

ST-8000

HF MODEM

TECHNICAL

MANUAL

VOLUME II



HAL COMMUNICATIONS CORP.
BOX 365
URBANA, ILLINOIS 61801

ST-8000

HF MODEM

TECHNICAL MANUAL

VOLUME II

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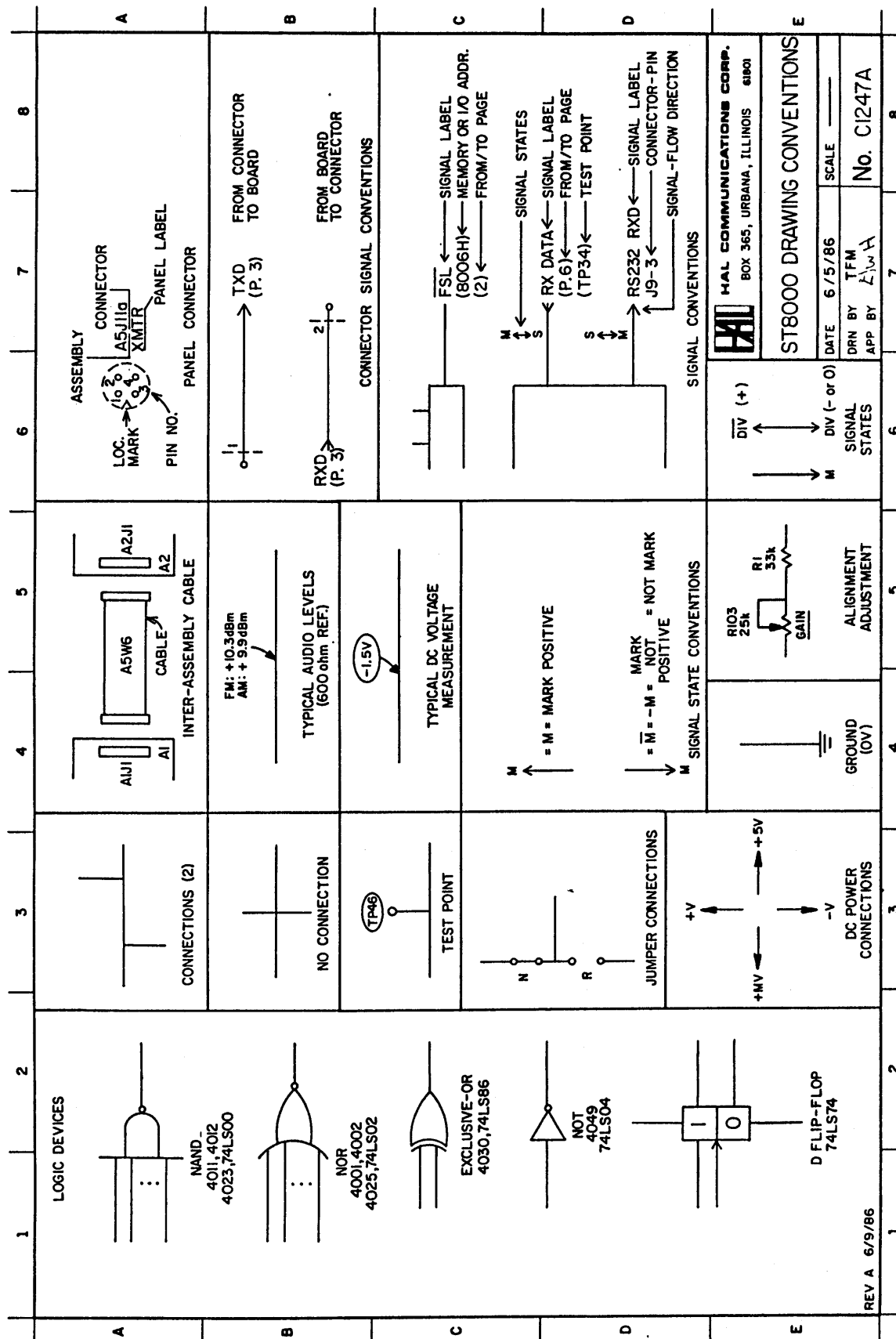
CHAPTER 6

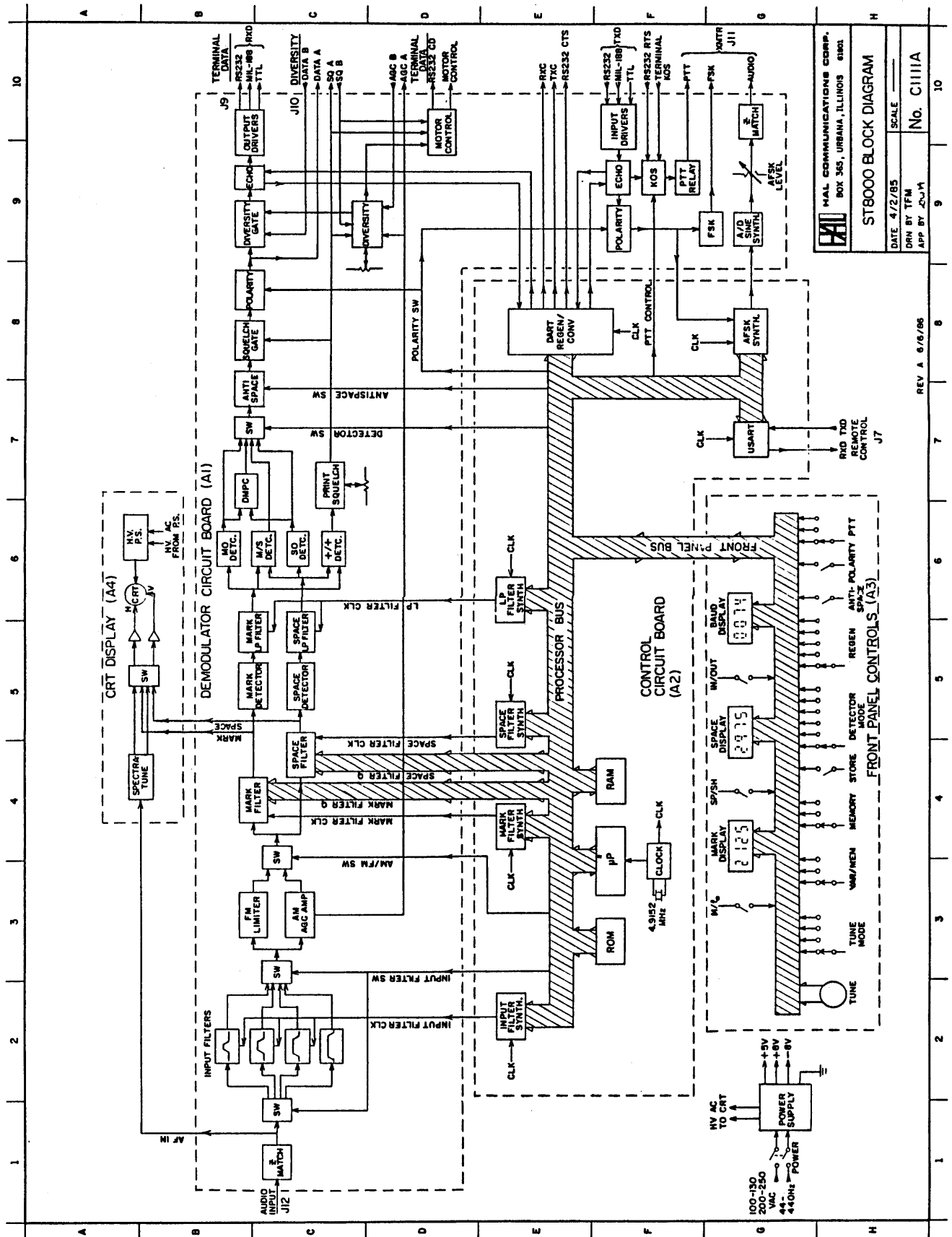
TECHNICAL DIAGRAMS

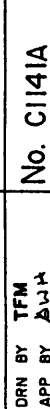
This Volume II of the ST8000 Technical Manual contains all of the schematic and pictorial diagrams for the HF MODEM. The diagrams are arranged on facing pages so that the schematic and its related partial or full pictorial may be studied without turning pages. The following is the cross-reference between Figure numbers in this manual and HAL drawing numbers.

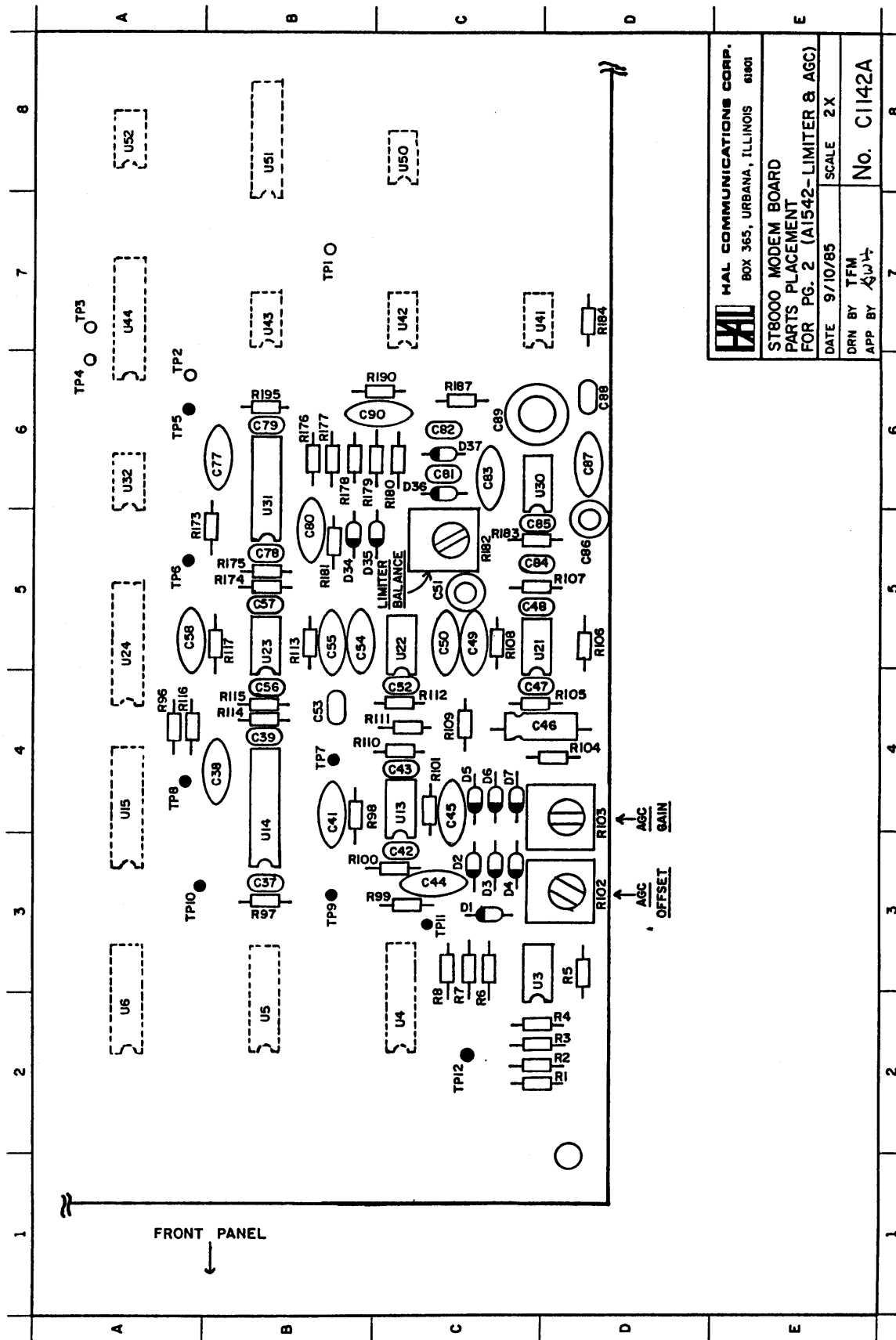
FIGURE	HAL DWG	DESCRIPTION
6.1	C1246	ST8000 DRAWING CONVENTIONS
6.2	C1111	BLOCK DIAGRAM
6.3	C1141	MODEM ASBLY - INPUT FILTER PICTORIAL
6.4	A1541	MODEM ASBLY - INPUT FILTER SCHEMATIC
6.5	C1142	MODEM ASBLY - LIMITER & AGC PICTORIAL
6.6	A1542	MODEM ASBLY - LIMITER & AGC SCHEMATIC
6.7	C1143	MODEM ASBLY - MARK FILTER PICTORIAL
6.8	A1543	MODEM ASBLY - MARK FILTER SCHEMATIC
6.9	C1144	MODEM ASBLY - SPACE FILTER PICTORIAL
6.10	A1544	MODEM ASBLY - SPACE FILTER SCHEMATIC
6.11	C1145	MODEM ASBLY - DETECTOR & LP PICTORIAL
6.12	A1545	MODEM ASBLY - DETECTOR & LP SCHEMATIC
6.13	C1146	MODEM ASBLY - DETC. & PR SQUELCH PICTORIAL
6.14	A1546	MODEM ASBLY - DETC. & PR SQUELCH SCHEMATIC
6.15	C1147	MODEM ASBLY - RX DATA CONTROL PICTORIAL
6.16	A1547	MODEM ASBLY - RX DATA CONTROL SCHEMATIC
6.17	C1148	MODEM ASBLY - DIVERSITY PICTORIAL
6.18	A1548	MODEM ASBLY - DIVERSITY SCHEMATIC
6.19	C1149	MODEM ASBLY - TXD CONTROL, KOS PICTORIAL
6.20	A1549	MODEM ASBLY - TXD CONTROL, KOS SCHEMATIC
6.21	C1150	MODEM ASBLY - AFSK OSCILLATOR PICTORIAL
6.22	A1550	MODEM ASBLY - AFSK OSCILLATOR SCHEMATIC
6.23	C1151	MODEM ASBLY - POWER SUPPLY PICTORIAL
6.24	A1553	MODEM ASBLY - POWER SUPPLY SCHEMATIC
6.25	C1133	MODEM ASBLY - PARTS PLACEMENT
6.26	A1576	MODEM ASBLY - I/O CONNECTORS SCHEMATIC
6.27	C1154	CONTROL ASBLY - PROCESSOR RAM/ROM PICTORIAL
6.28	A1554	CONTROL ASBLY - PROCESSOR RAM/ROM SCHEMATIC
6.29	C1155	CONTROL ASBLY - MODEM CONTROL PICTORIAL
6.30	A1555	CONTROL ASBLY - MODEM CONTROL SCHEMATIC
6.31	C1156	CONTROL ASBLY - SERIAL, DSPLY I/O PICTORIAL
6.32	A1556	CONTROL ASBLY - SERIAL, DSPLY I/O SCHEMATIC
6.33	C1157	CONTROL ASBLY - SYNTH. CLOCK PICTORIAL
6.34	A1557	CONTROL ASBLY - SYNTH. CLOCK SCHEMATIC
6.35	C1158	CONTROL ASBLY - AFSK SYNTHESIZER PICTORIAL
6.36	A1558	CONTROL ASBLY - AFSK SYNTHESIZER SCHEMATIC
6.37	C1159	CONTROL ASBLY - MARK SYNTHESIZER PICTORIAL
6.38	A1559	CONTROL ASBLY - MARK SYNTHESIZER SCHEMATIC

