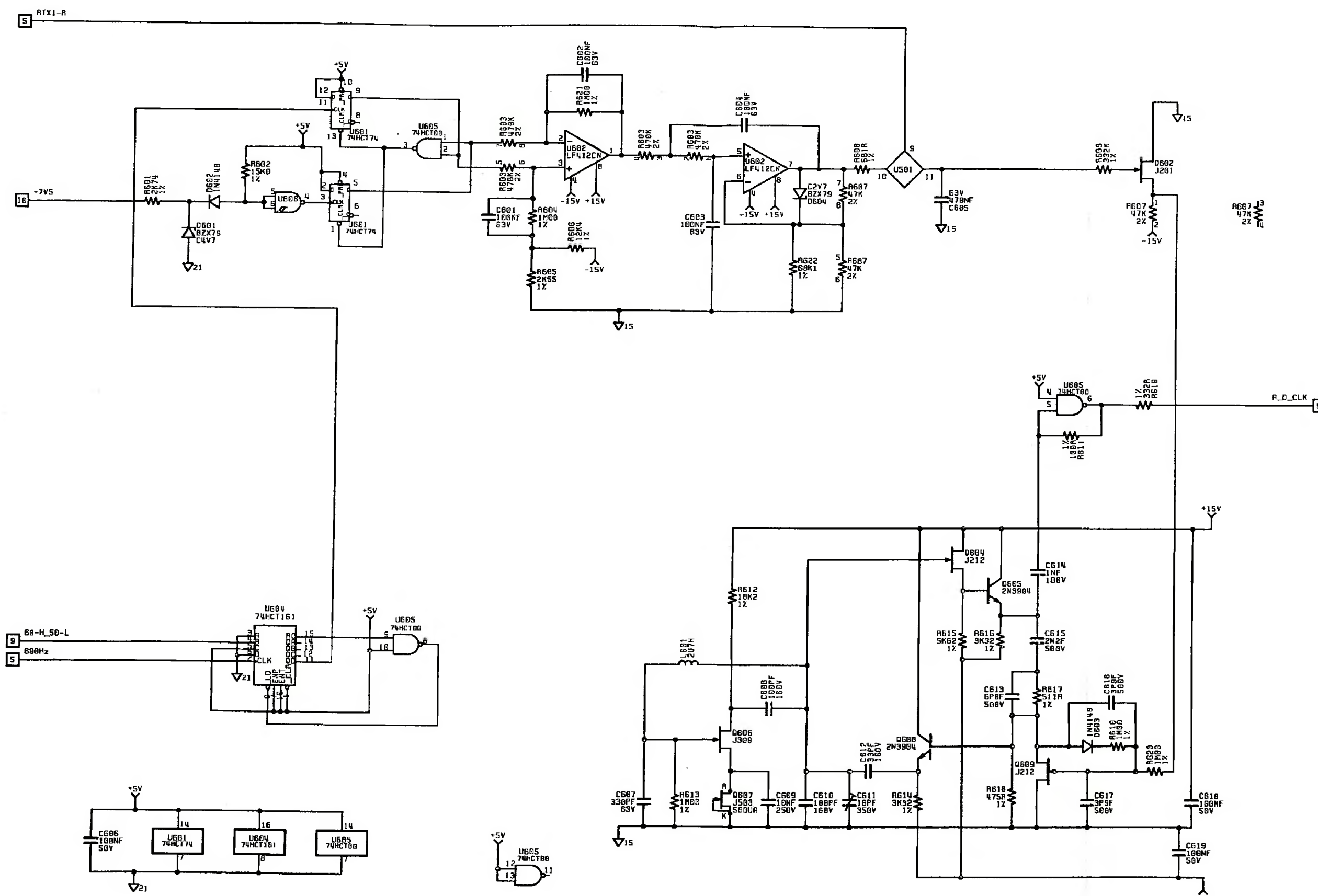
B	D <sub>0</sub> -D <sub>7</sub>
B	SCLK1-F
B	ENG-H
B	ERR2-L
B	D <sub>0</sub> -D <sub>7</sub> FROM A/D
B	RTX1-R
B	C11-R



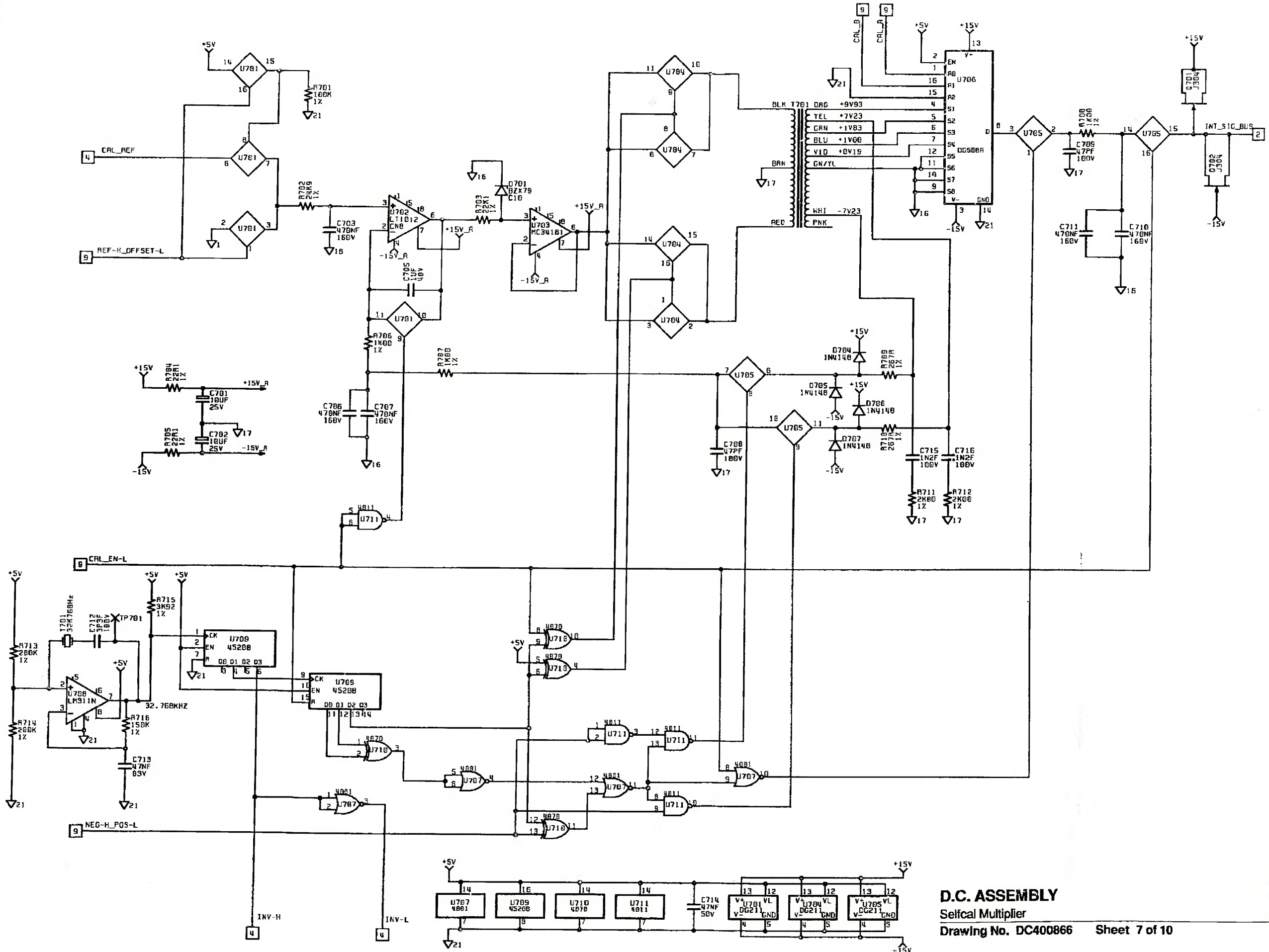
**D.C. ASSEMBLY**  
 Analog to Digital Converter  
 Drawing No. DC400856 Sheet 5 of 10



1271



**D.C. ASSEMBLY**  
 Line Locking and A-D Control  
 Drawing No. DC400866 Sheet 6 of 10



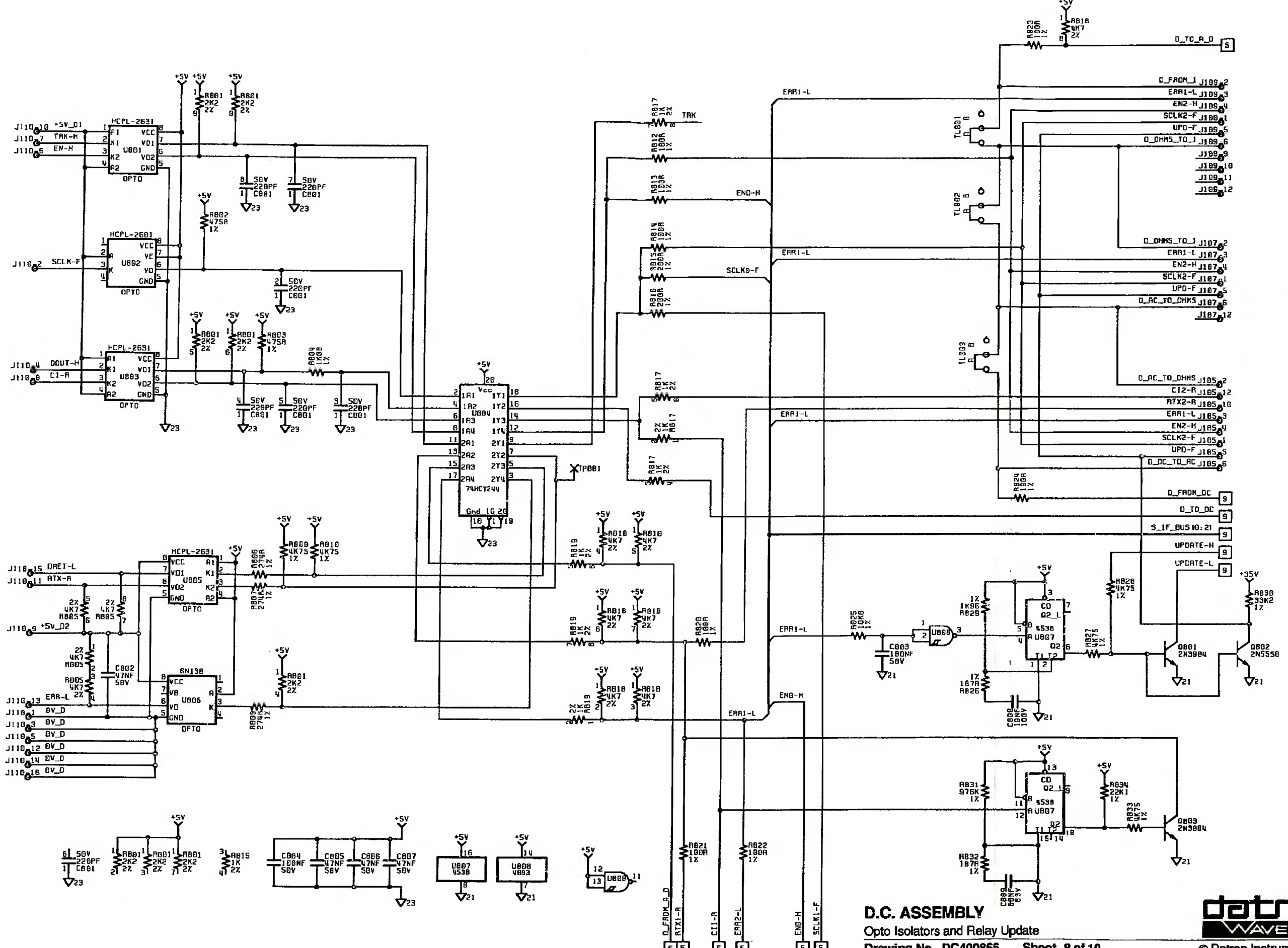
**D.C. ASSEMBLY**  
Selfcal Multiplier  
Drawing No. DC400866