FIGURE	HAL DWG	DESCRIPTION
6.39	C1160	CONTROL ASBLY - SPACE SYNTHESIZER PICTORIAL
6.40	A1560	CONTROL ASBLY - SPACE SYNTHESIZER SCHEMATIC
6.41	C1161	CONTROL ASBLY - BAND-PASS SYNTH. PICTORIAL
6.42	A1561	CONTROL ASBLY - BAND-PASS SYNTH. SCHEMATIC
6.43	C1162	CONTROL ASBLY - LOW-PASS SYNTH. PICTORIAL
6.44	A1562	CONTROL ASBLY - LOW-PASS SYNTH. SCHEMATIC
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6.47	C1152	FRONT PANEL ASBLY - PICTORIAL
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6.53	C1112	INTER-MODULE CONNECTIONS - PICTORIAL
6.54	A1578	INTER-MODULE CONNECTIONS - SCHEMATIC







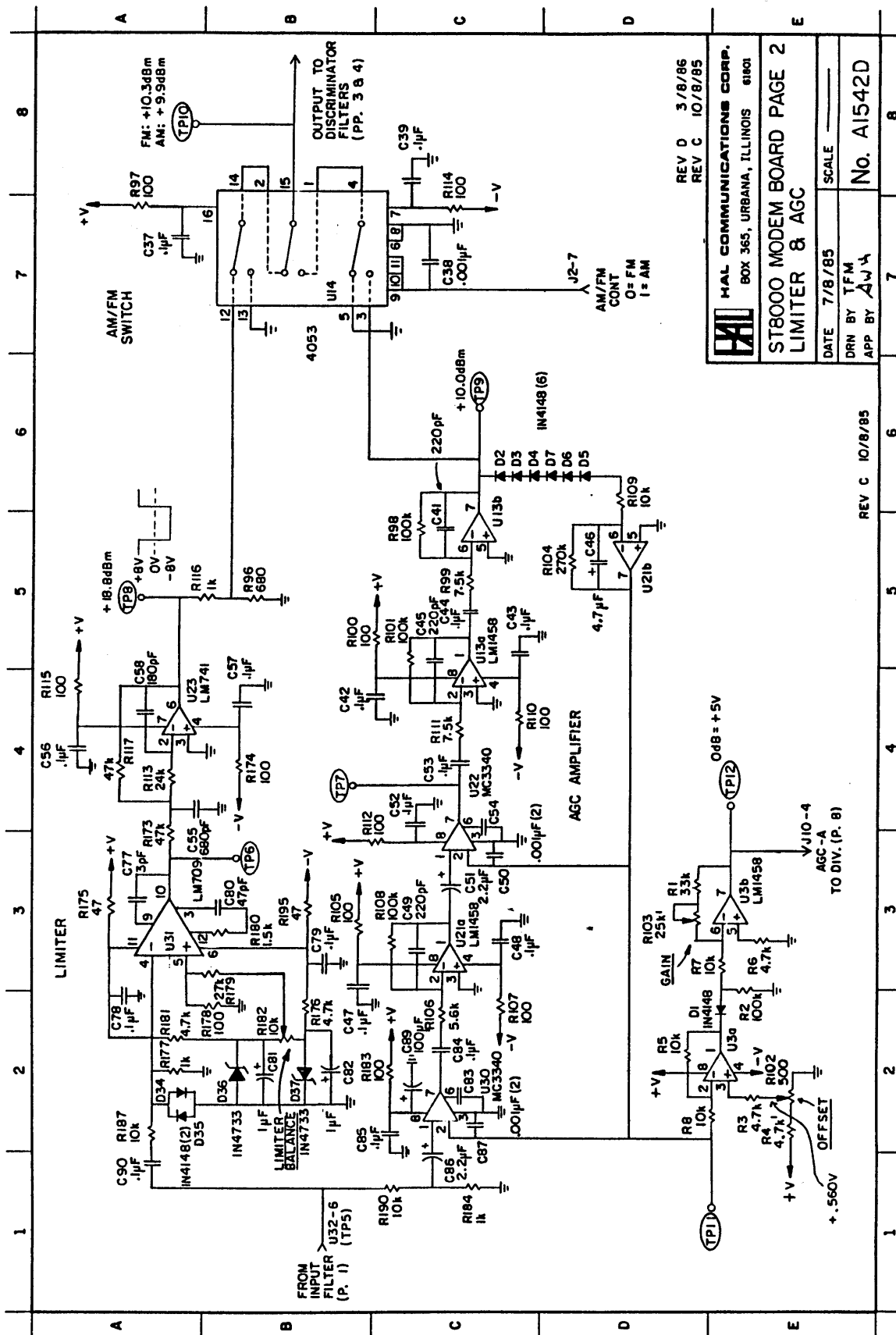


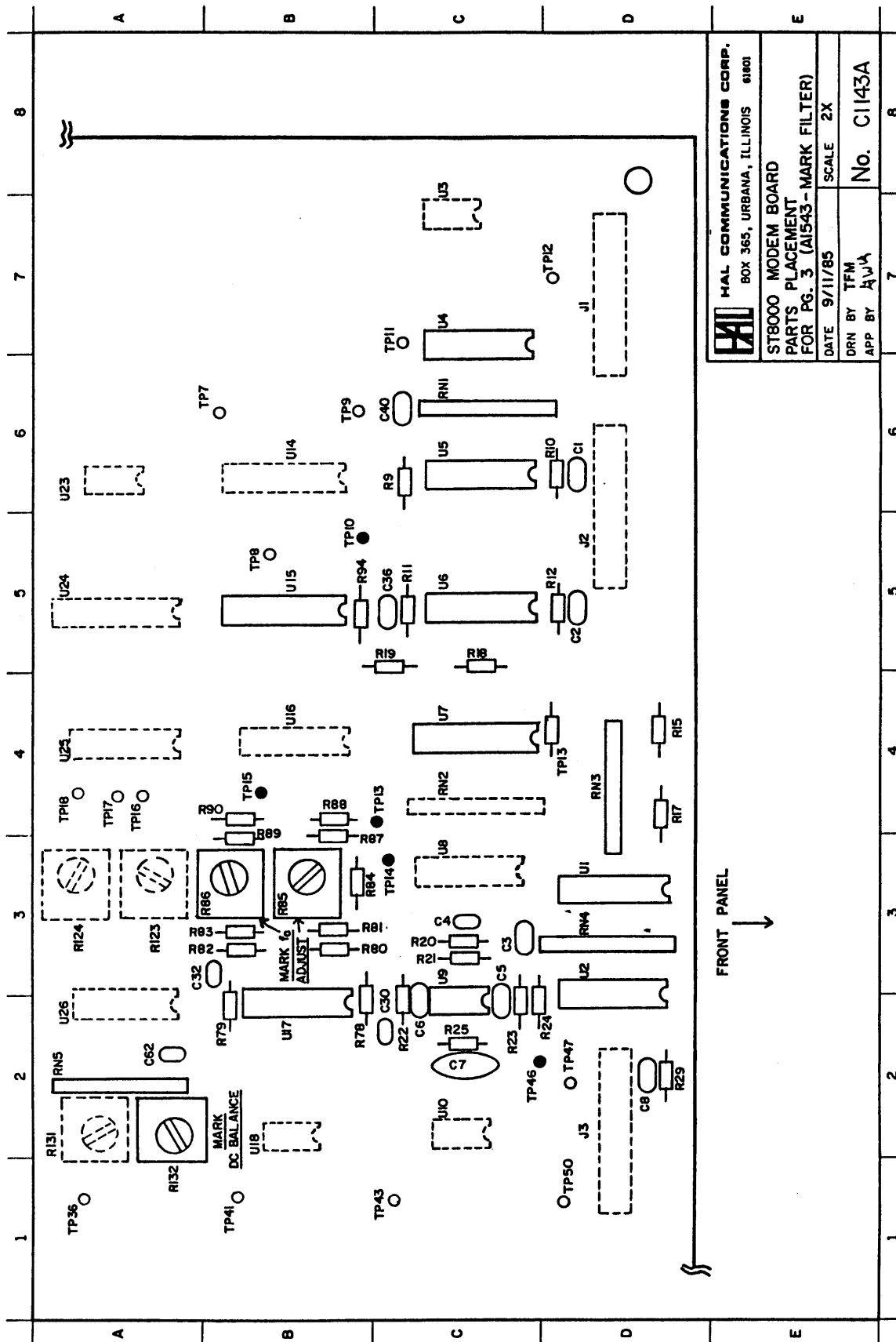
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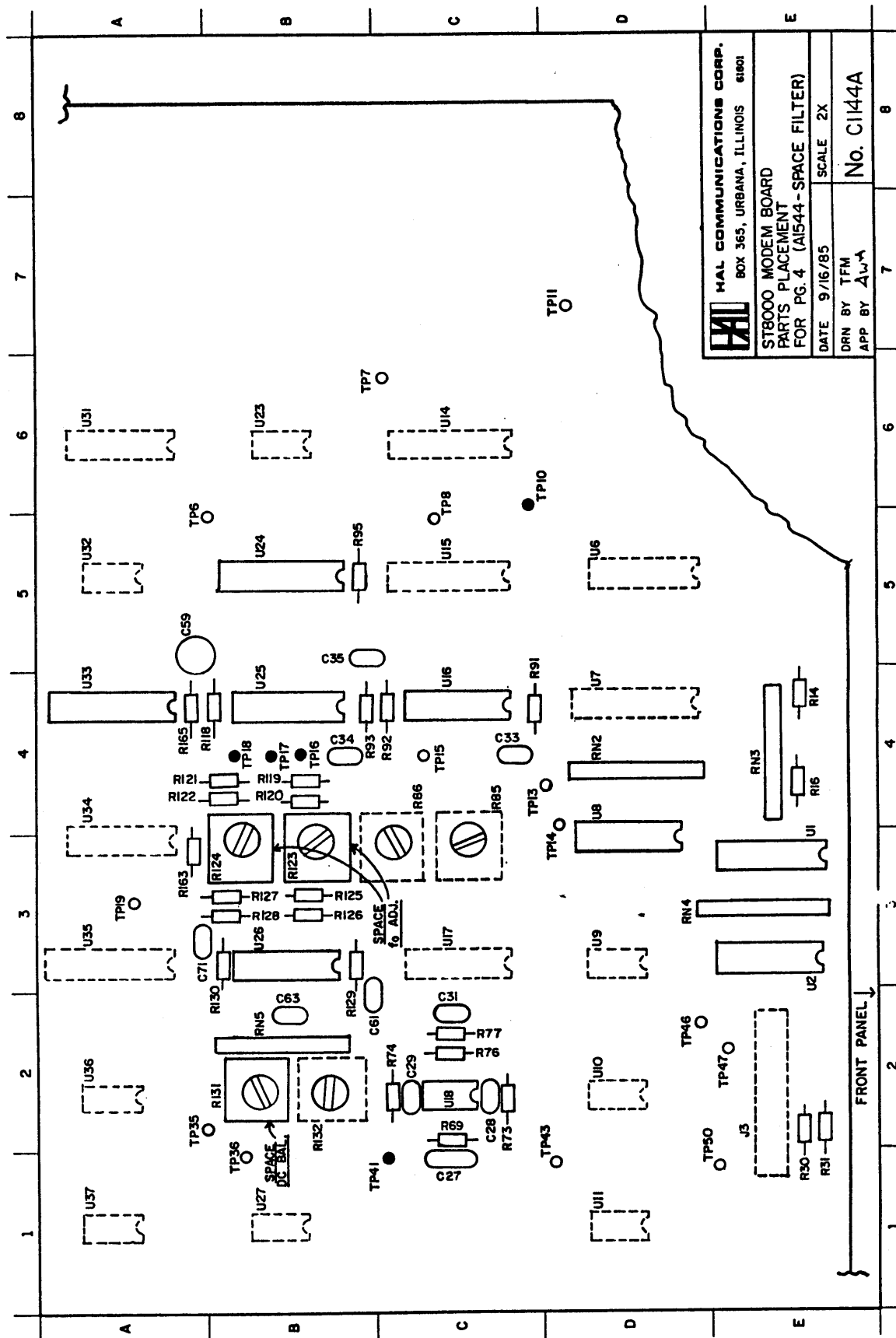
ST8000 MODEM BOARD
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FOR PG. 2 (A1542-LIMITER & AGC)