Sheet 7 of 10

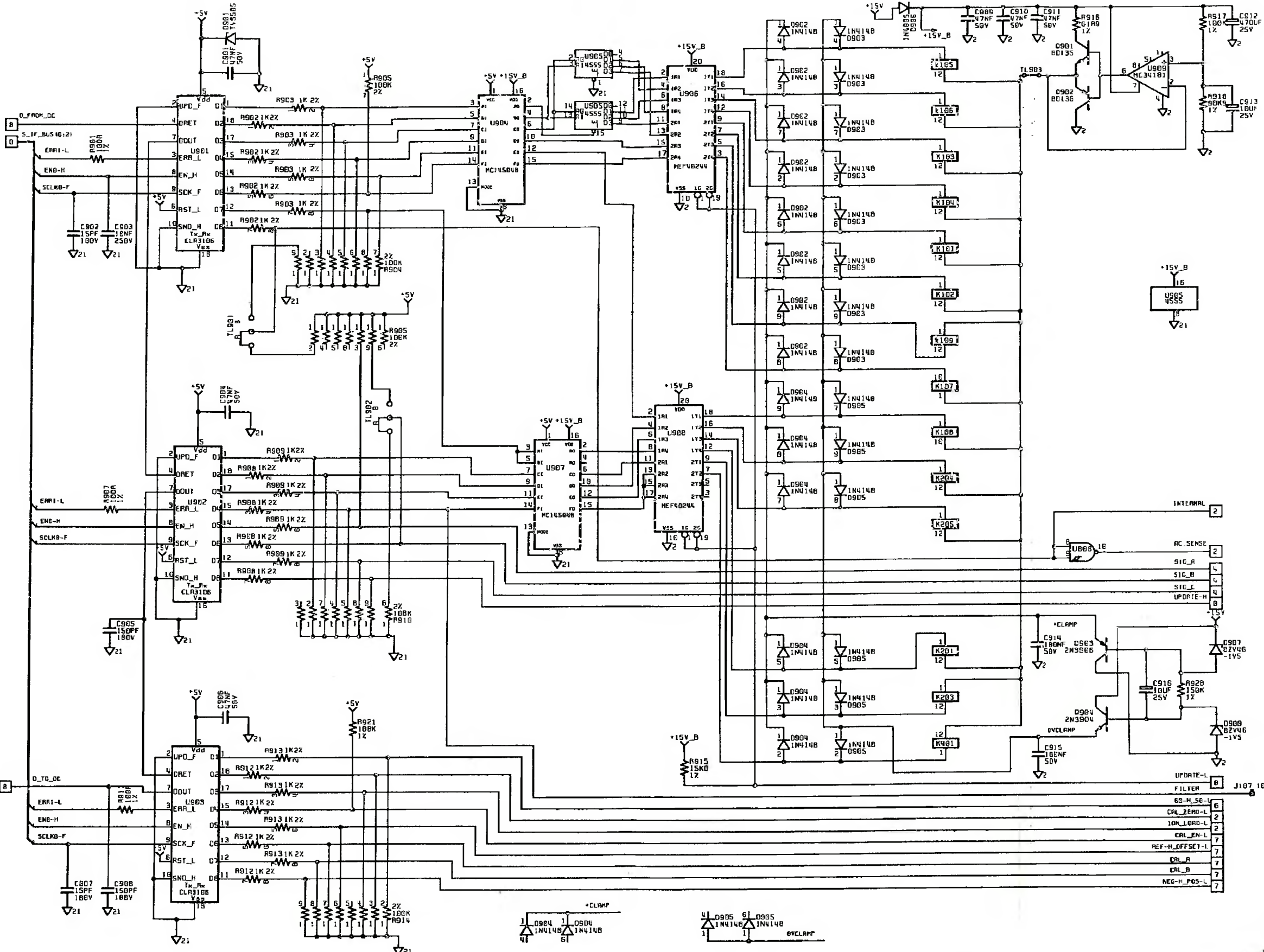


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**D.C. ASSEMBLY**  
 Opto Isolators and Relay Update  
 Drawing No. DC400866 Sheet 8 of 10



D.C. ASSEMBLY  
 Control and Relay Drive  
 Drawing No. DC400866

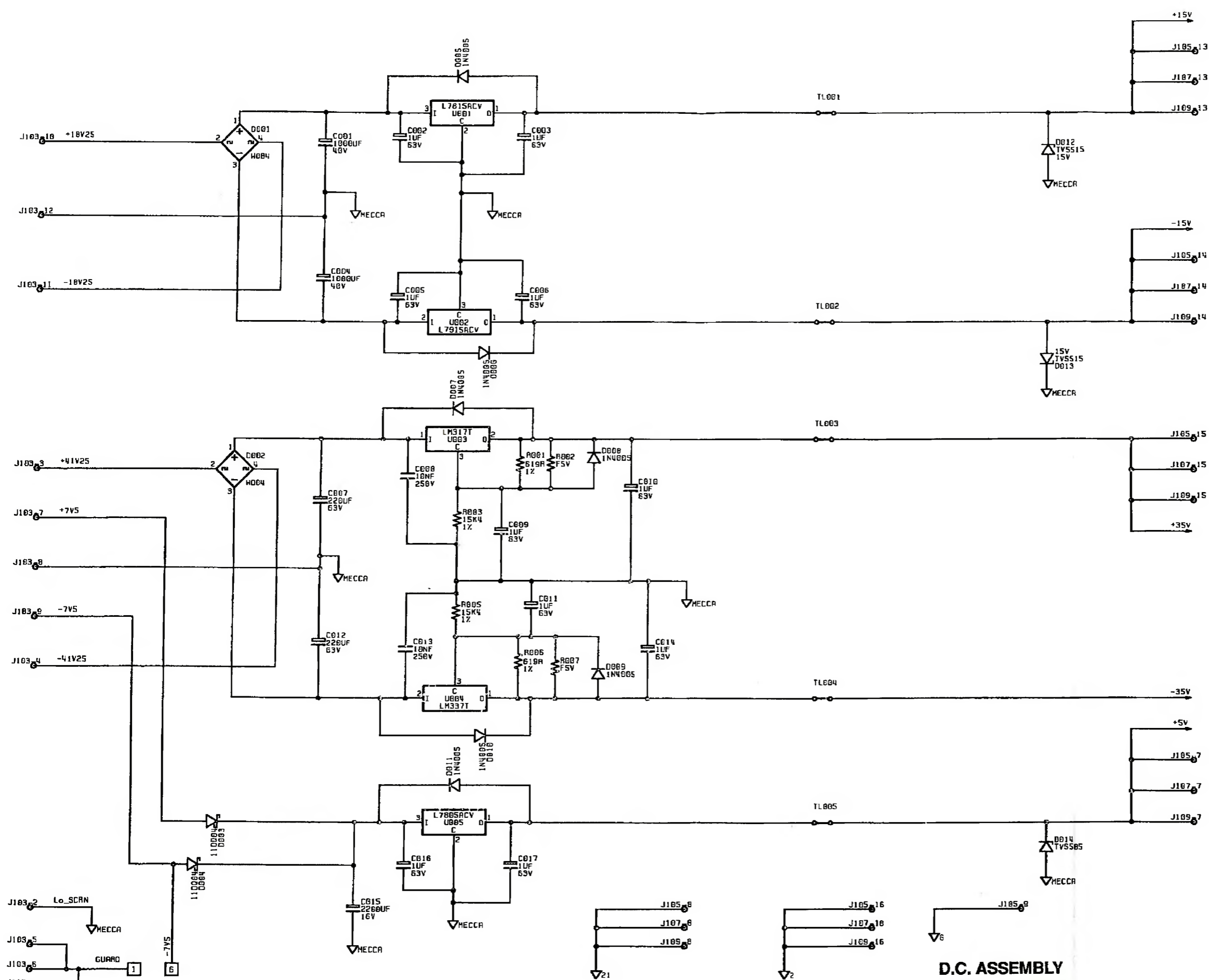
Sheet 9 of 10



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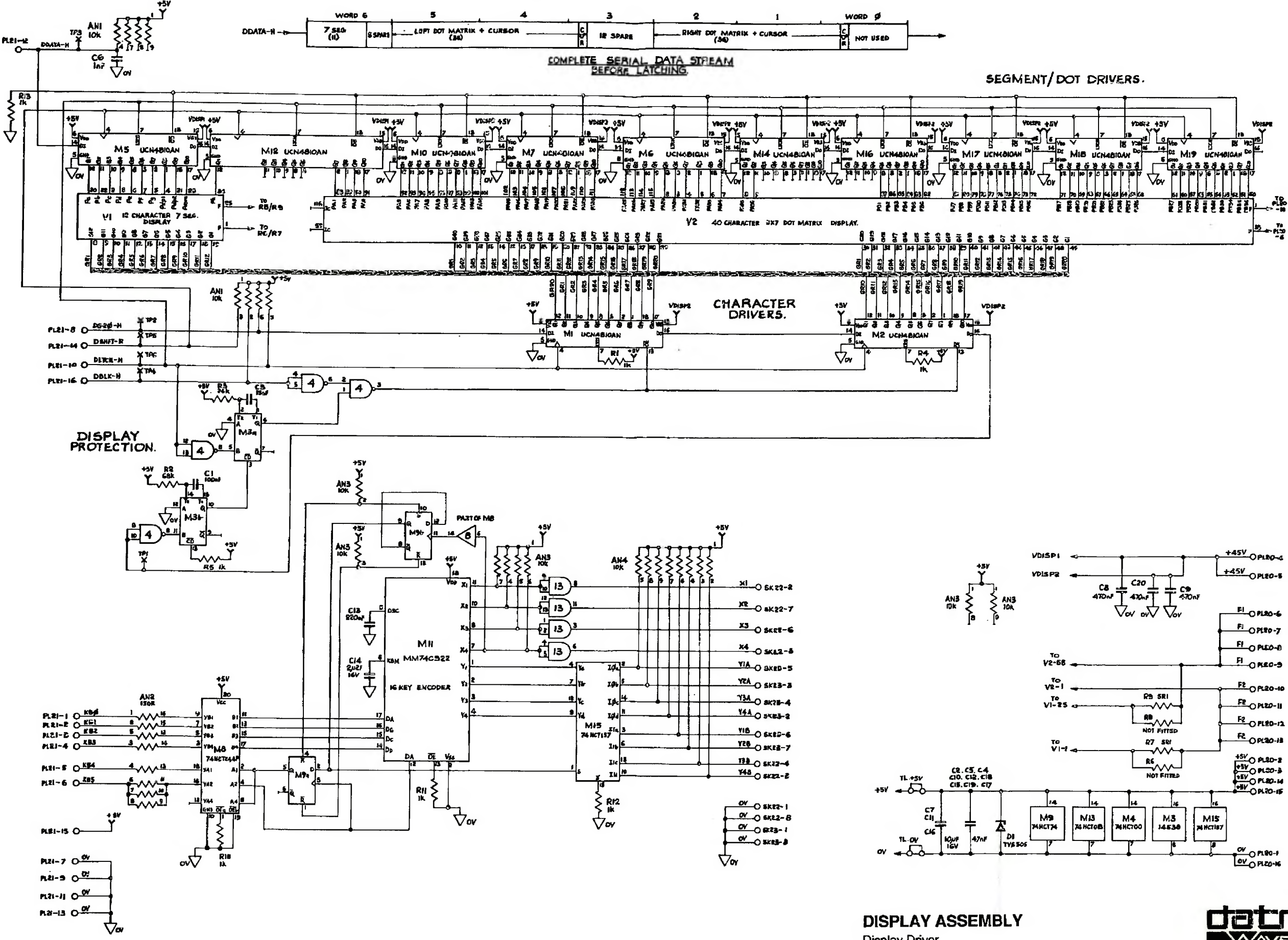
1271

11.2-10



**D.C. ASSEMBLY**  
 In-Guard Power Supplies  
 Drawing No. DC400866 Sheet 10 of 10





**DISPLAY ASSEMBLY**

Display Driver

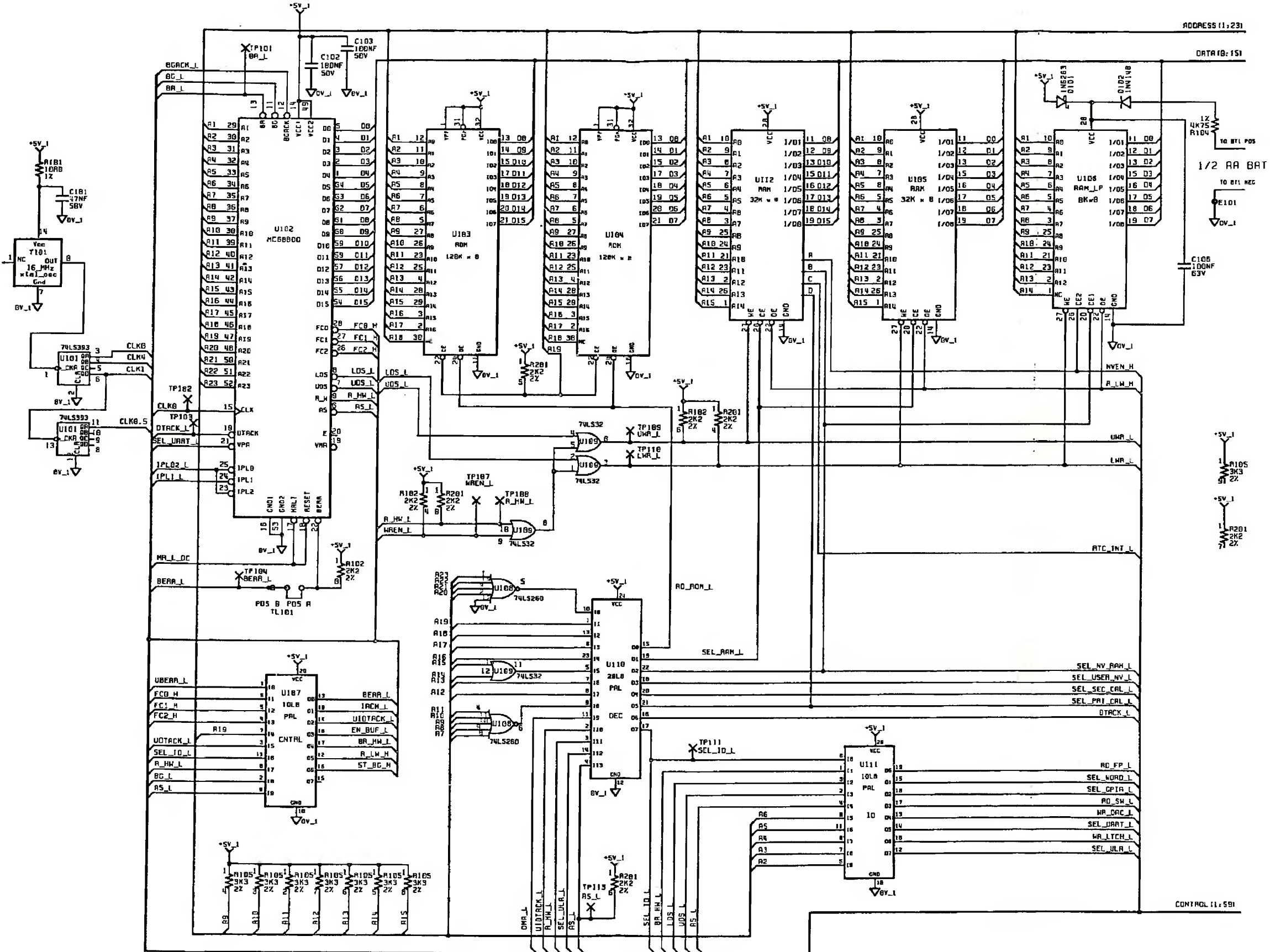
Drawing No. 430739

Sheet 1 of 1



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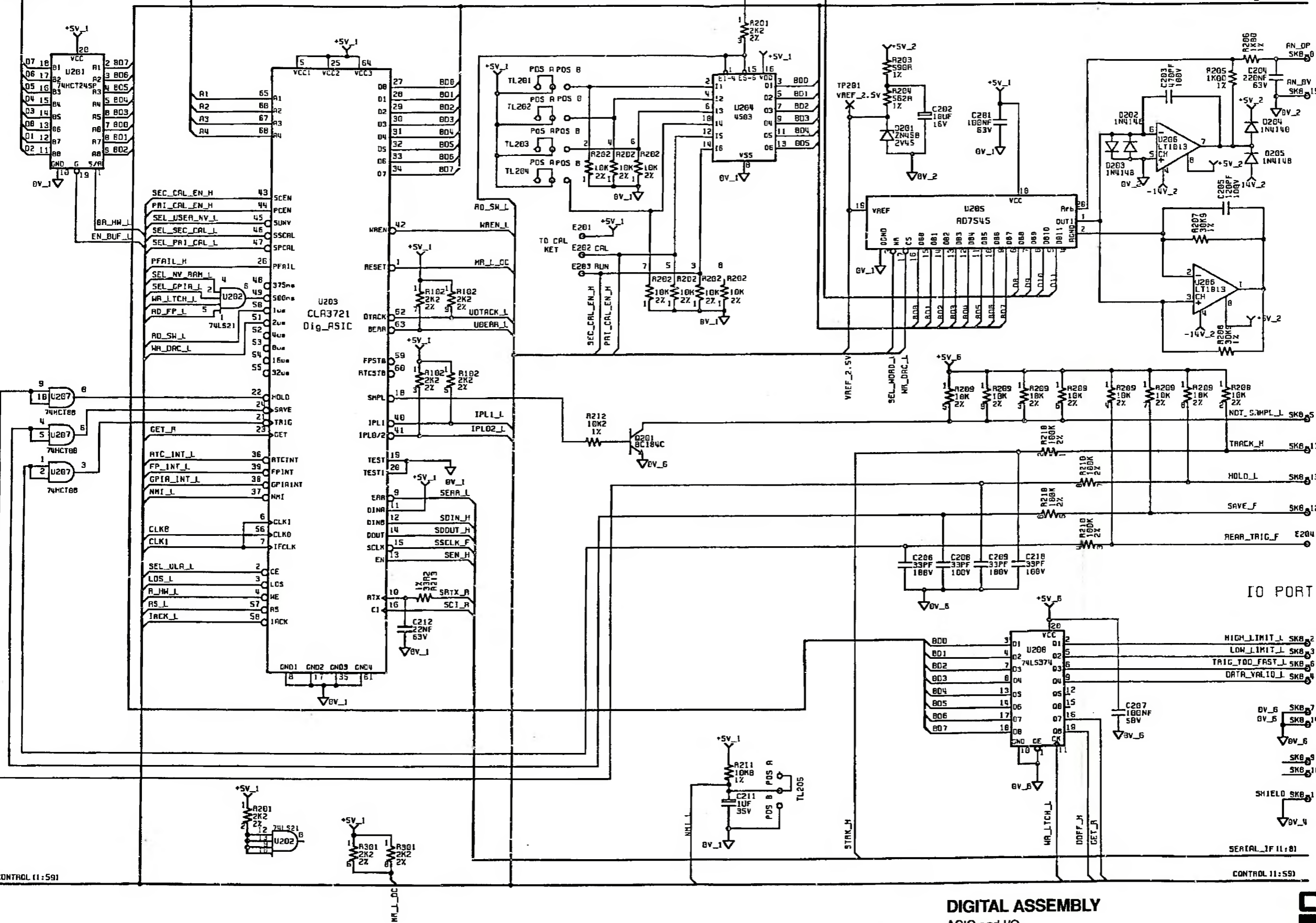
ADDRESS (1:231)