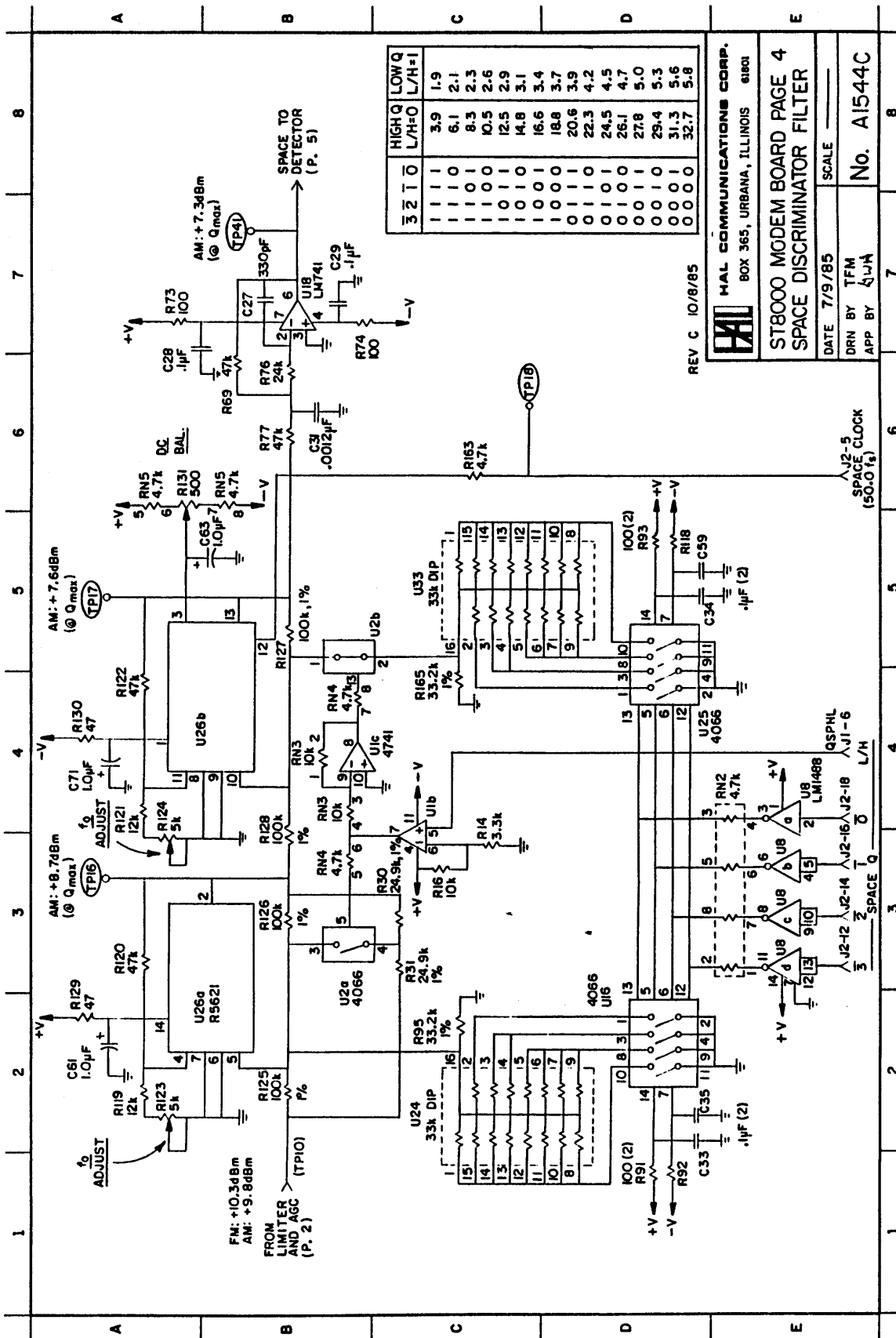
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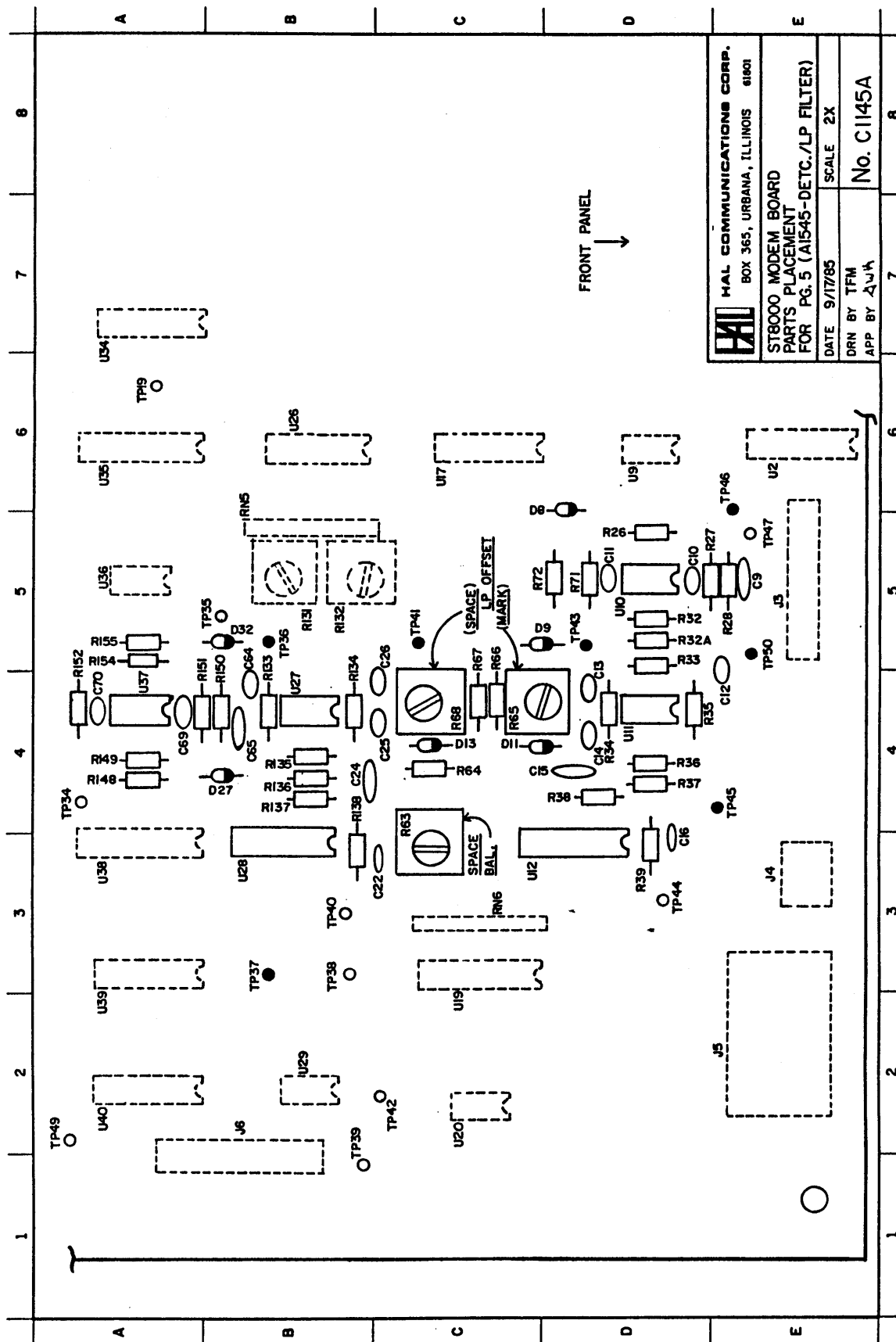
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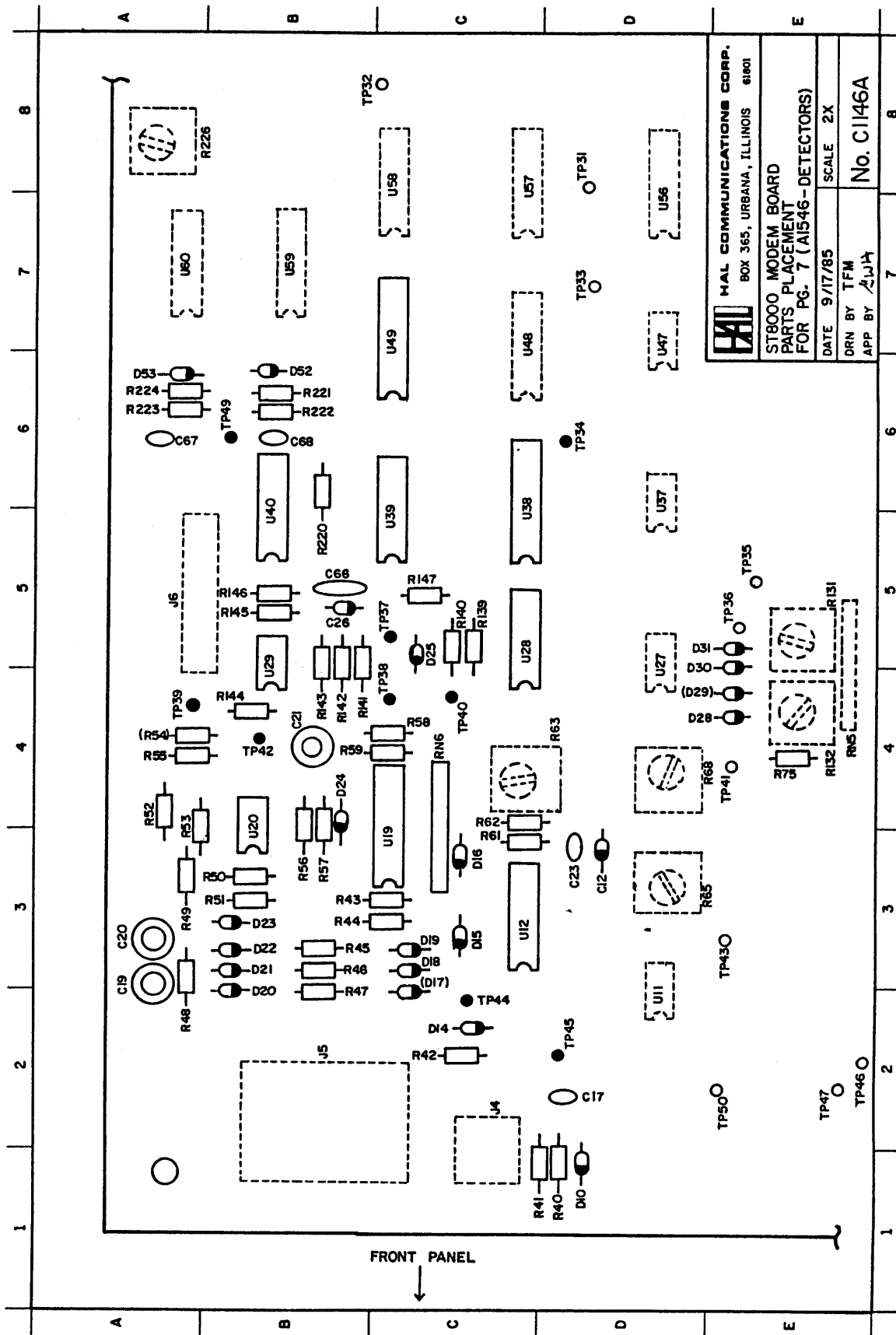