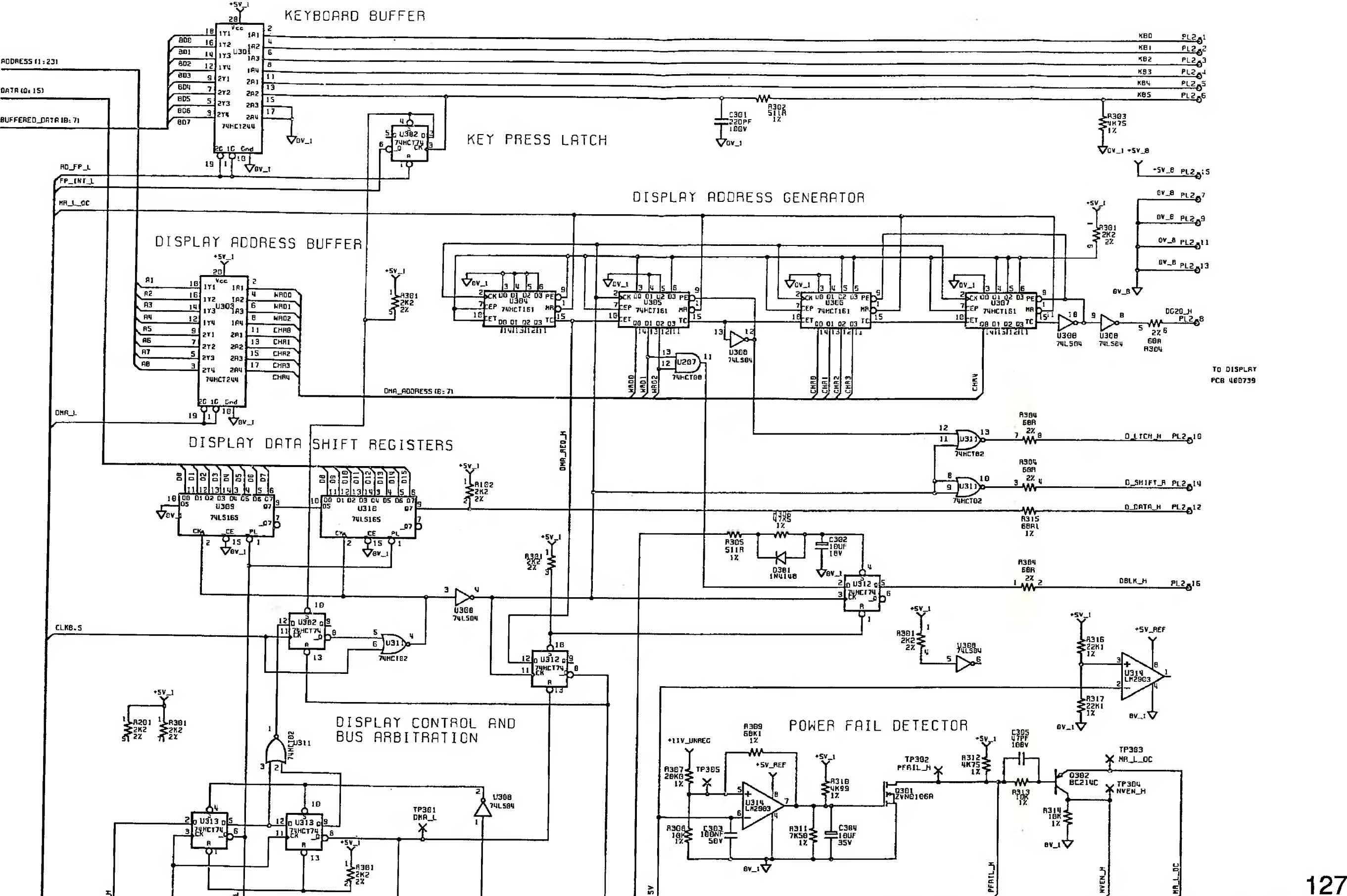
DATA (8:151)

CONTROL (1:591)

DIGITAL ASSEMBLY  
 Processor, Address Decoding and Memory  
 Drawing No. DC400901 Sheet 1 of 5







ADDRESS (1: 231)  
 DATA (0: 15)  
 BUFFERED\_DATA (0: 7)

KB0 PL2\_1  
 KB1 PL2\_2  
 KB2 PL2\_3  
 KB3 PL2\_4  
 KB4 PL2\_5  
 KB5 PL2\_6

-5V\_B PL2\_5  
 0V\_B PL2\_7  
 0V\_B PL2\_9  
 0V\_B PL2\_11  
 0V\_B PL2\_13

TO DISPLAY  
 PCB 400799

D\_LATCH\_H PL2\_10

D\_SHIFT\_A PL2\_14

D\_DATA\_H PL2\_12

DBLK\_H PL2\_15

+5V\_REF  
 0V\_1

0V\_1  
 +5V\_REF

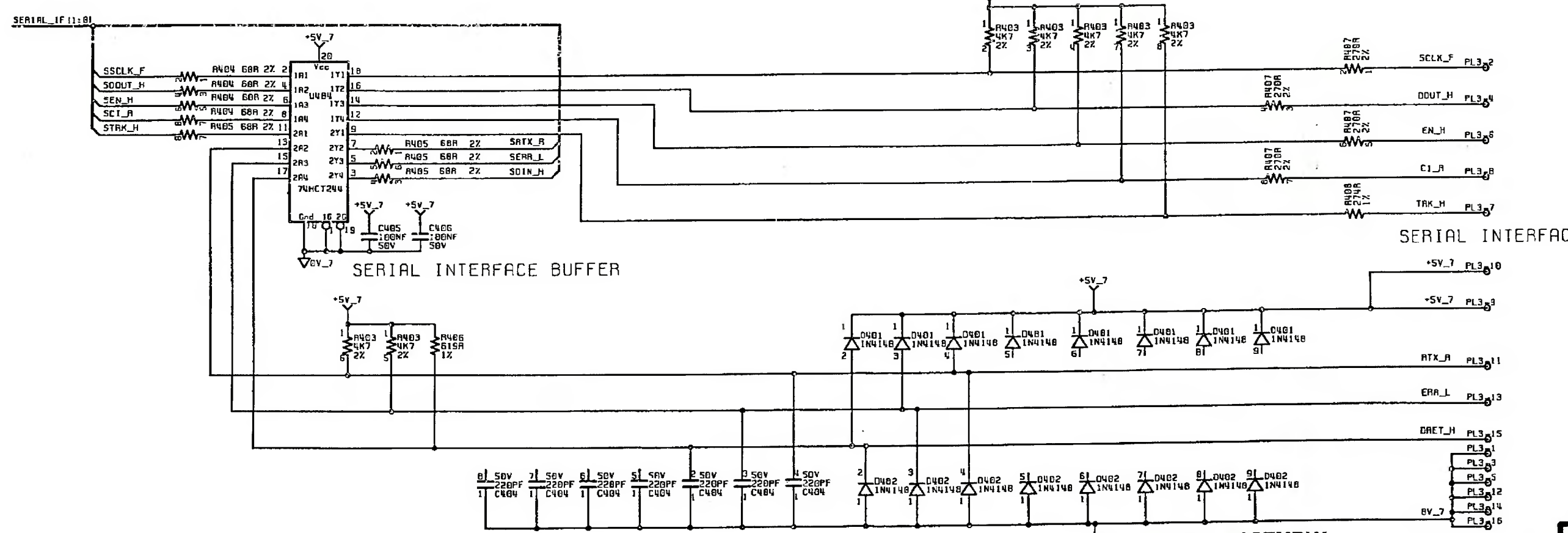
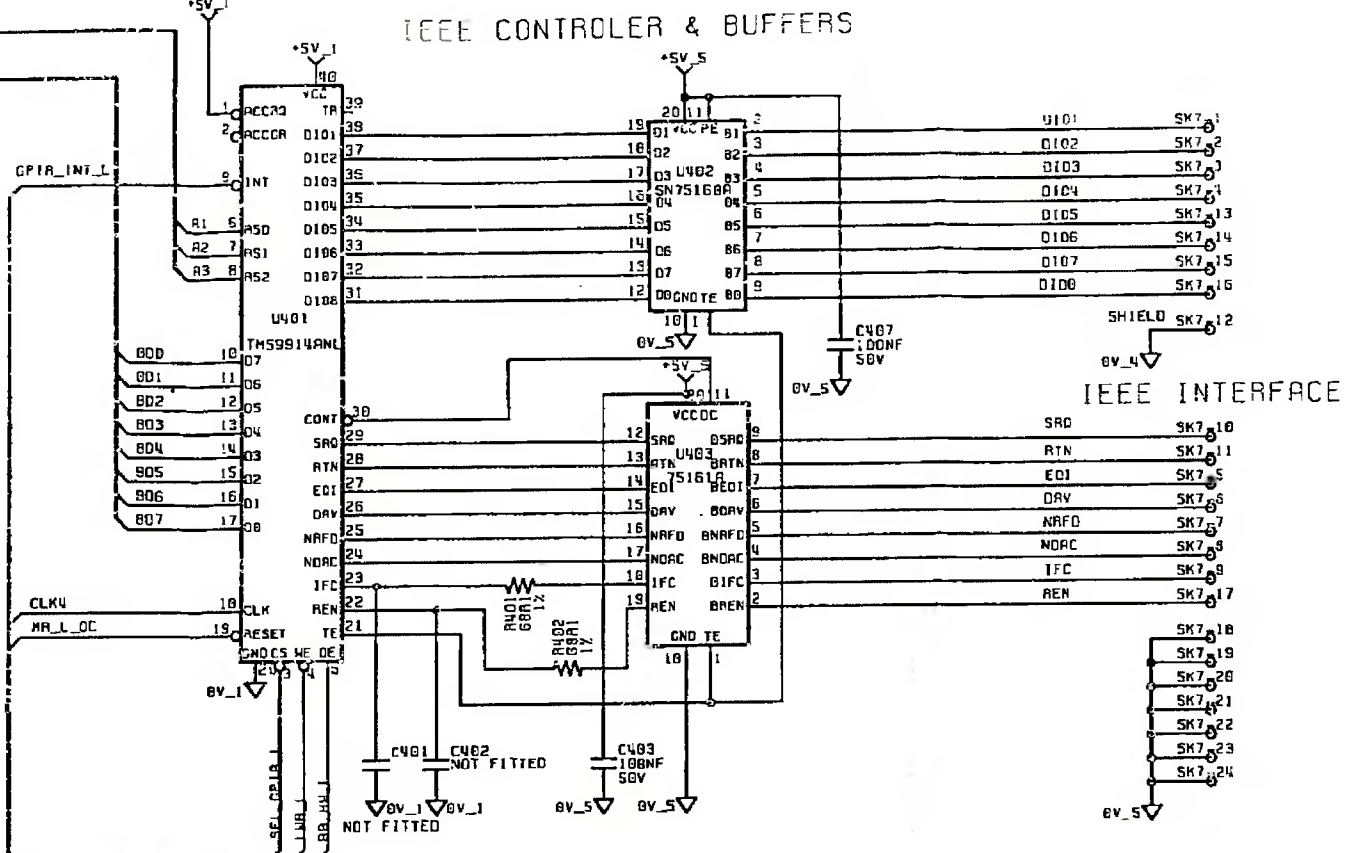
MR\_L\_OC  
 NVEN\_H

CONTROL (1: 591)