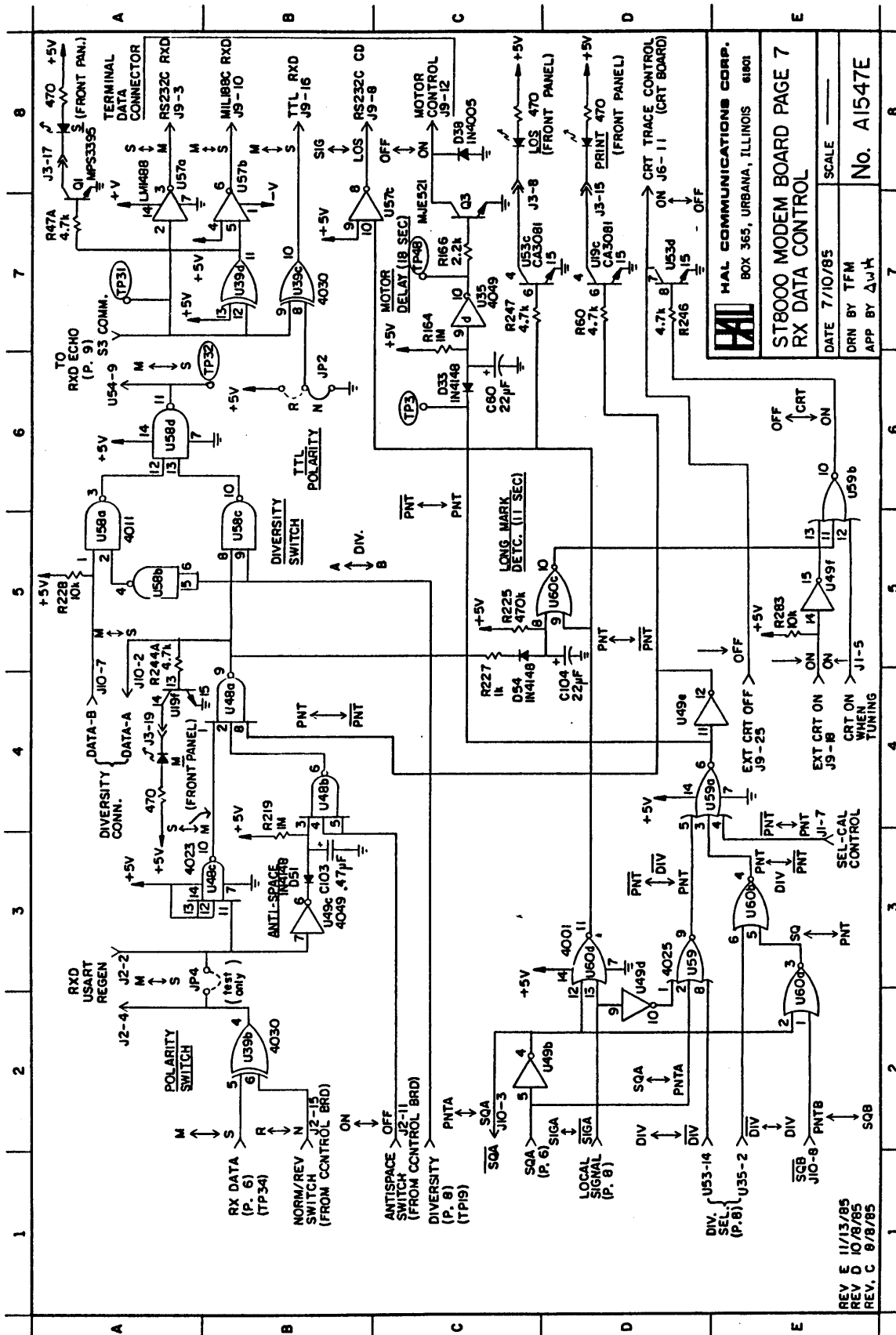


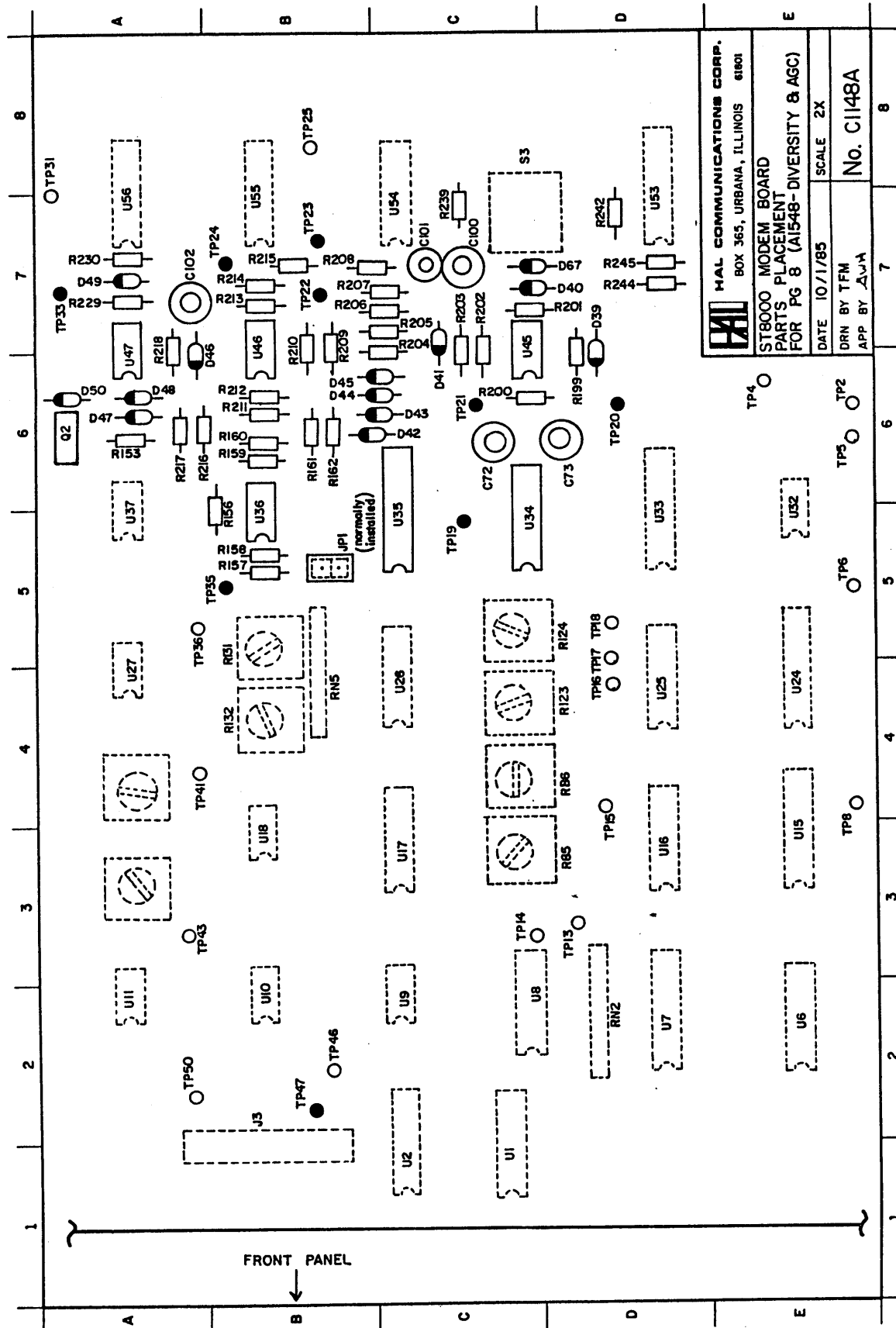


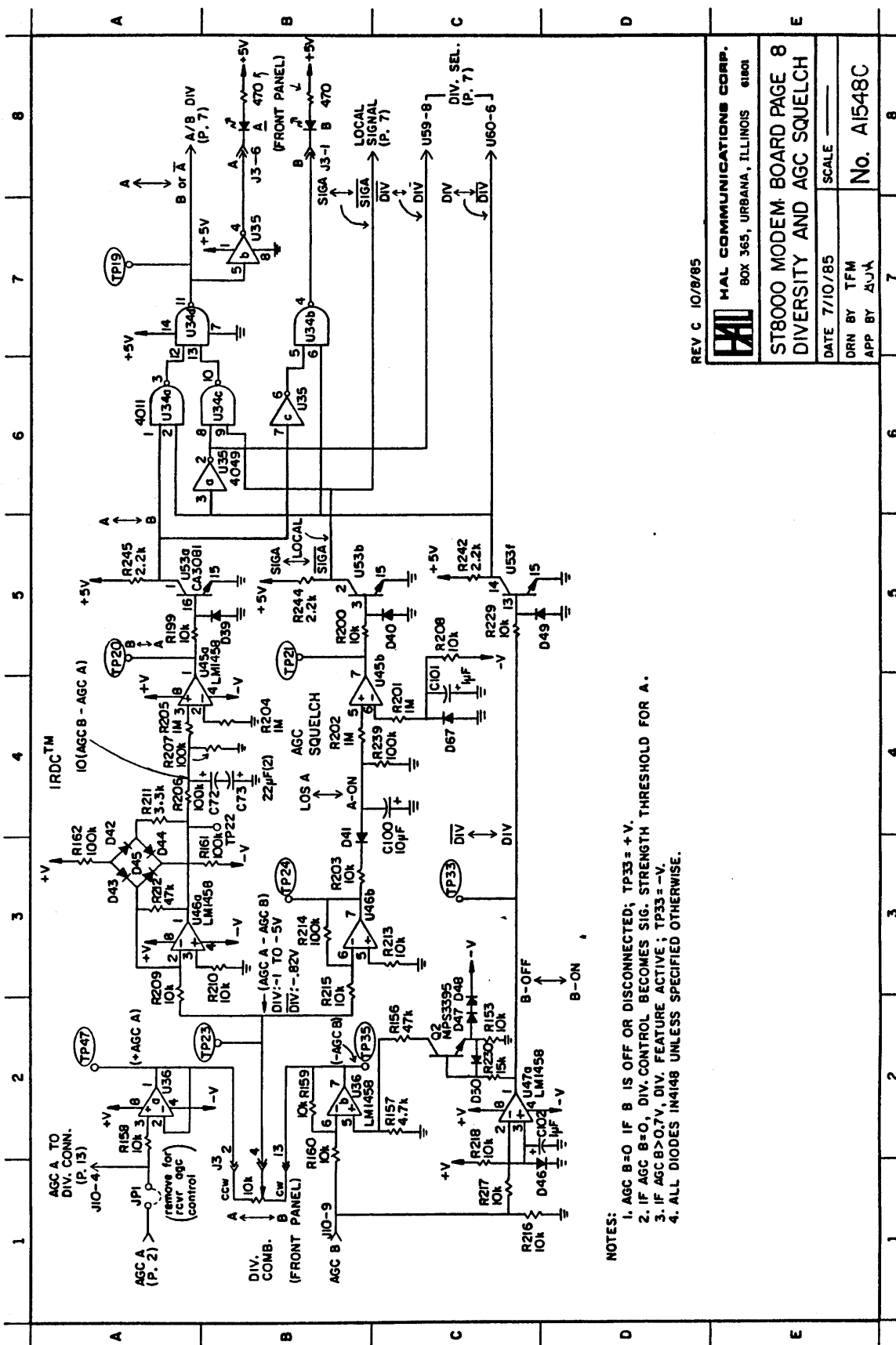


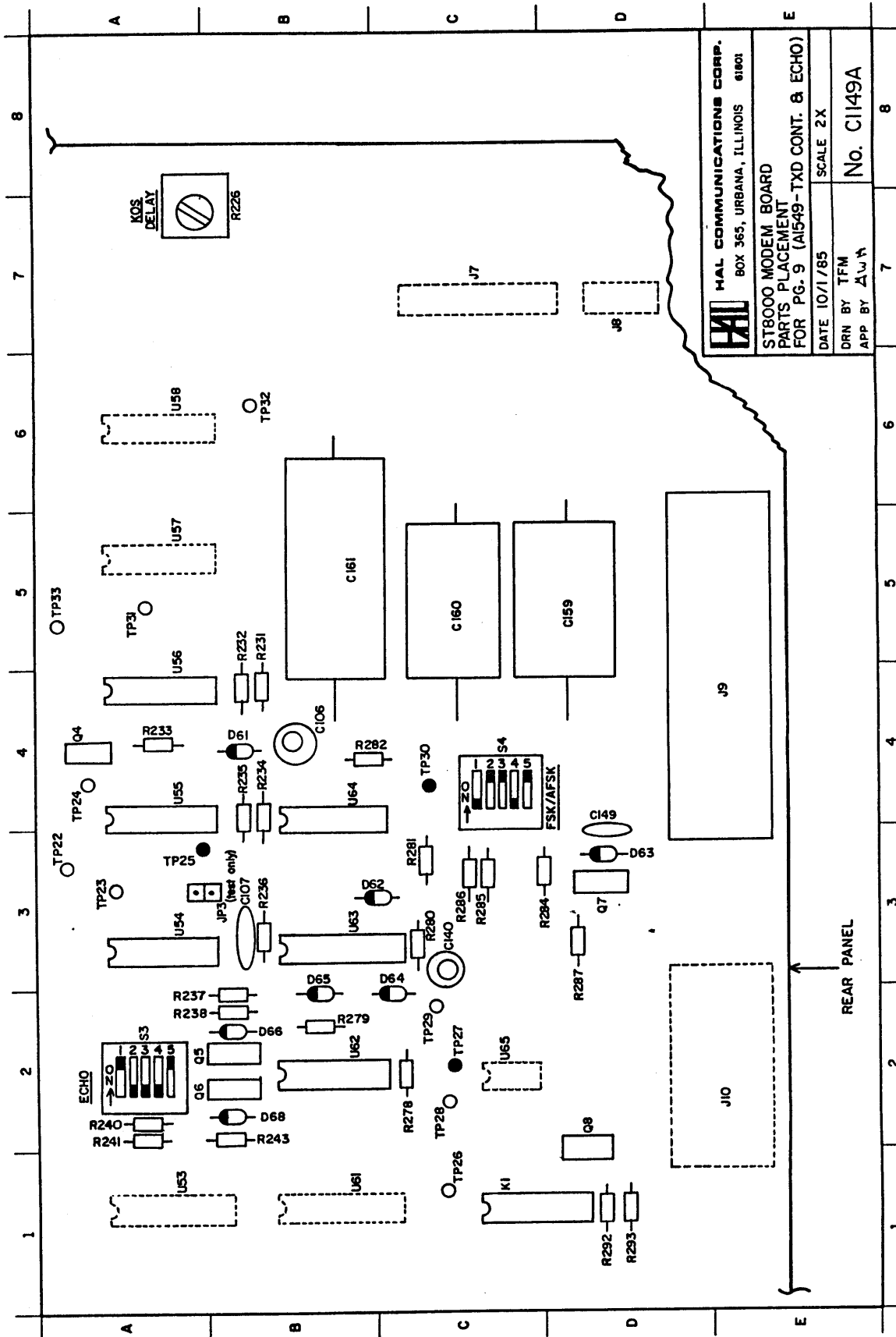


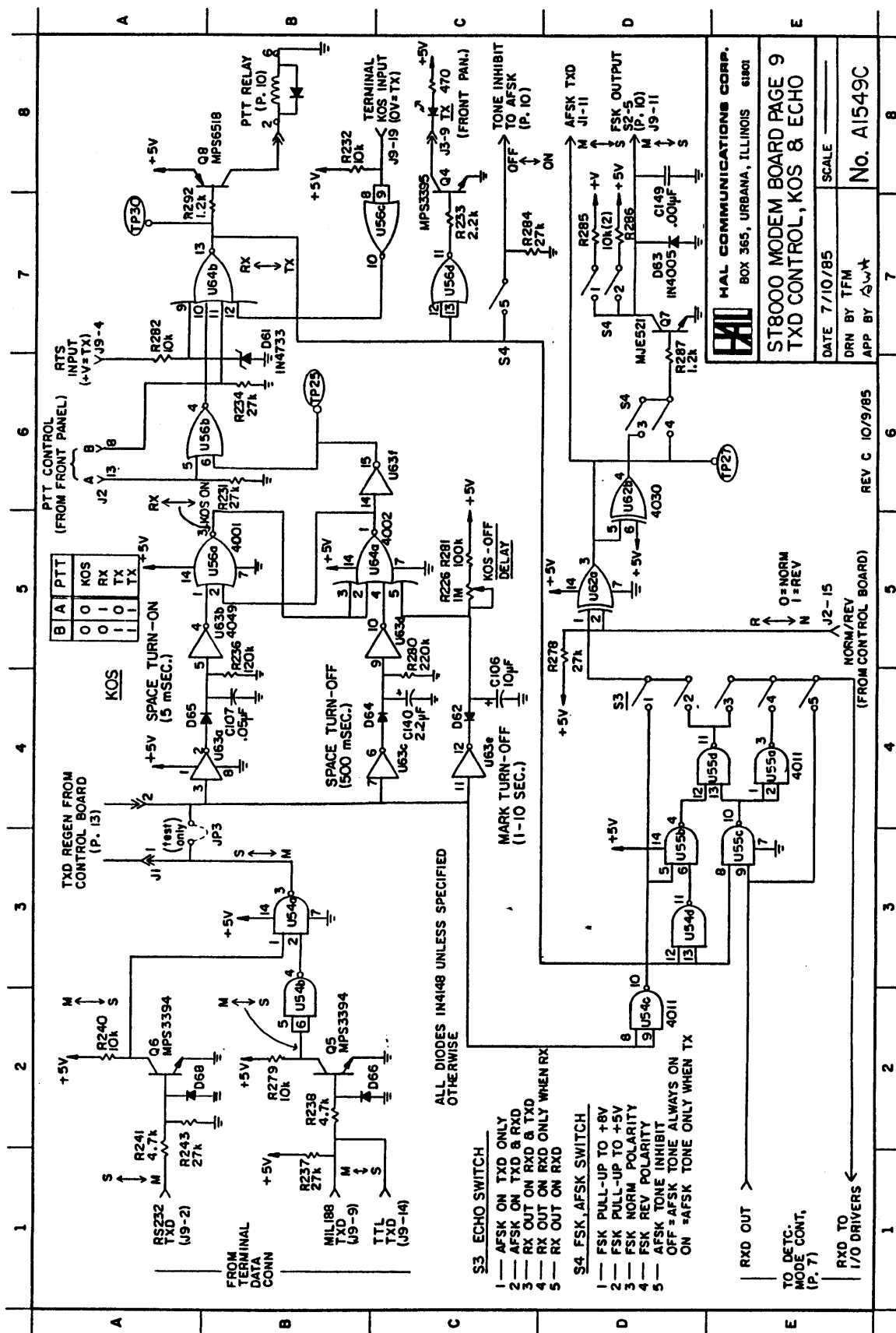