**DIGITAL ASSEMBLY**  
 Keyboard/Display Interface and Power Fail Detector  
 Drawing No. DC400901 Sheet 3 of 5

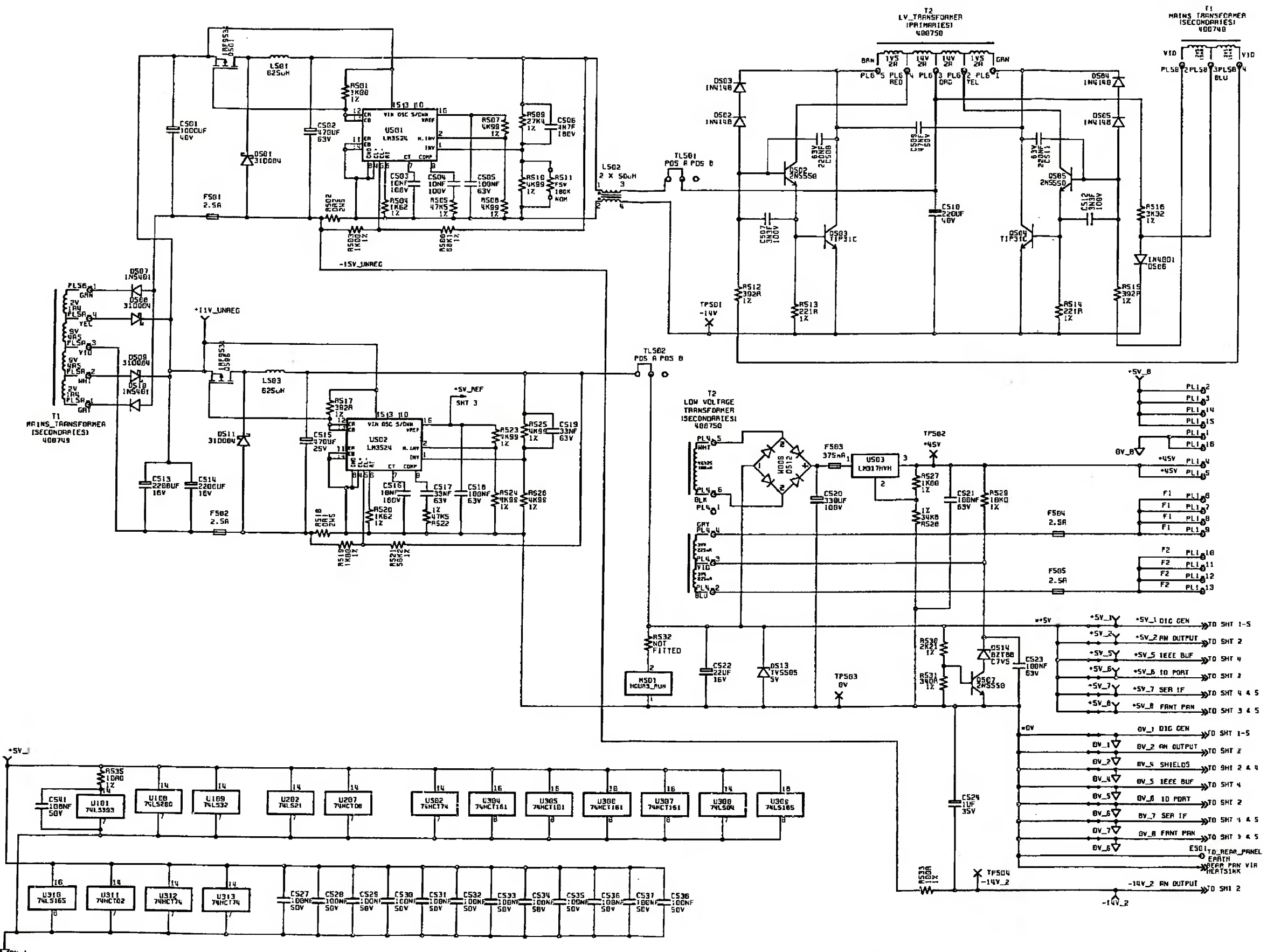
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**Datron**  
 WAVETEK  
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# IEEE CONTROLLER & BUFFERS



**DIGITAL ASSEMBLY**  
 IEEE Interface and Serial Interface  
 Drawing No. DC400901 Sheet 4 of 5





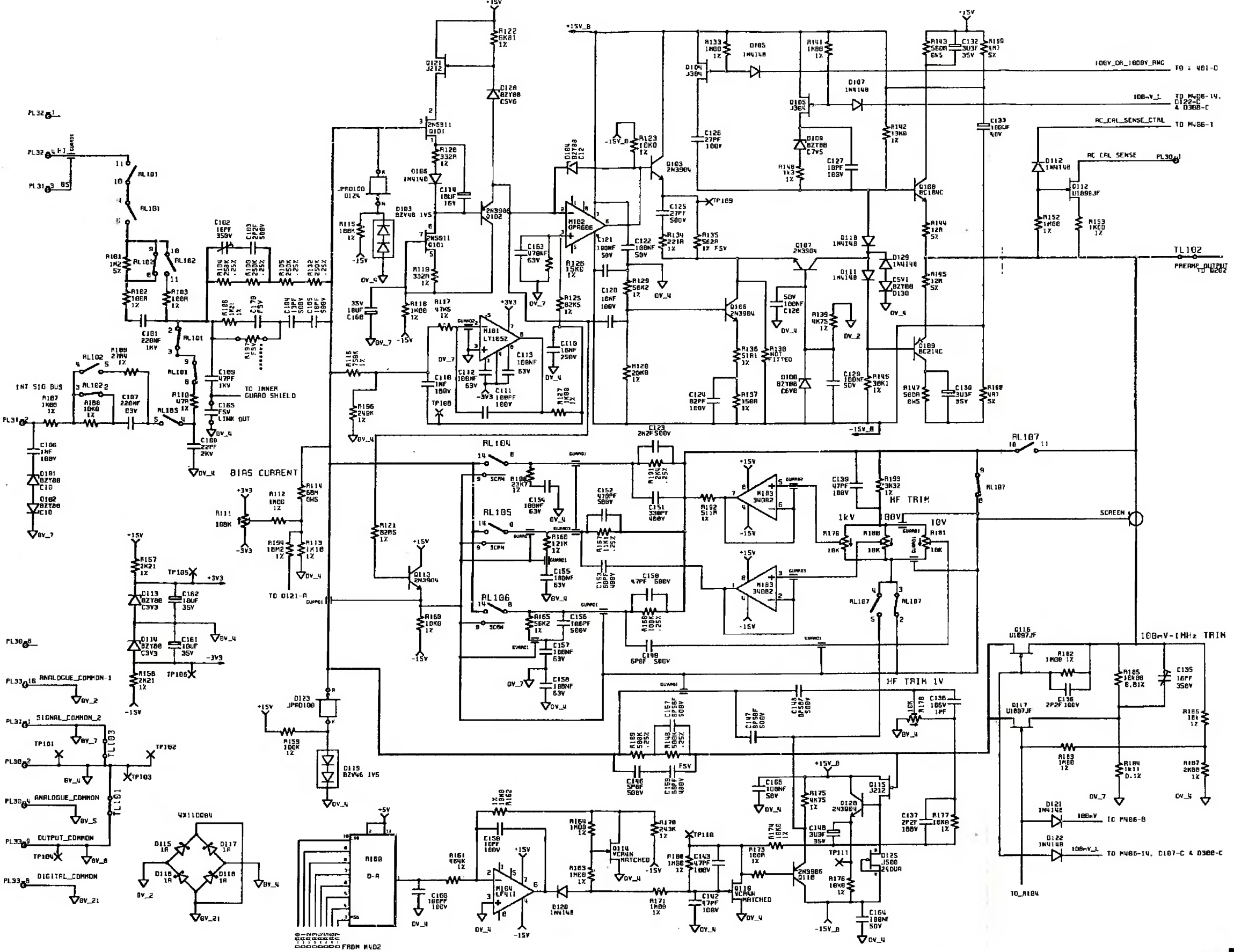
**DIGITAL ASSEMBLY**

Power Supplies

Drawing No. DC400901 Sheet 5 of 5



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100V\_OR\_100V\_RMC TO : 401-D

100V\_U\_1 TO M406-14, C122-C & D306-C

RC\_CAL\_SENSE\_CTRL TO M406-1

RC CAL SENSE PL306

TL102

PREAMP OUTPUT TO D002

BIAS CURRENT

TO D121-A

HF TRIM

HF TRIM 1V

100mV - [MHz] TRIM

TO M406-14, C107-C & D306-C

FROM M402

1273



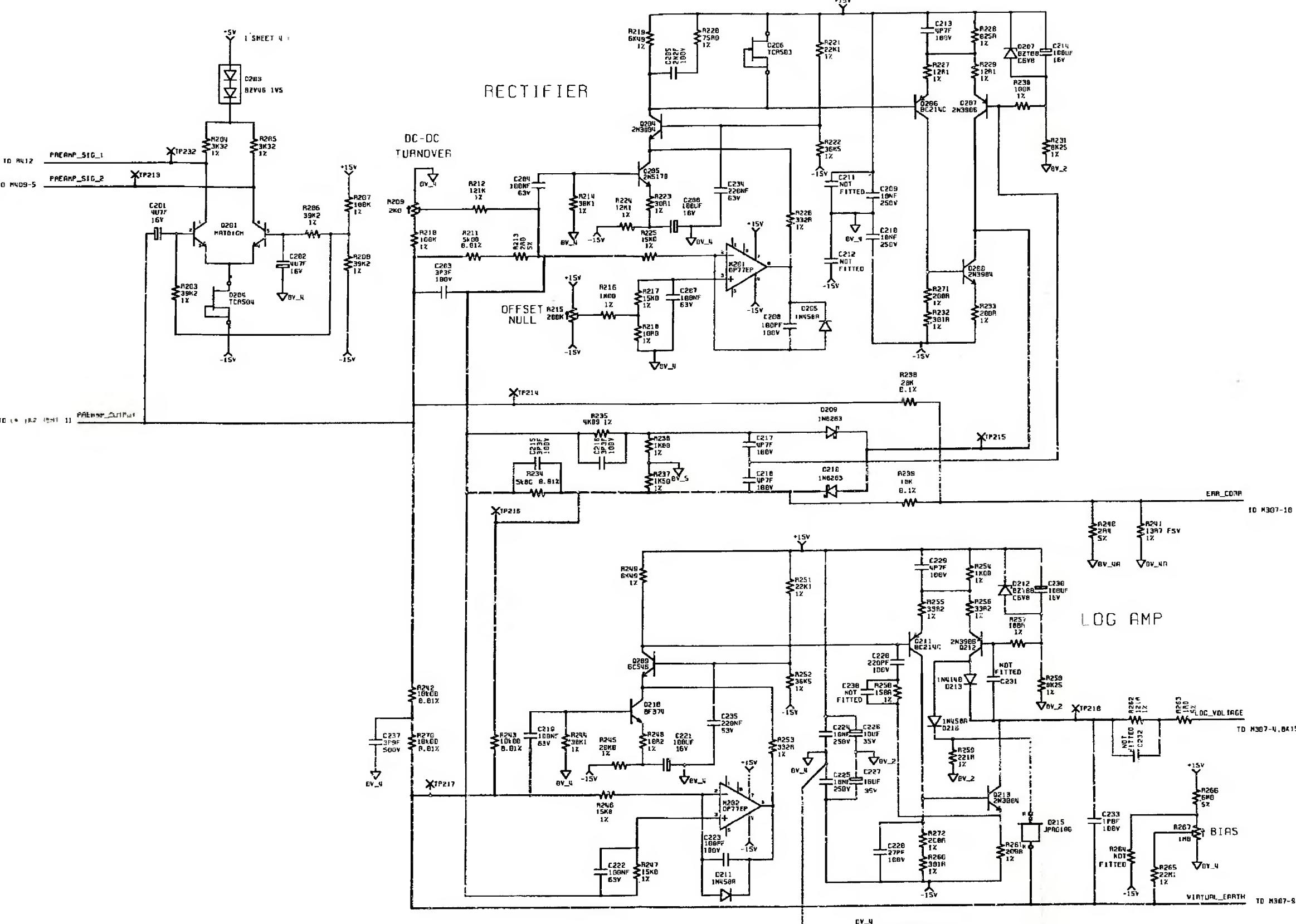
A.C. ASSEMBLY

Preamplifier

Drawing No. DC400870 Sheet 1 of 4

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11.5-1



RECTIFIER

DC-DC  
TURNOVER

OFFSET  
NULL

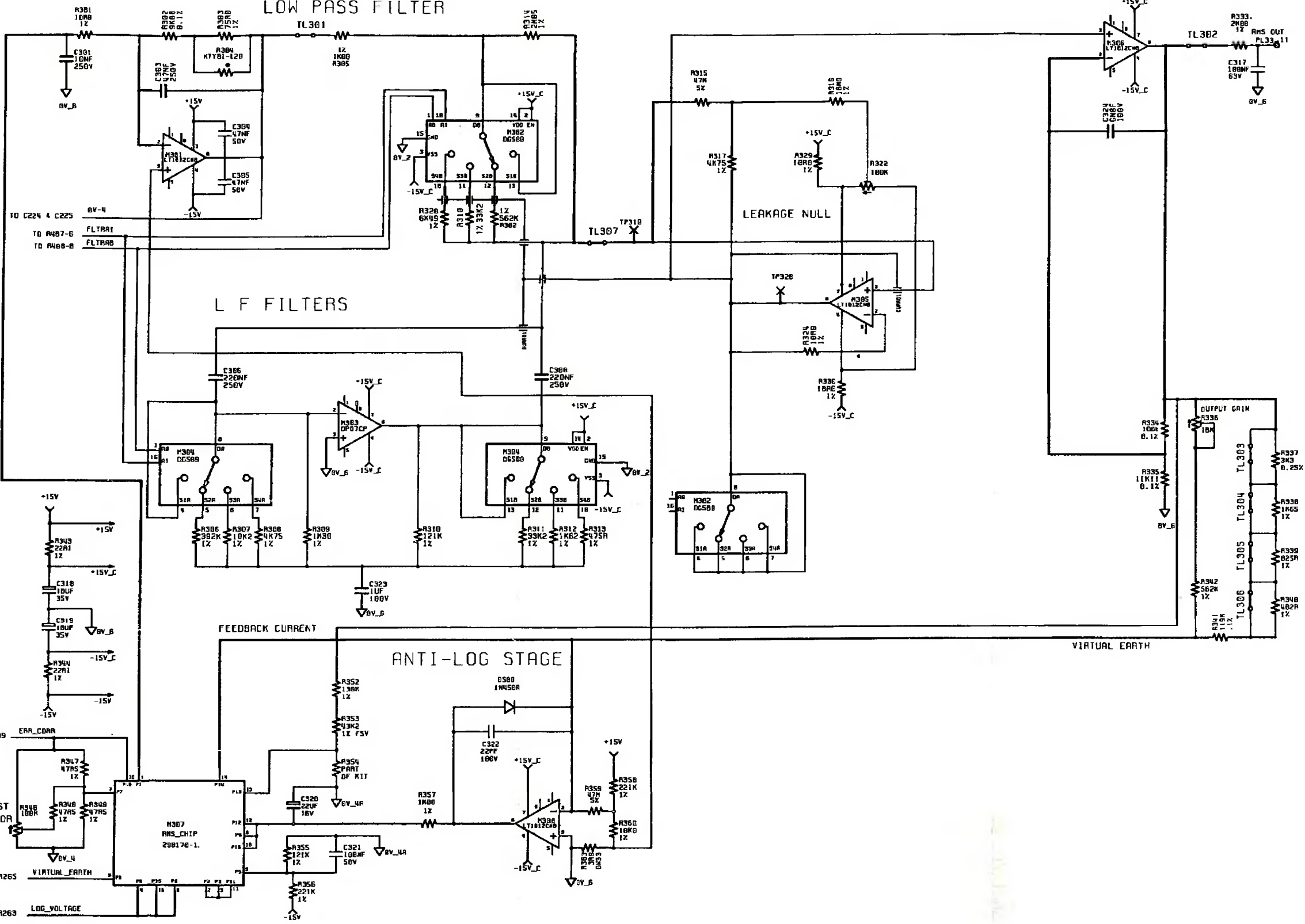
LOG AMP

**A.C. ASSEMBLY**  
Precision Rectifier and Logarithmic Amplifier  
Drawing No. DC400870 Sheet 2 of 4



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LOW PASS FILTER



A.C. ASSEMBLY

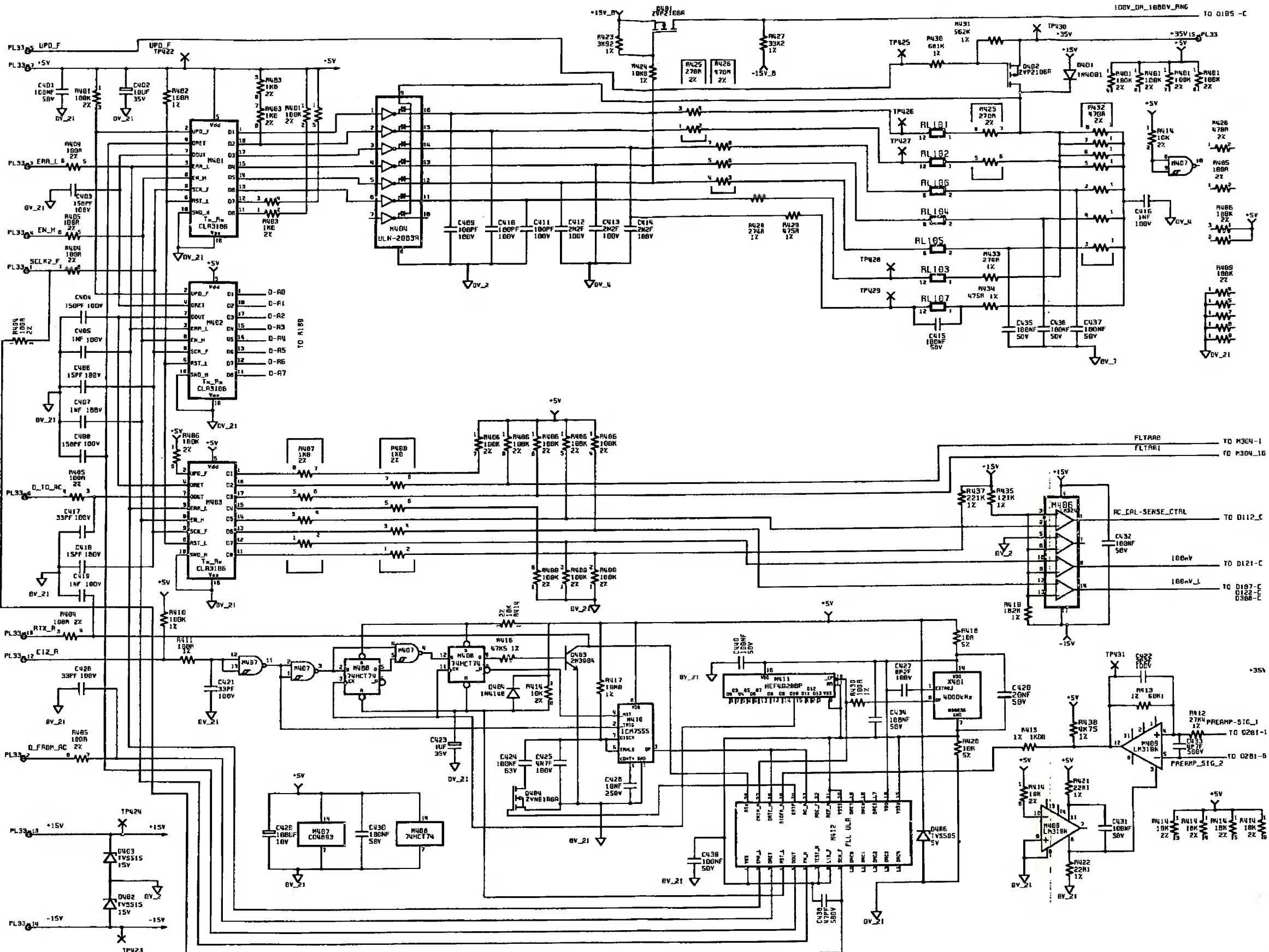
RMS Converter

Drawing No. DC400870 · Sheet 3 of 4



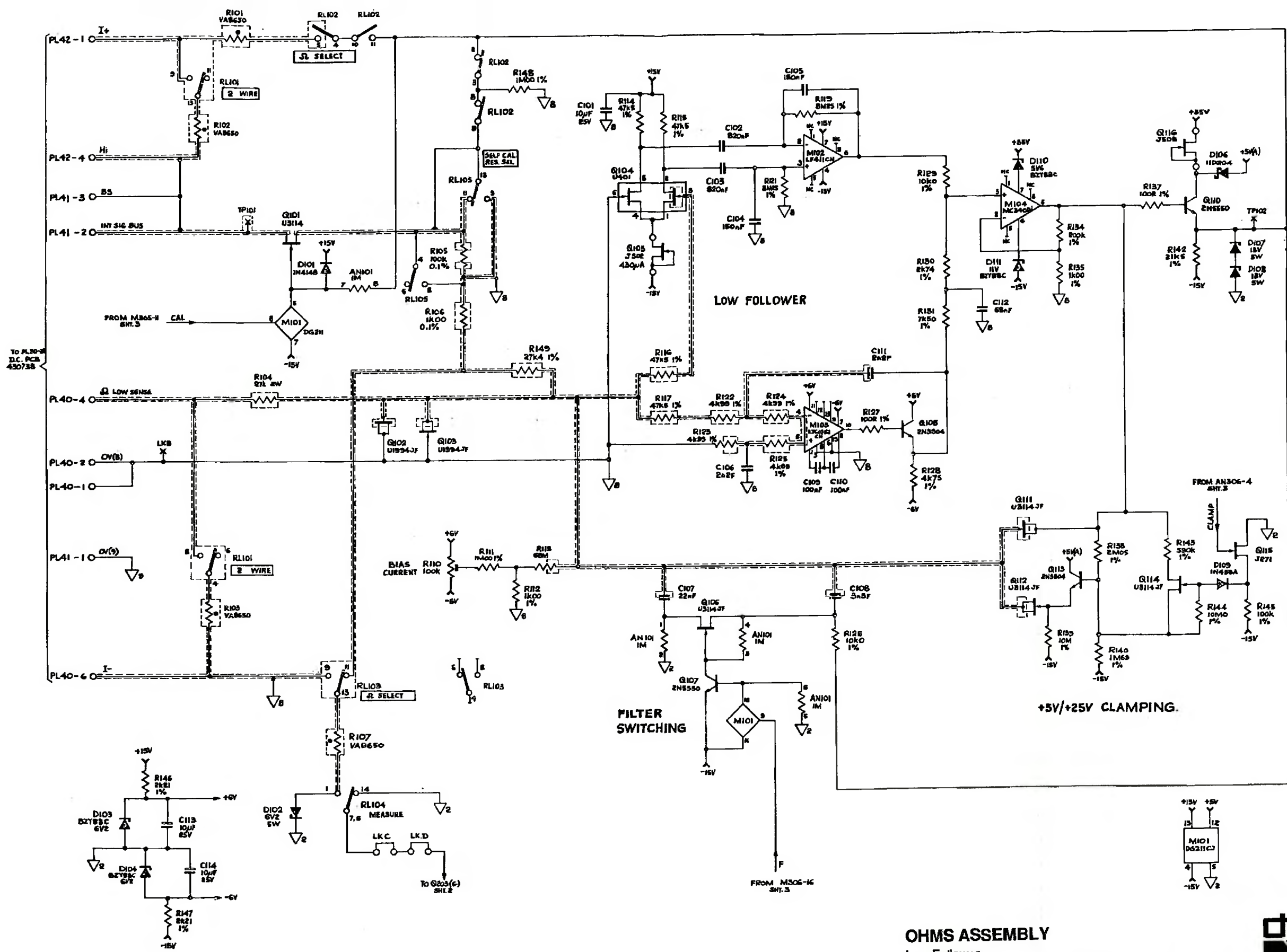
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**A.C. ASSEMBLY**  
 Control Logic  
 Drawing No. DC400870 Sheet 4 of 4