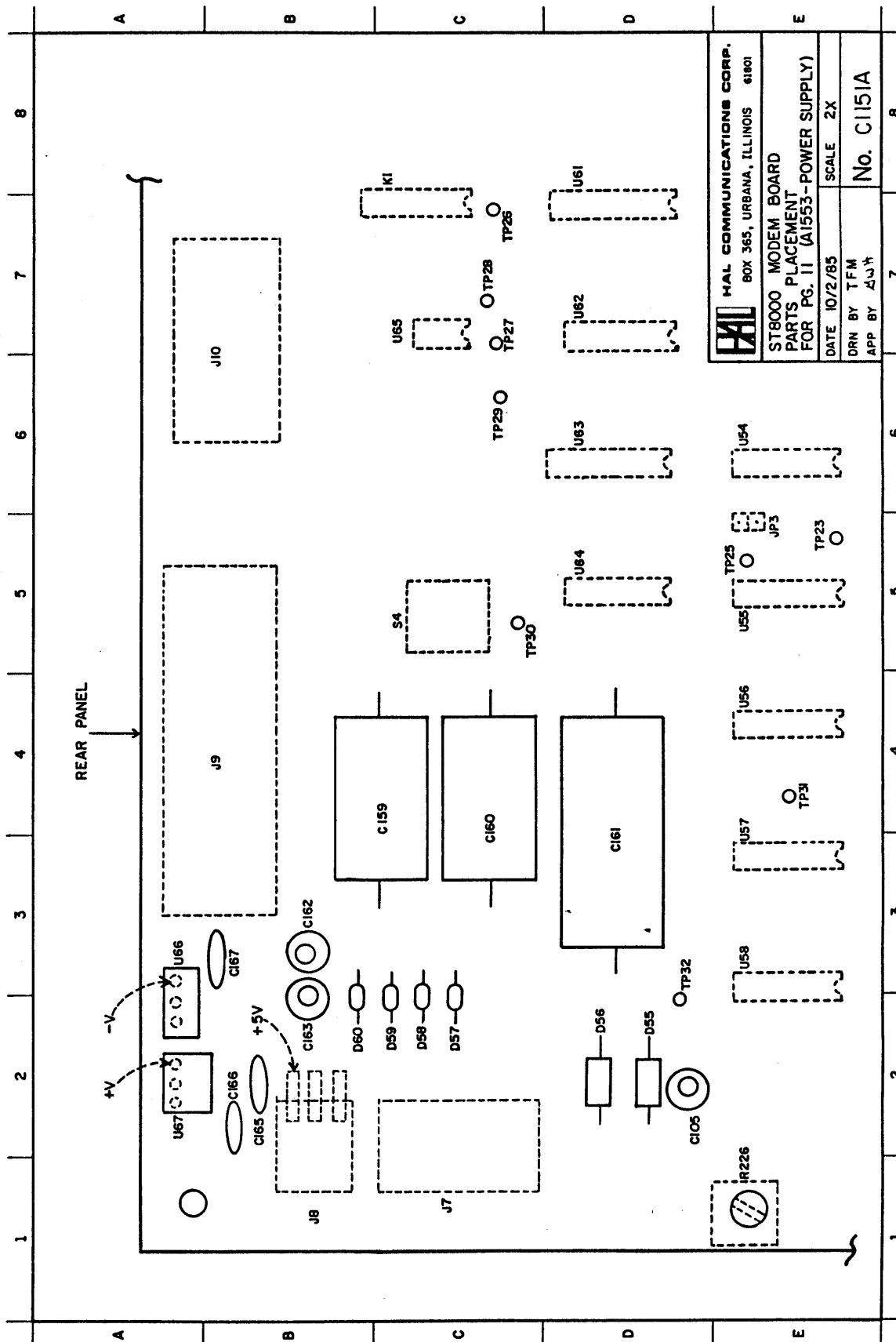


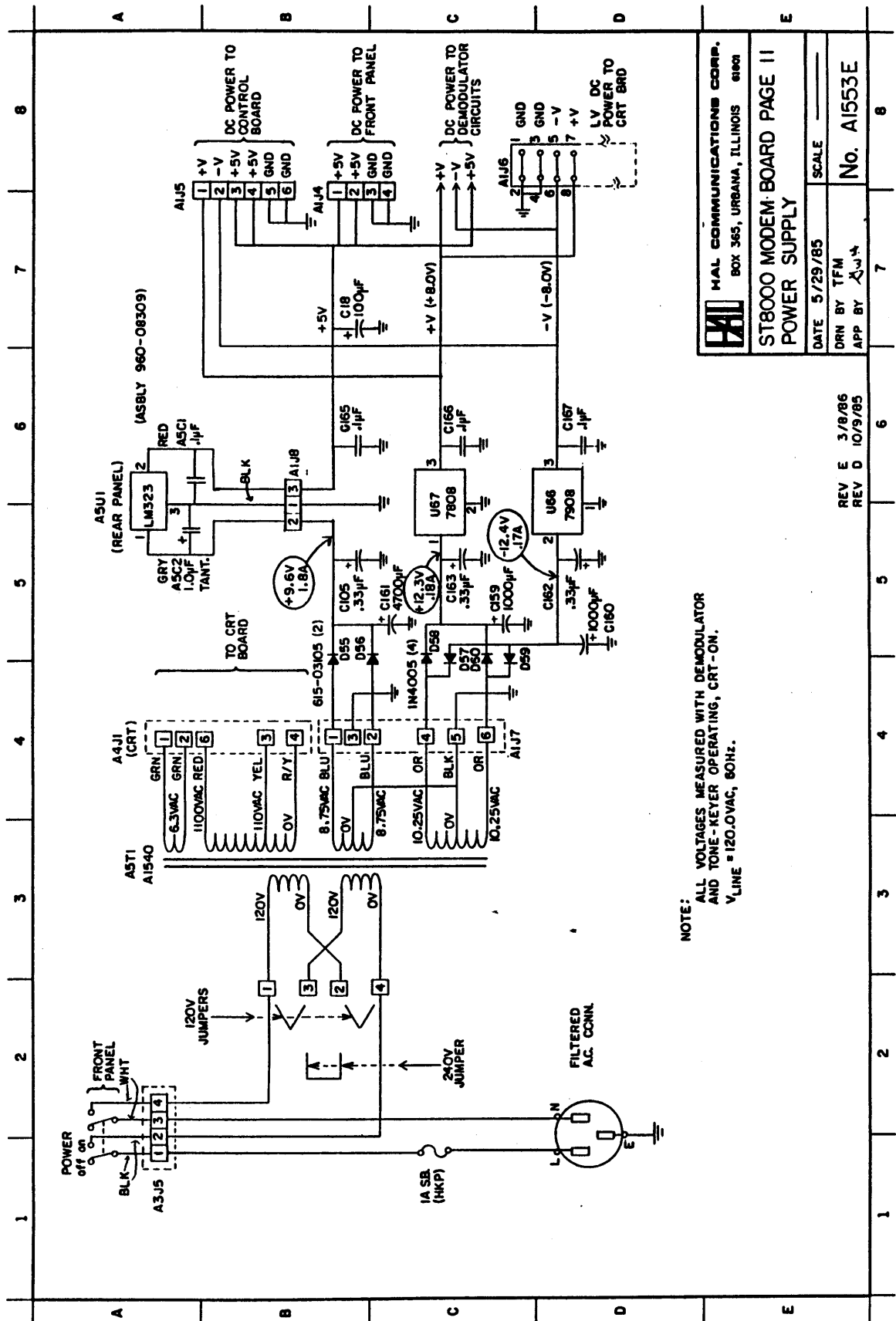






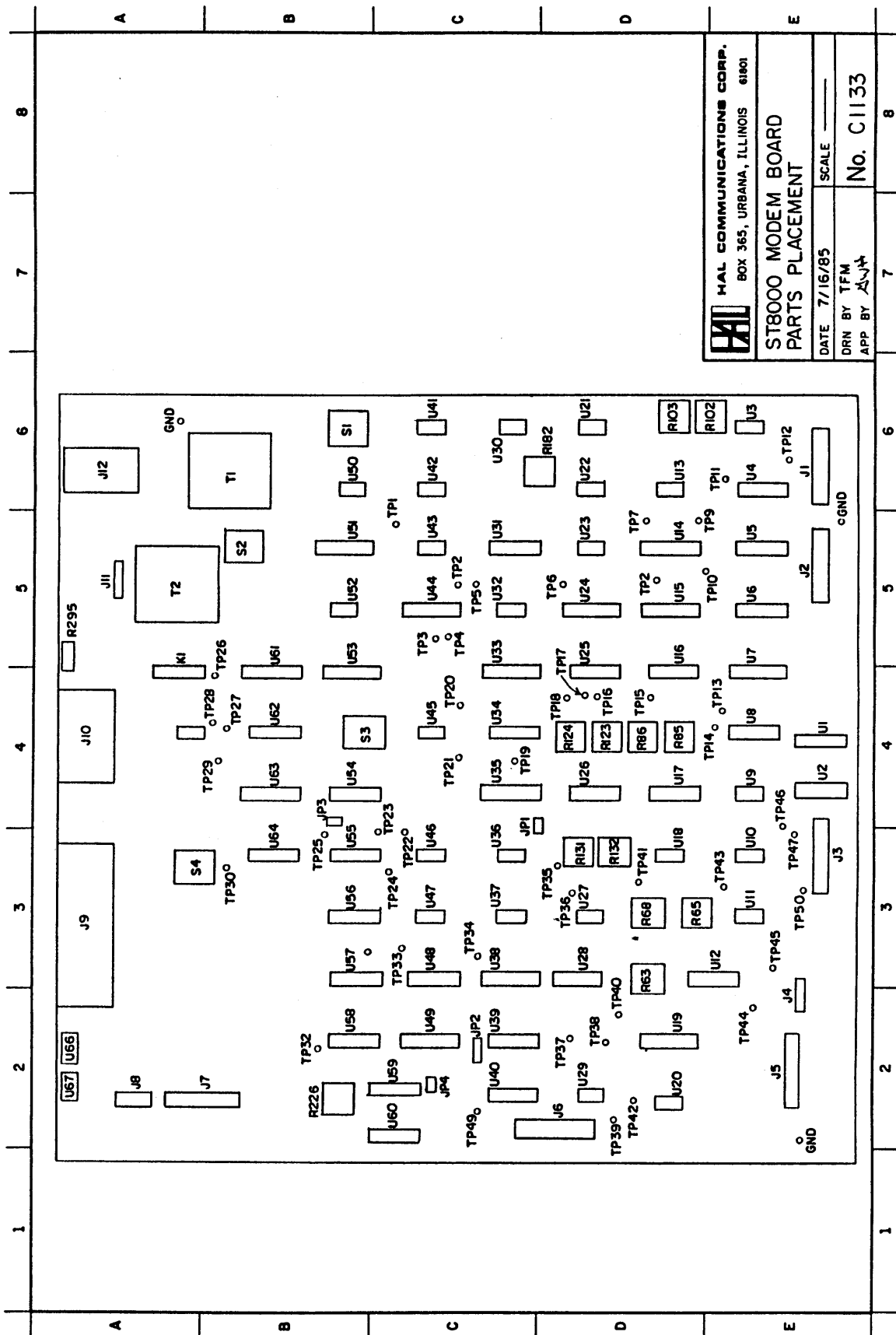




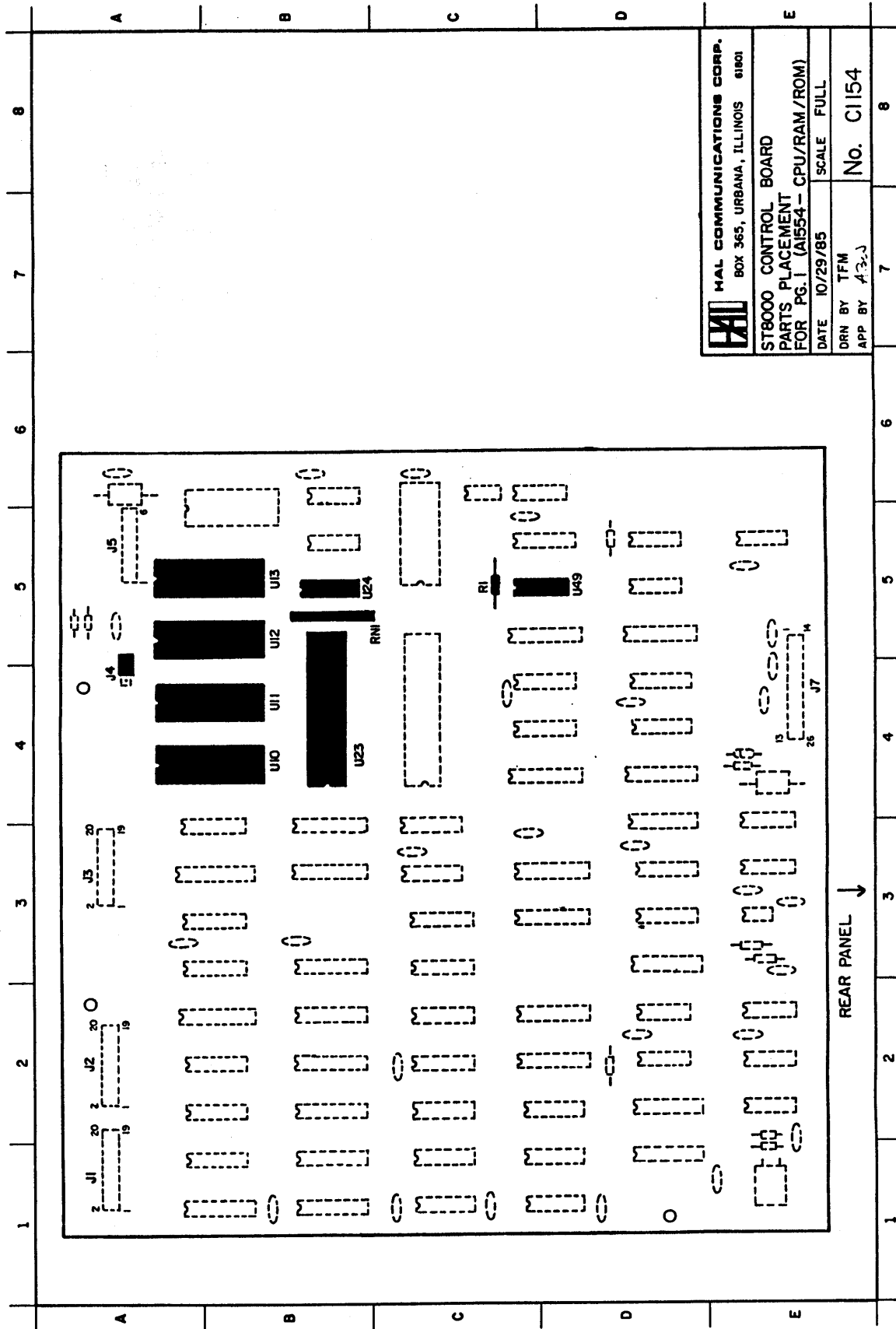


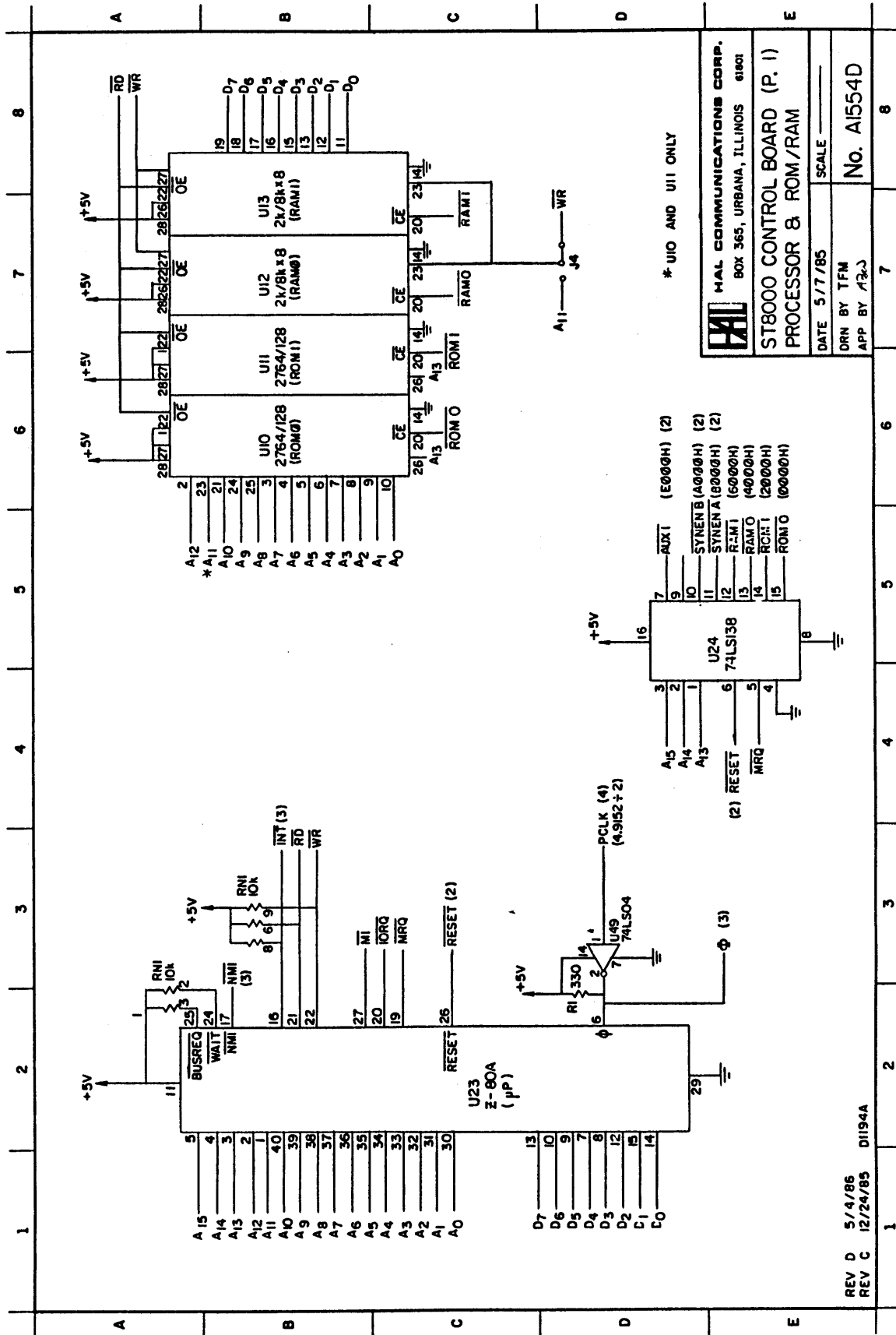