TO PL30-1  
D.C. PCB  
430738

**OHMS ASSEMBLY**  
Low Follower  
Drawing No. 430742

Sheet 1 of 3

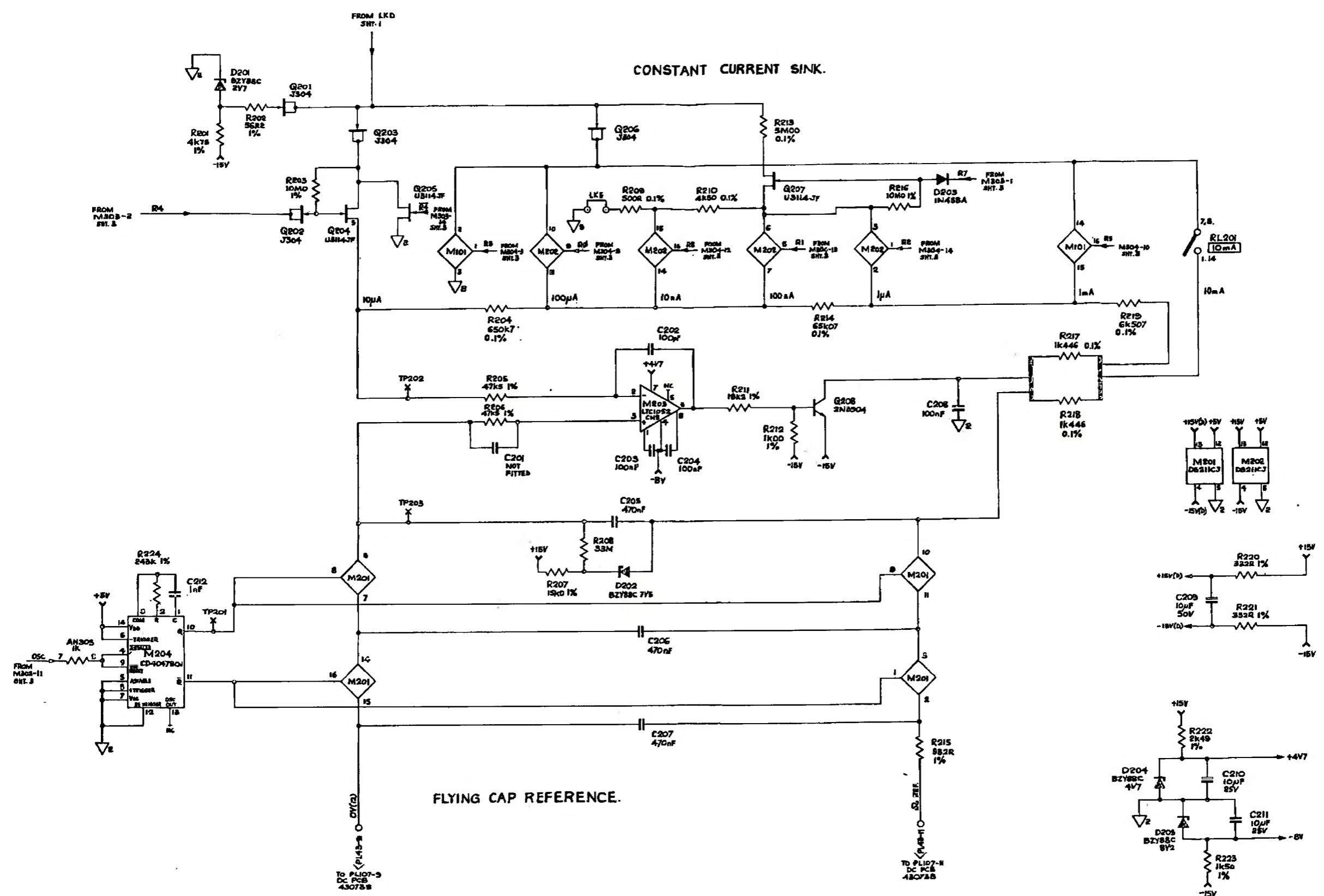


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CONSTANT CURRENT SINK.

FLYING CAP REFERENCE.