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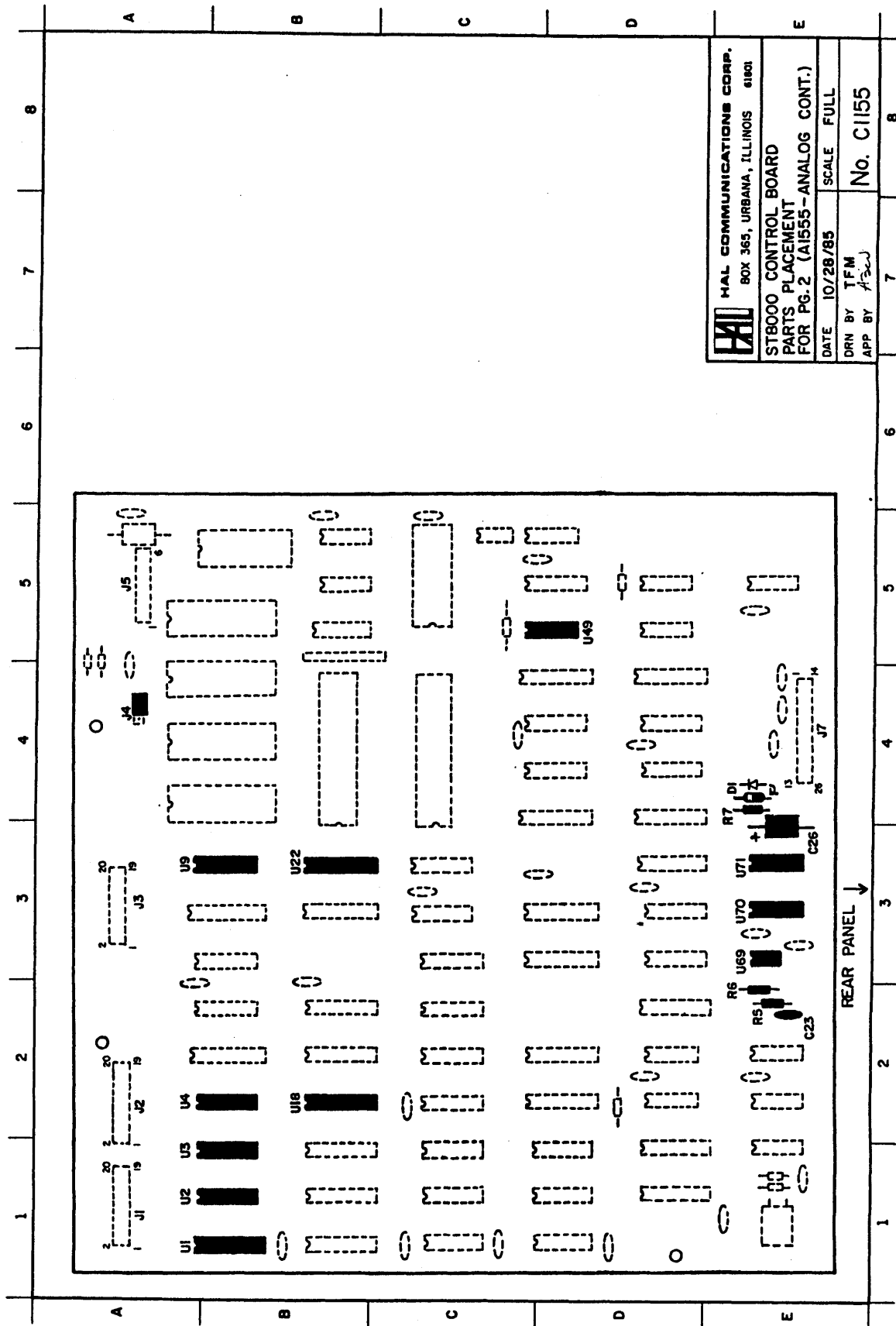
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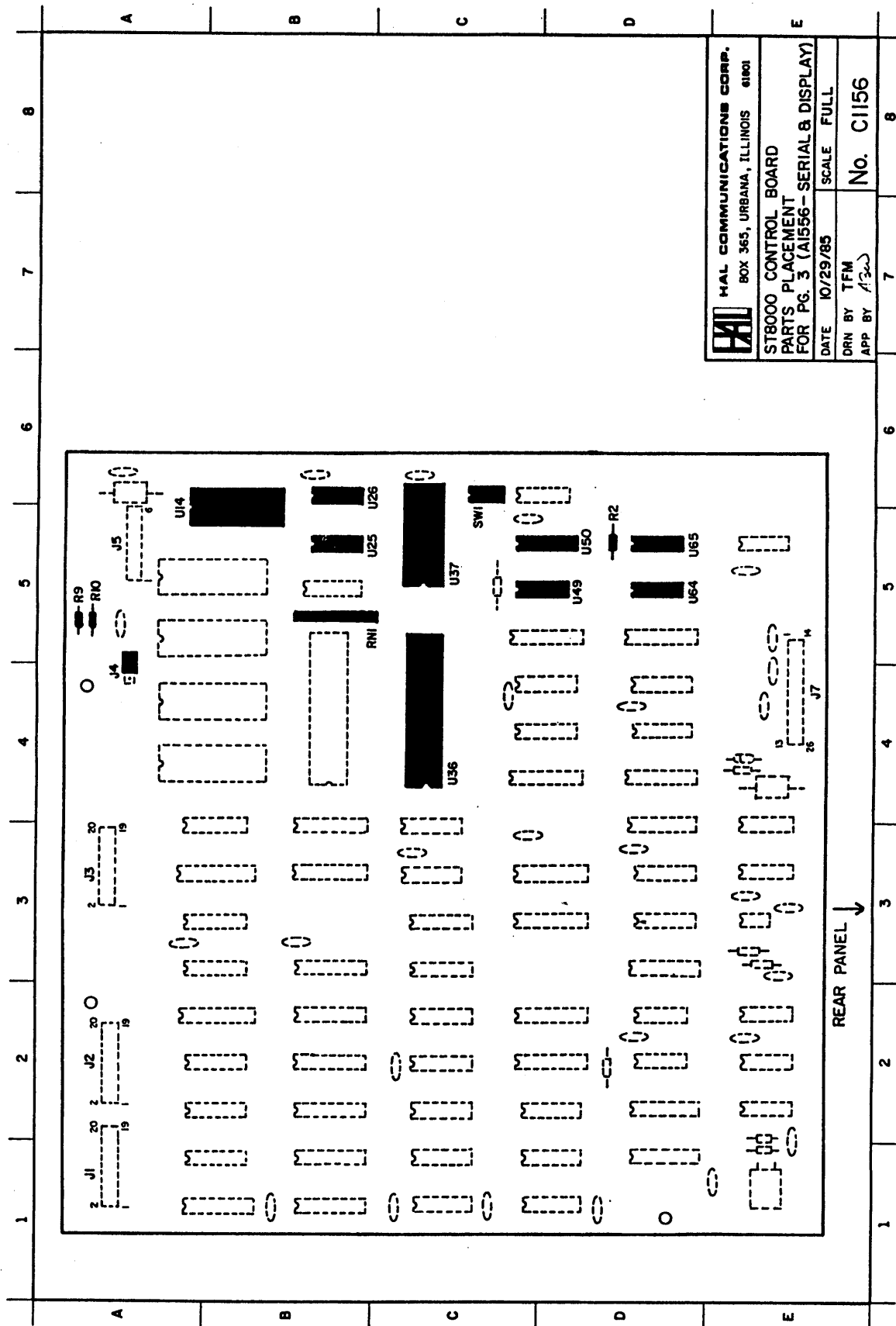


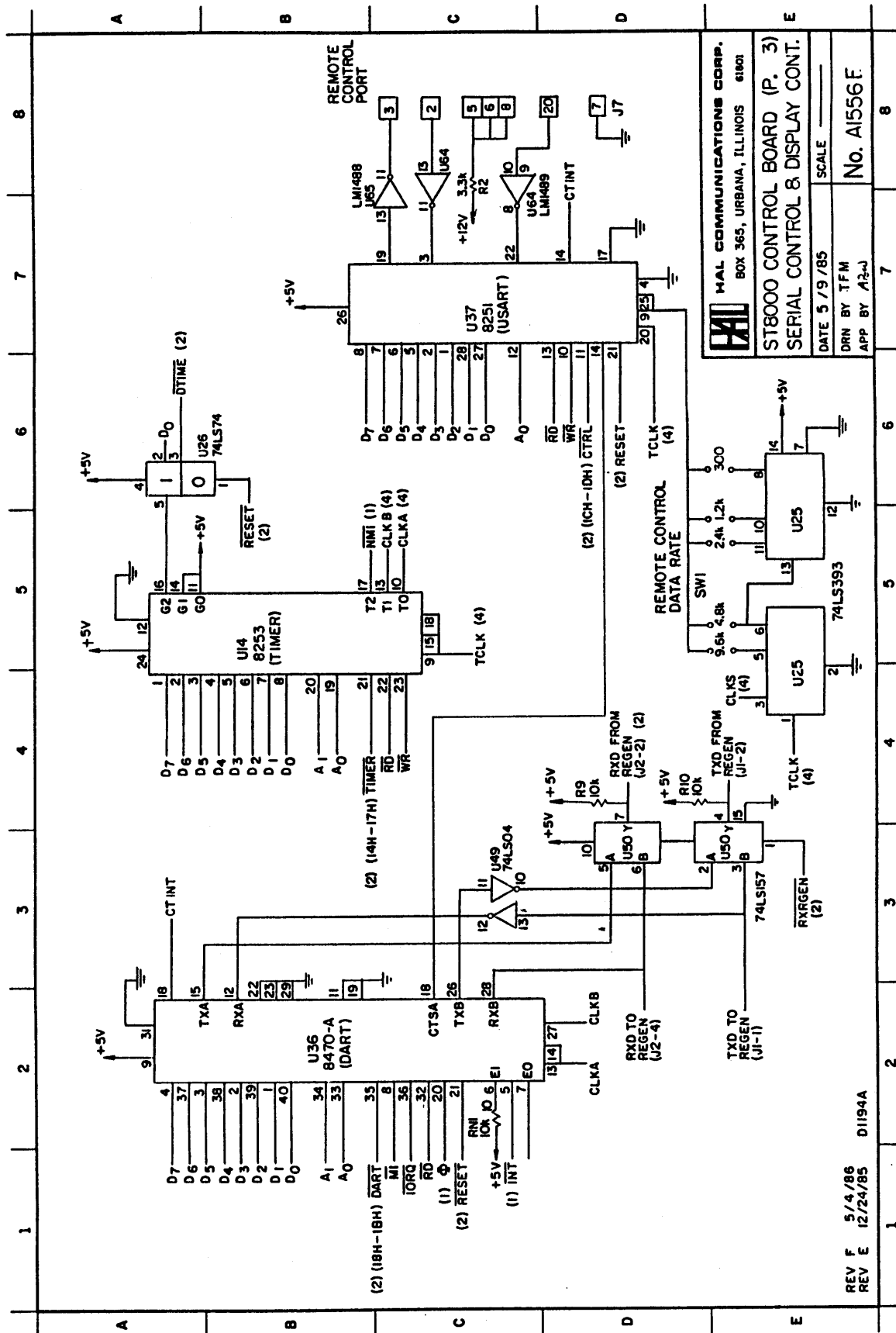


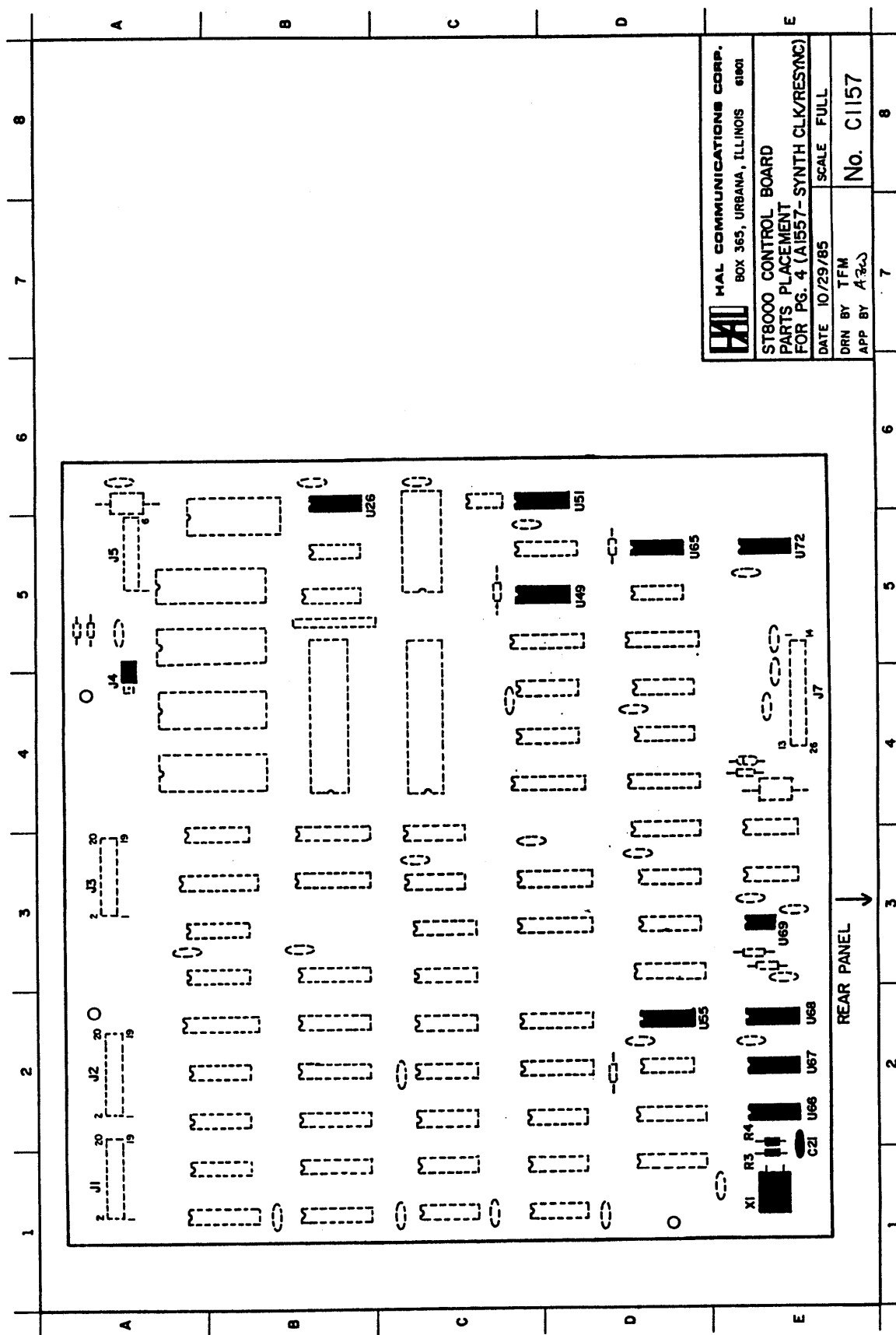


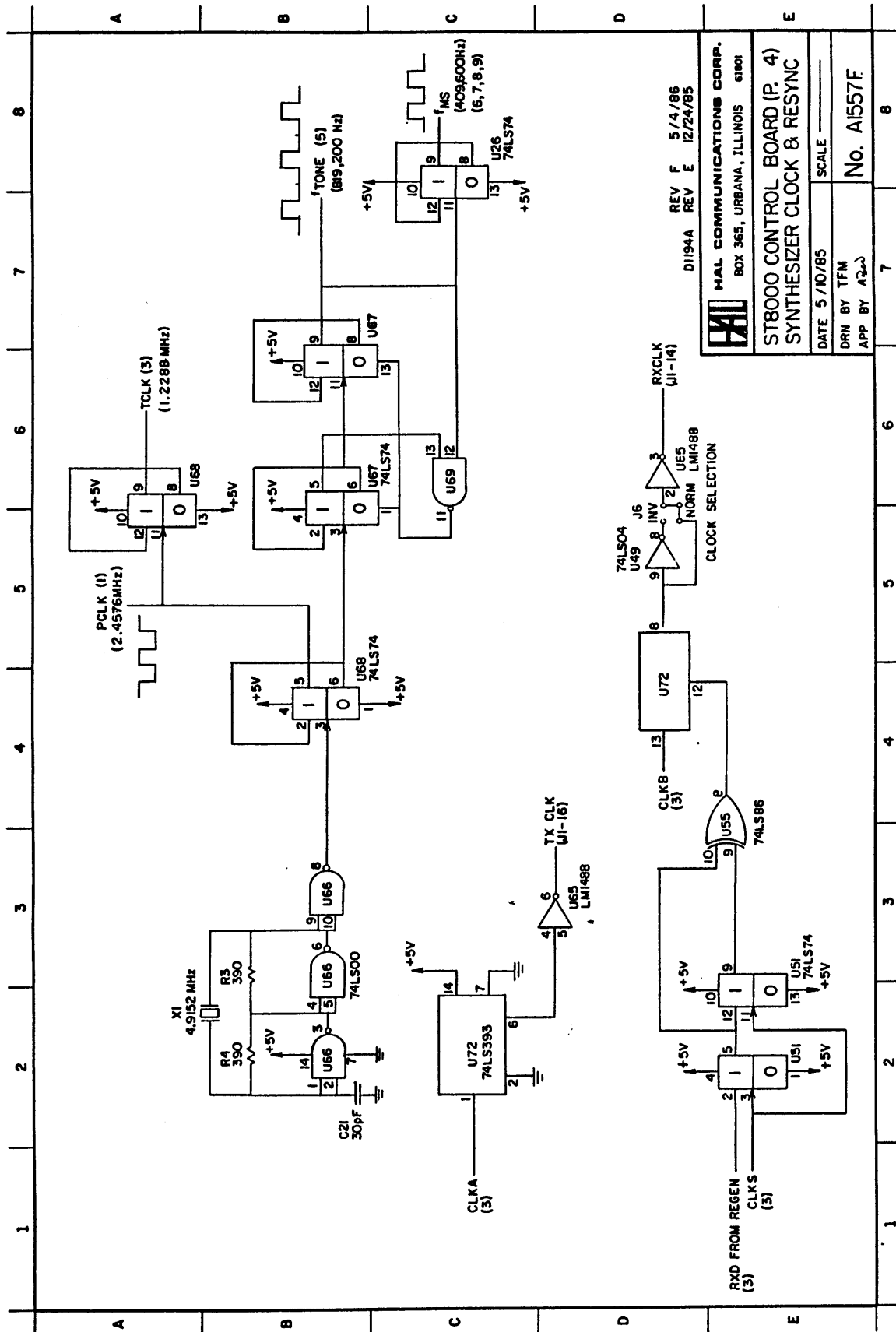




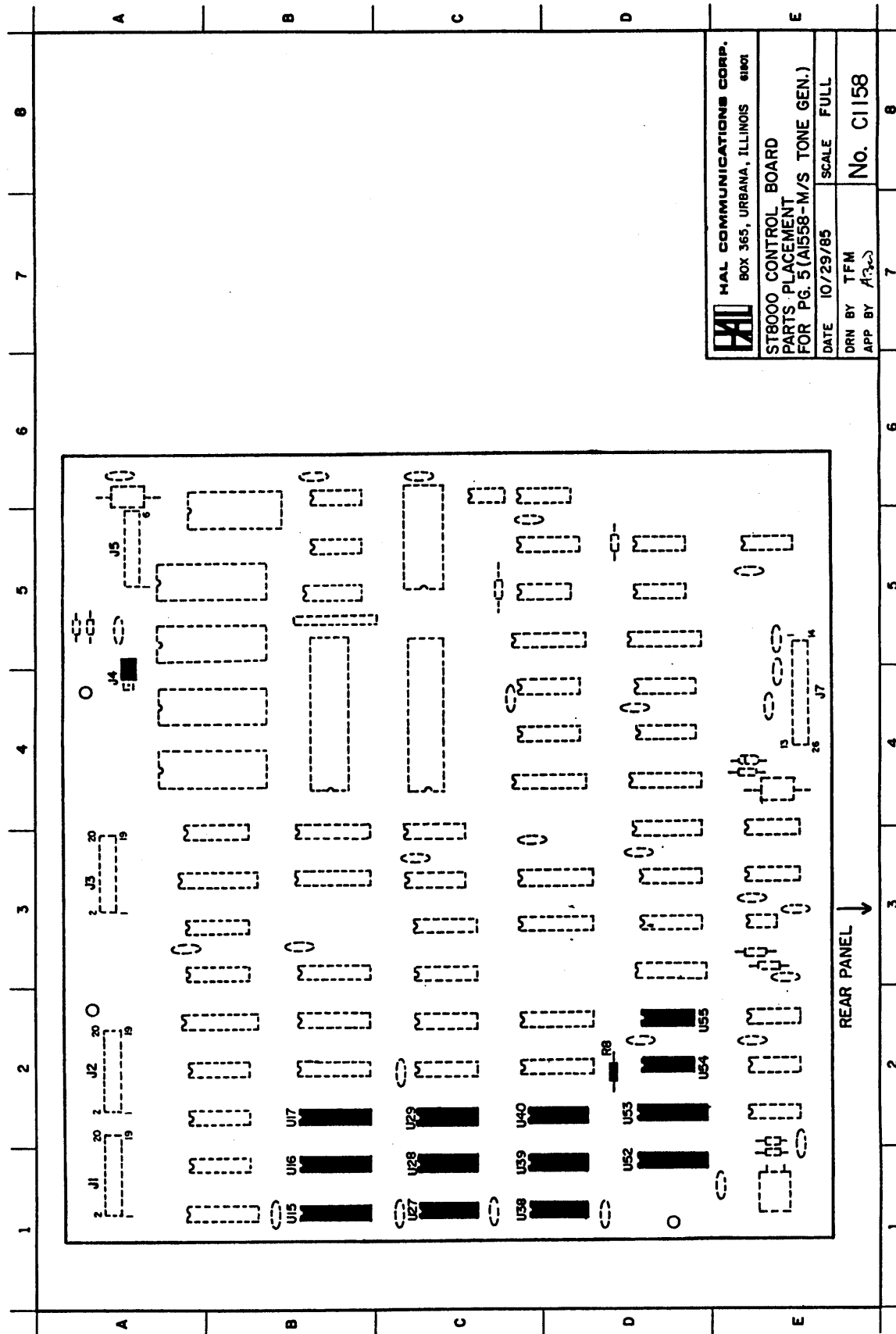


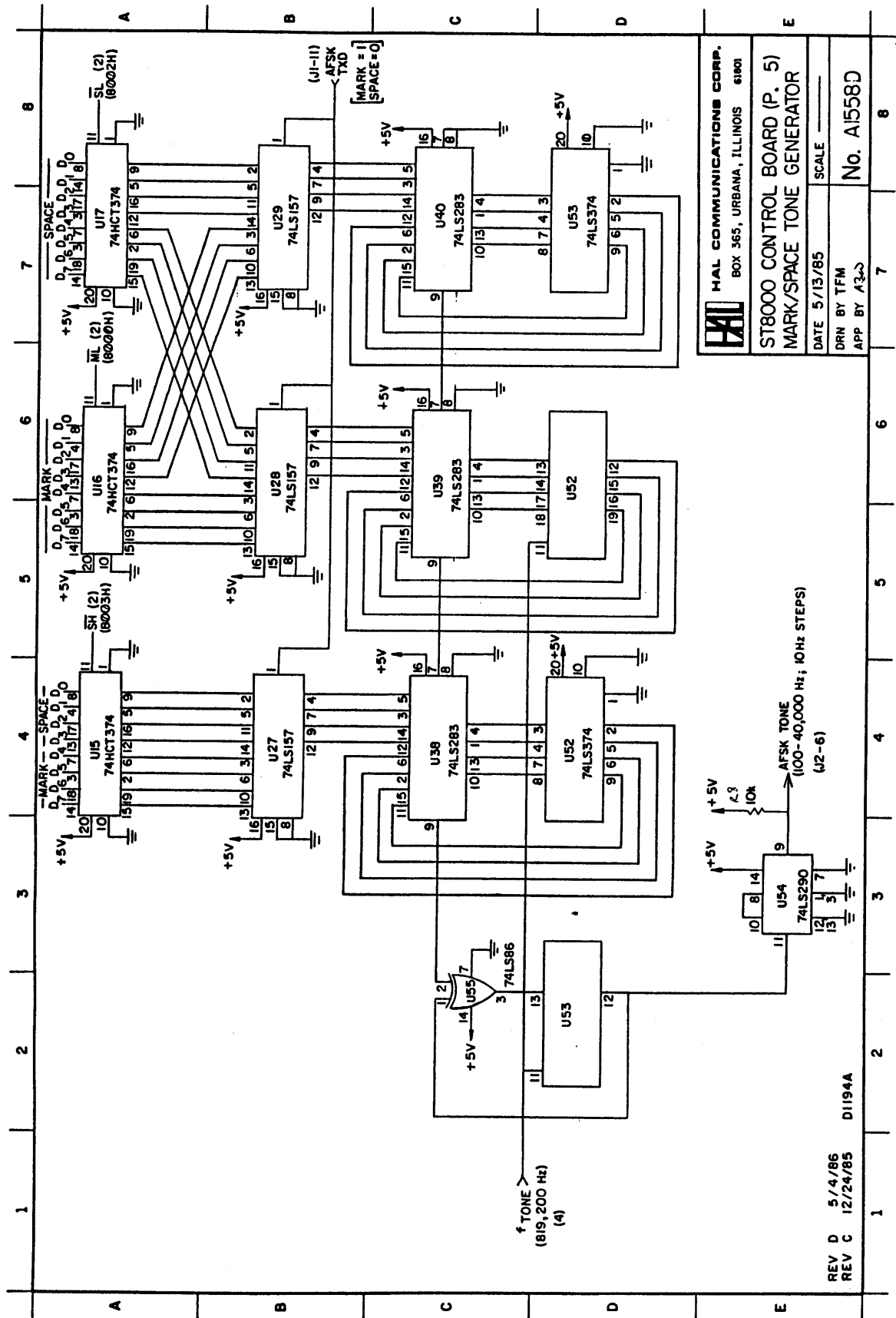


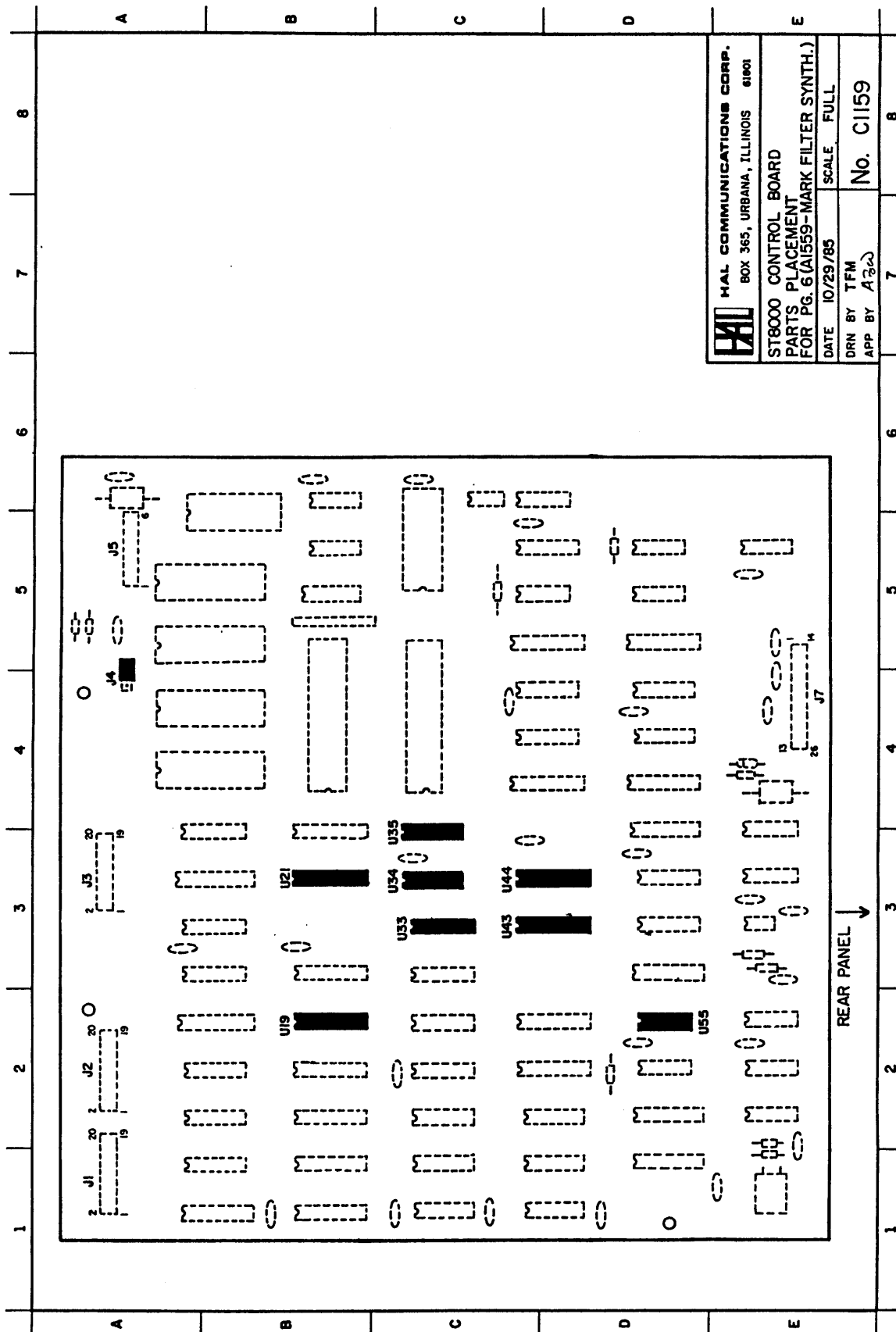


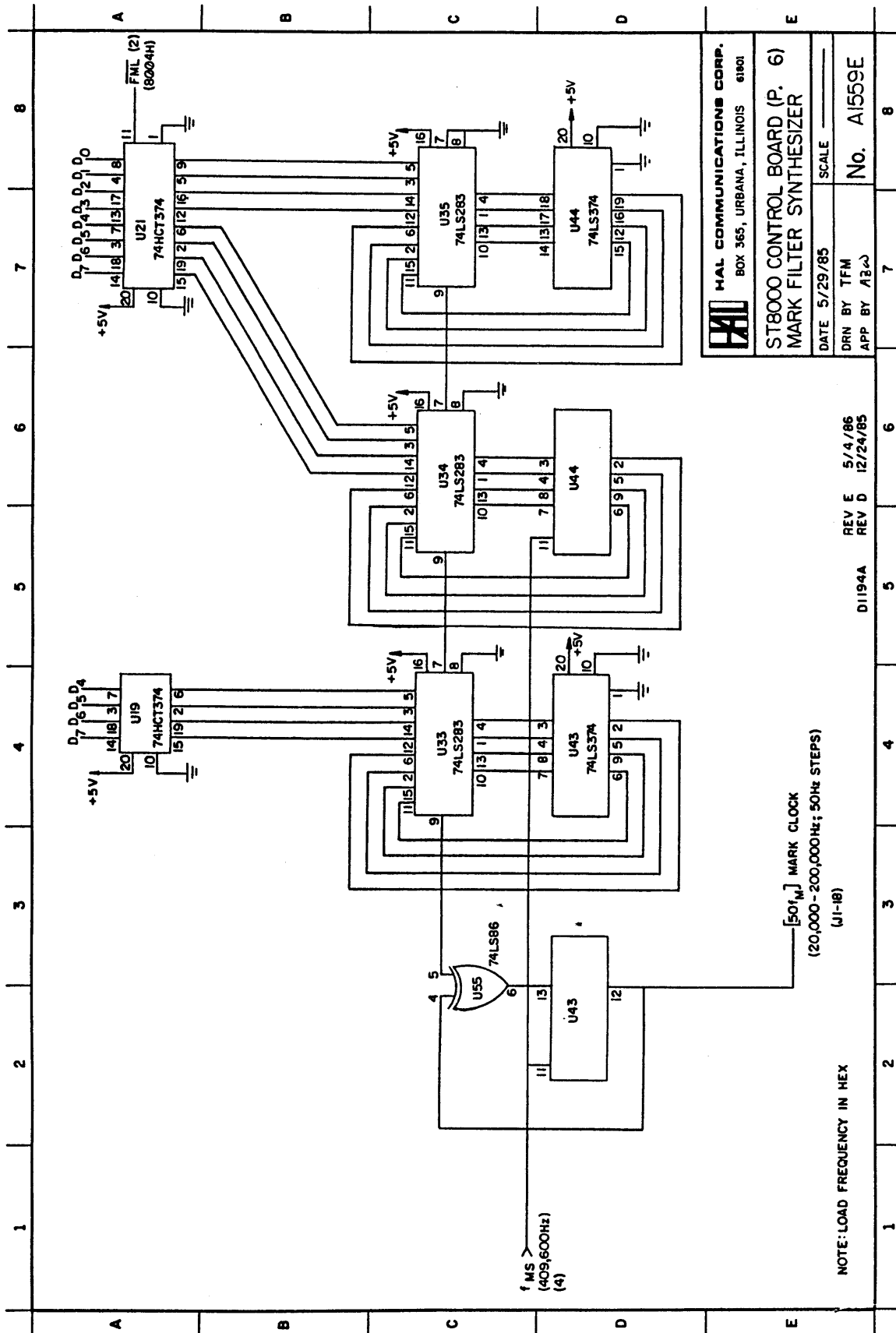


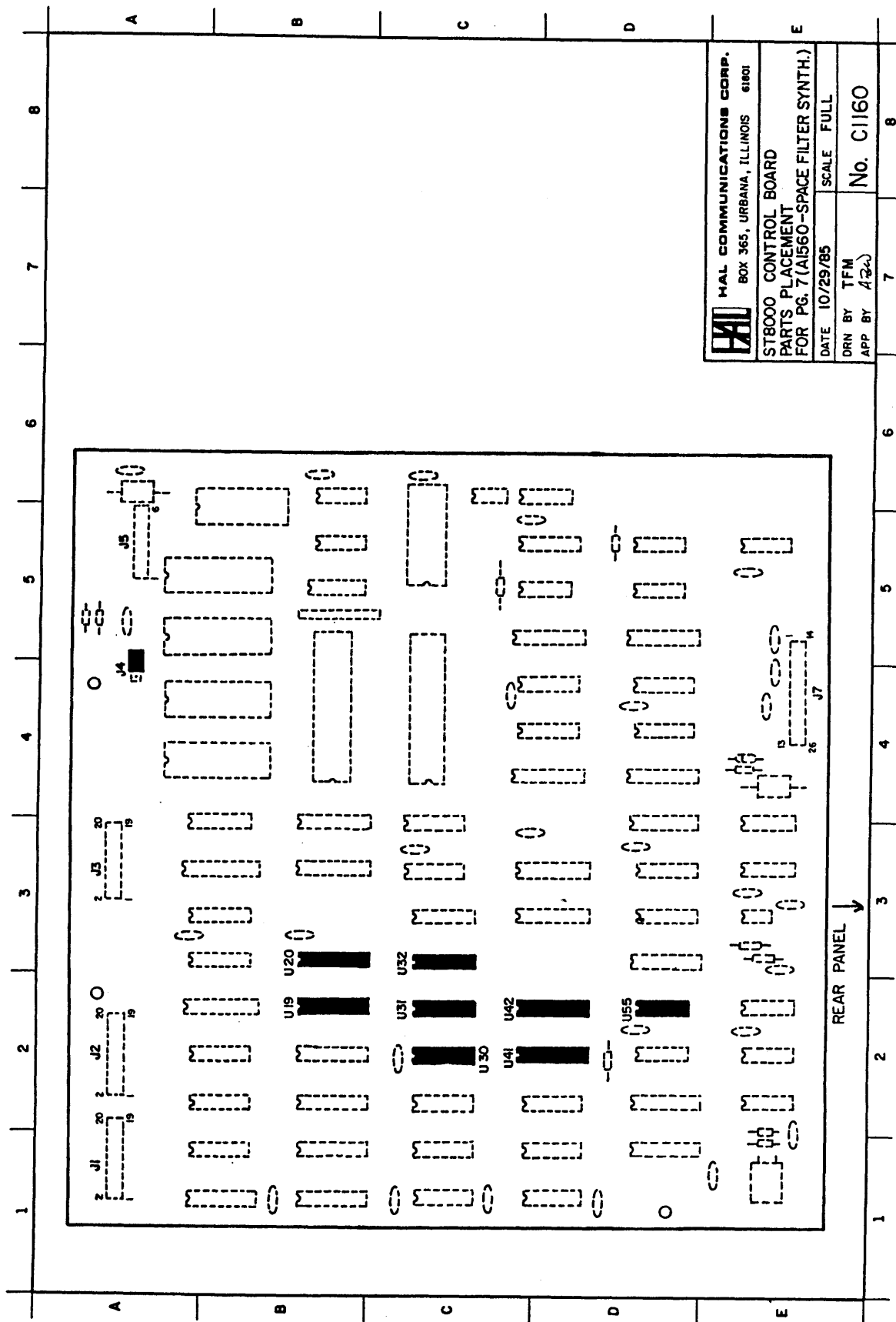