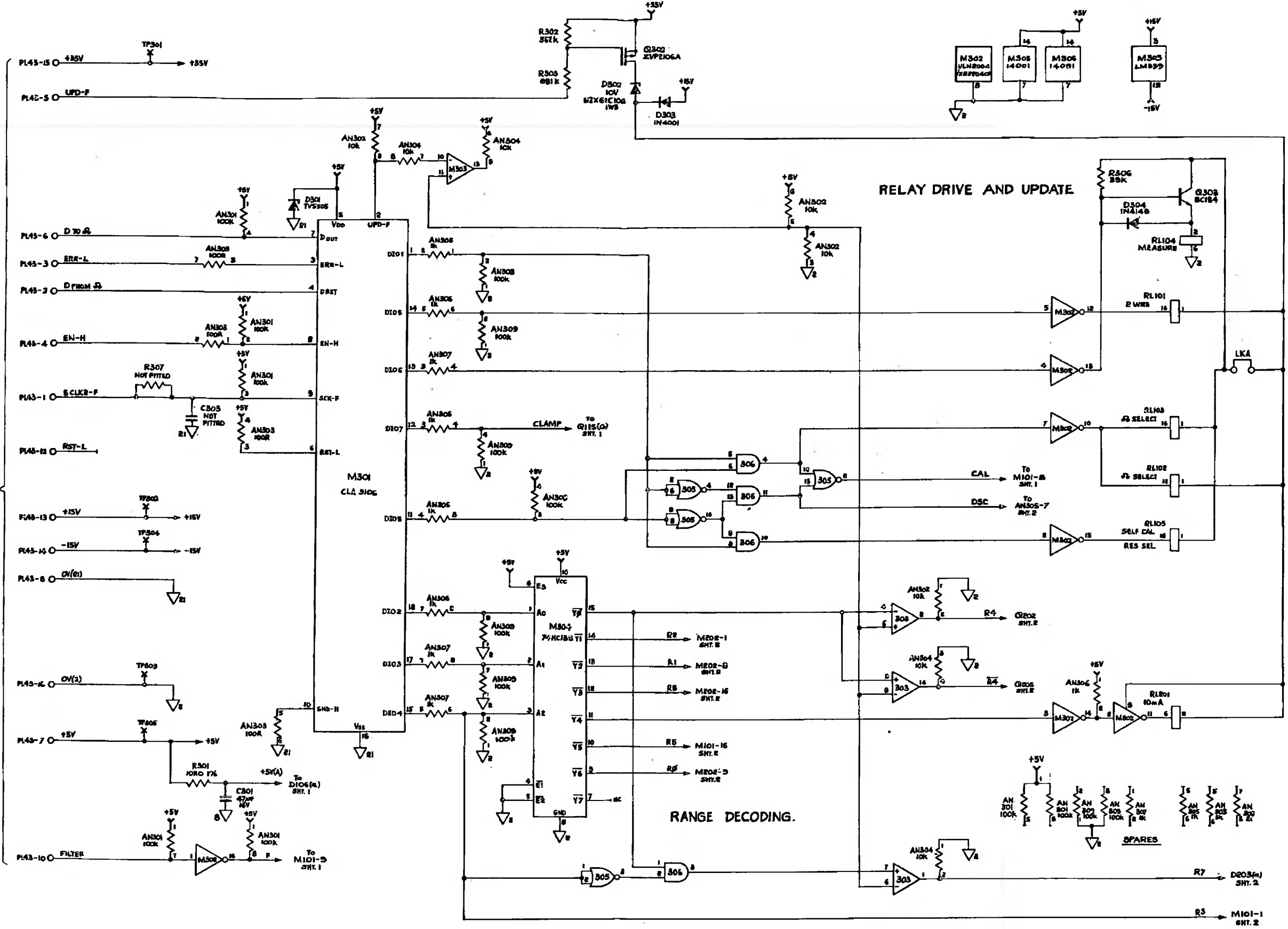


OHMS ASSEMBLY  
 Constant Current Sink  
 Drawing No. 430742

Sheet 2 of 3



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**OHMS ASSEMBLY**

Control Logic

Drawing No. 430742

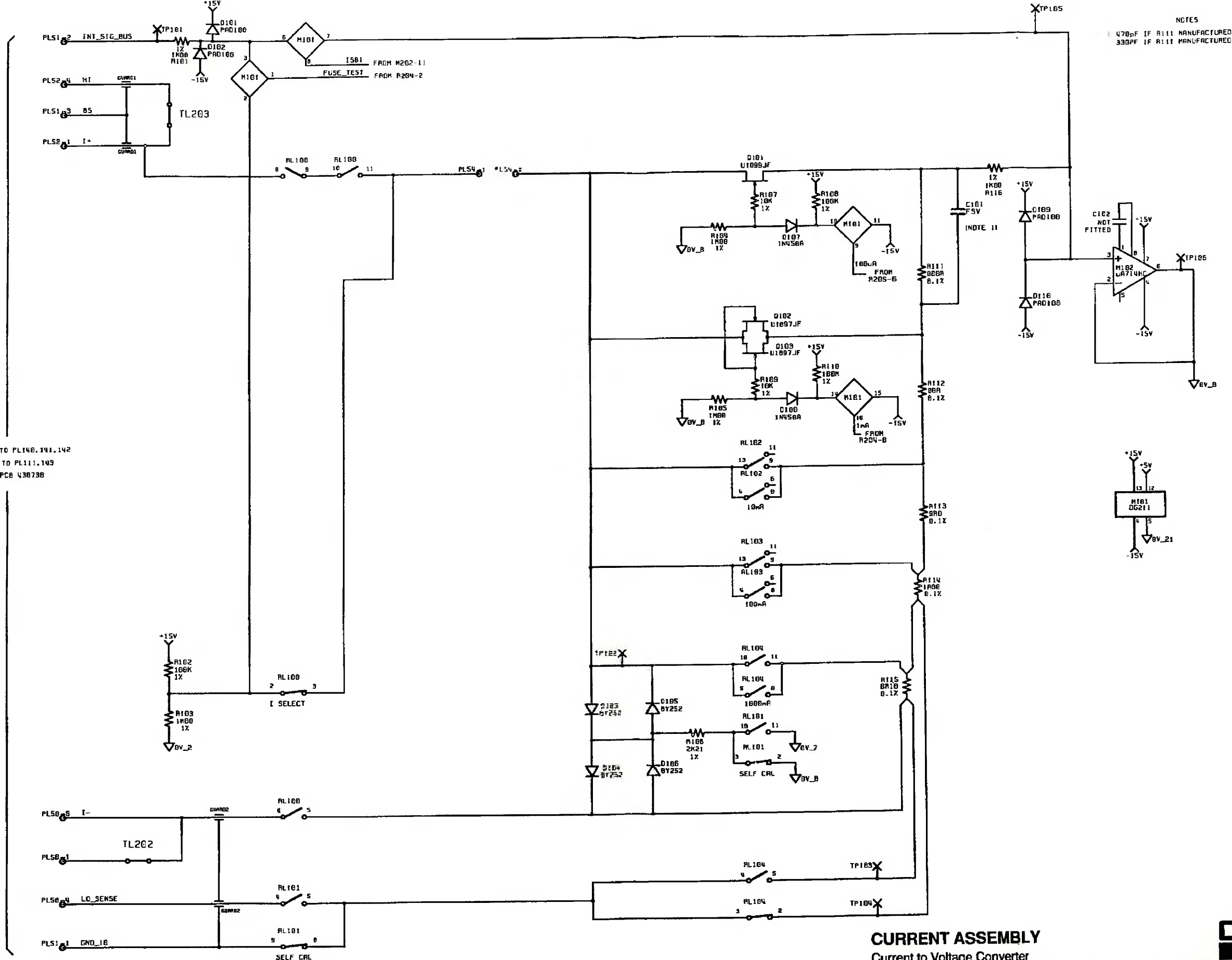
Sheet 3 of 3



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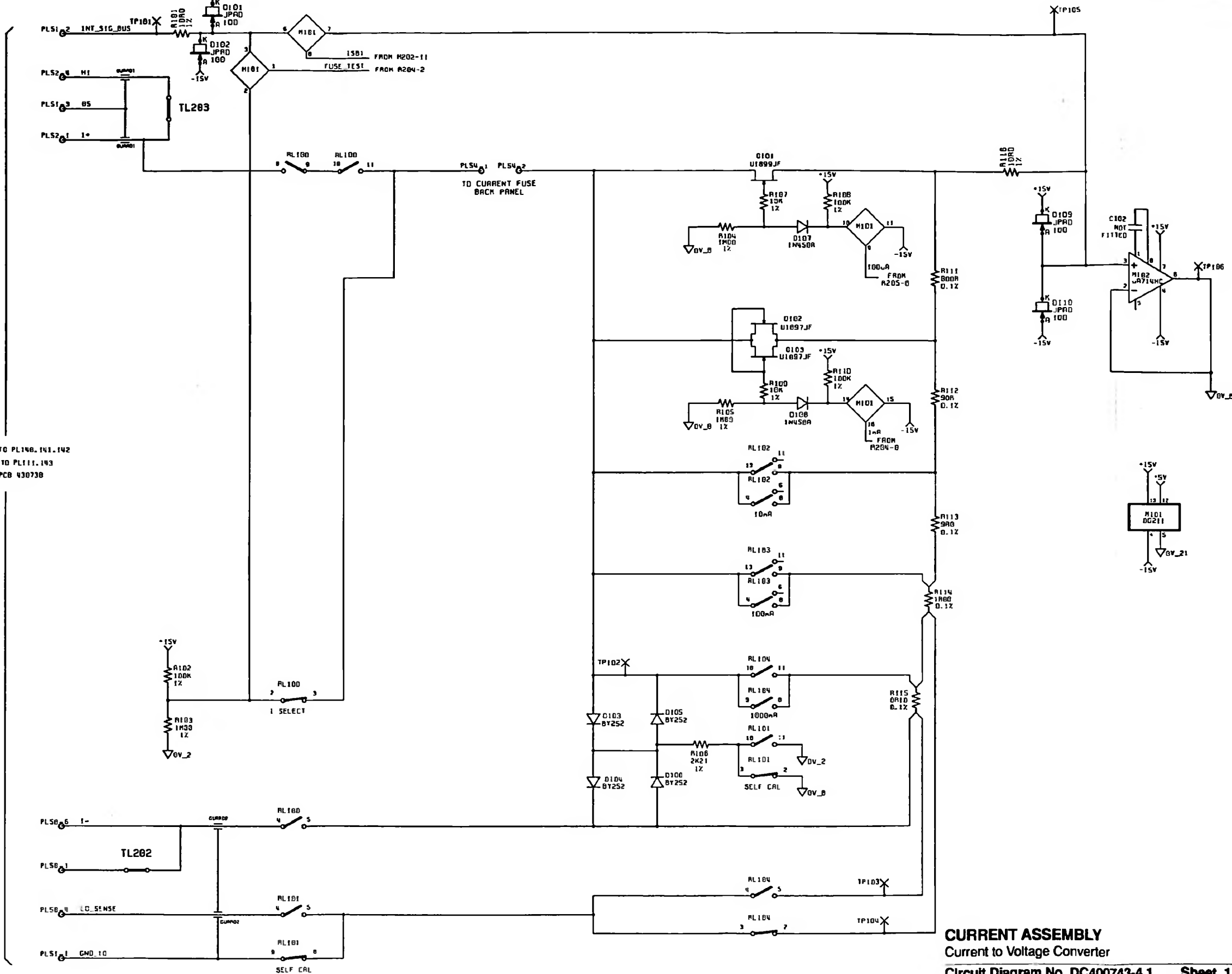
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NOTES  
 470pF IF R111 MANUFACTURED BY MANN  
 330pF IF R111 MANUFACTURED BY KELVIN



PL50, S1, S2 TO PL140, 141, 142  
 E101, 102 TO PL111, 110  
 DC PCB 430738

**CURRENT ASSEMBLY**  
 Current to Voltage Converter  
 Drawing No. 430743 Sheet 1 of 2

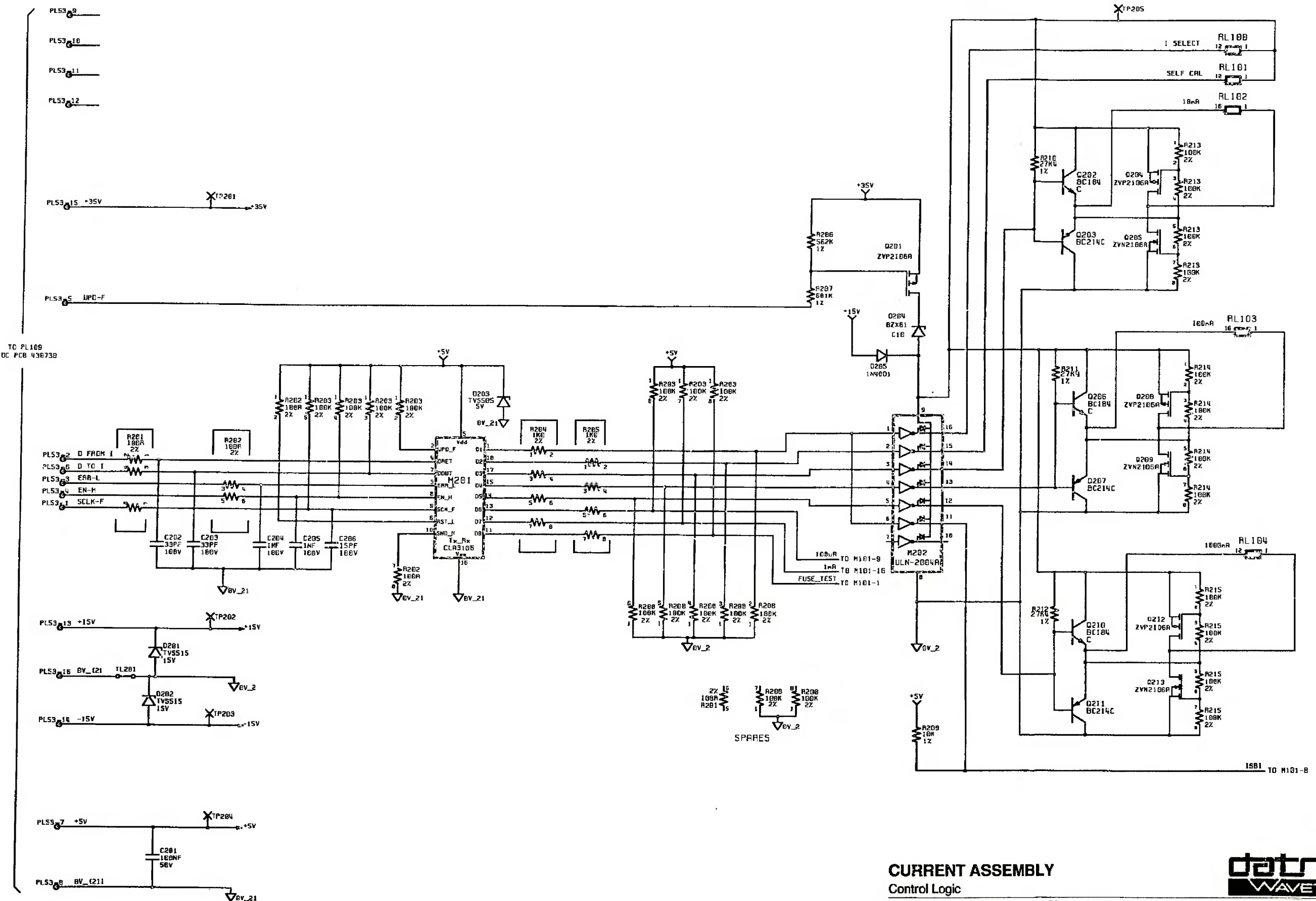


PLS0, S1, S2 TO PL140, 141, 142  
 E101, 102 TO PL111, 113  
 DC PCB 430738

**CURRENT ASSEMBLY**  
 Current to Voltage Converter  
 Circuit Diagram No. DC400743-4.1 Sheet 1



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TO PL189  
DC PCB 436739

**CURRENT ASSEMBLY**

Control Logic

Drawing No. 430743

Sheet 2 of 2



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11.7-2