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ST8000 CONTROL BOARD (P. 4) SYNTHESIZER CLOCK & RESYNC	
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APP BY A2	No. A1557E

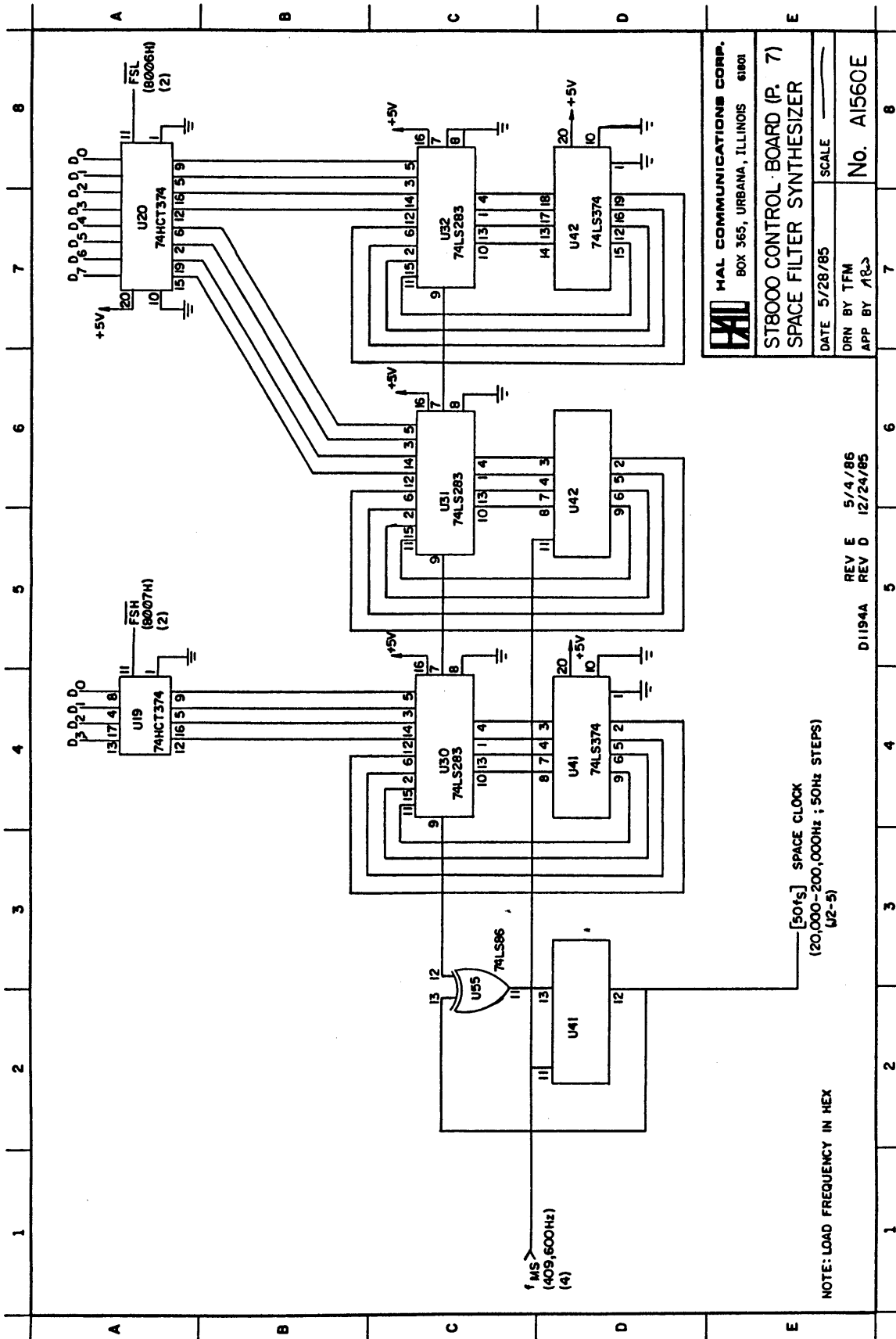


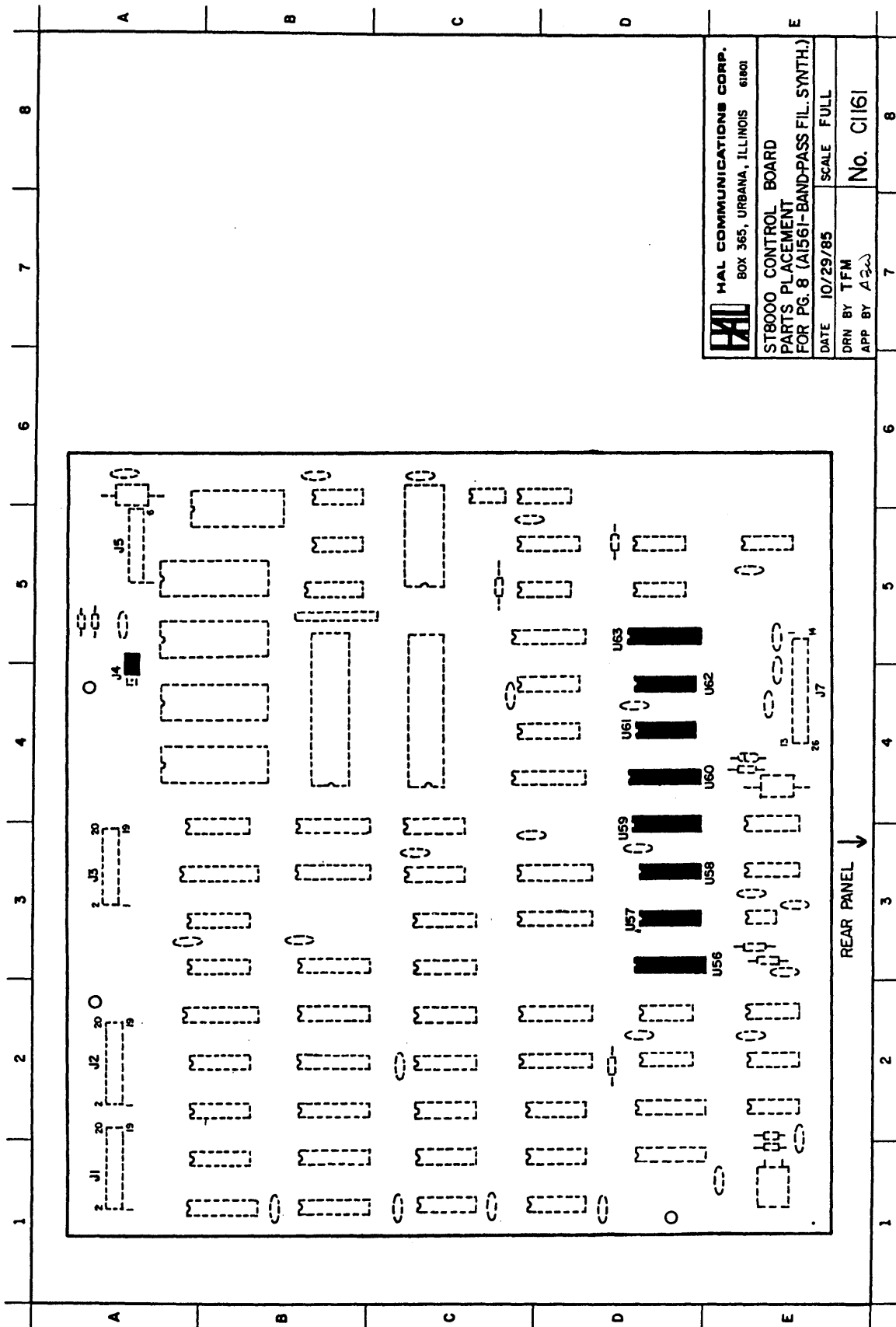


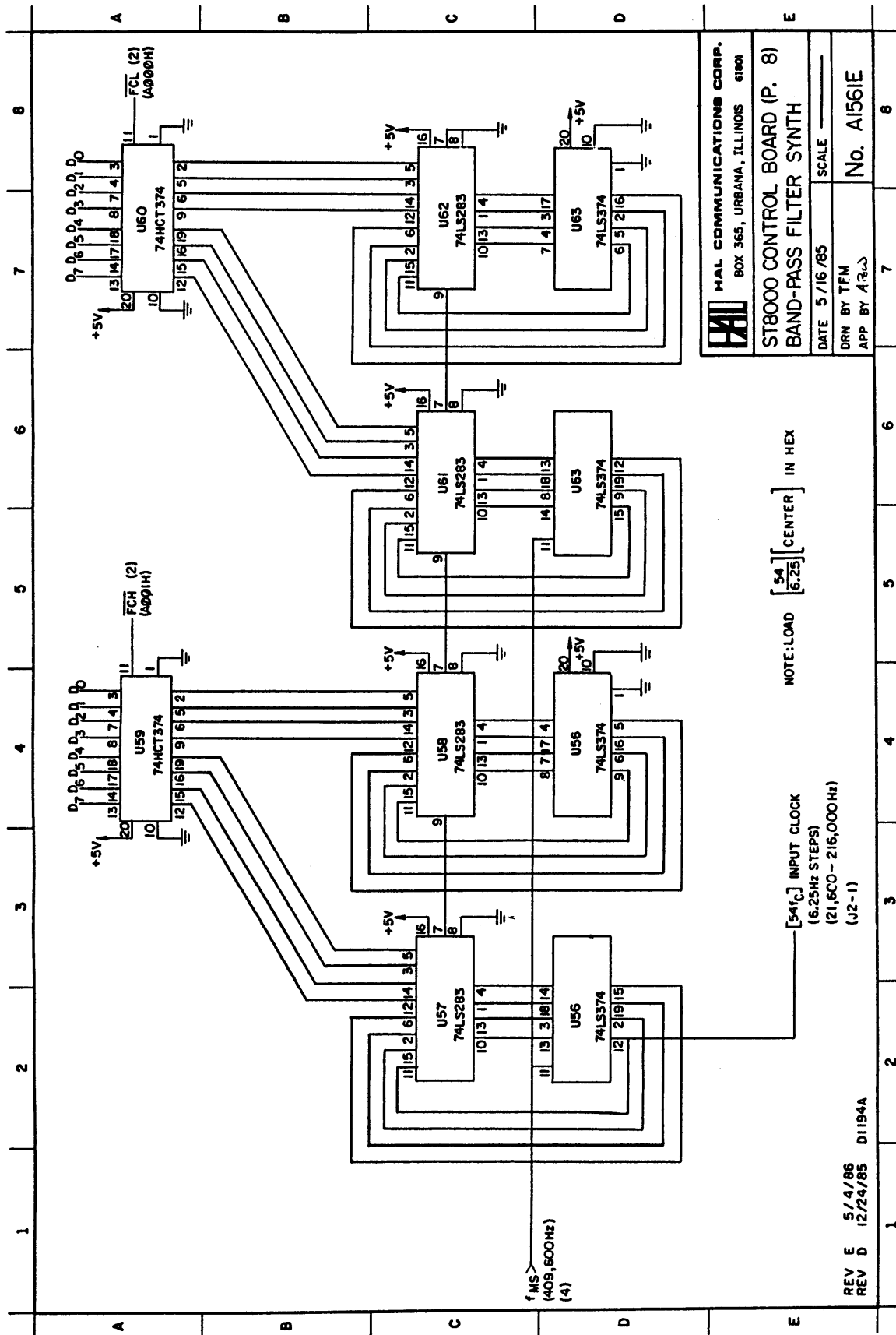










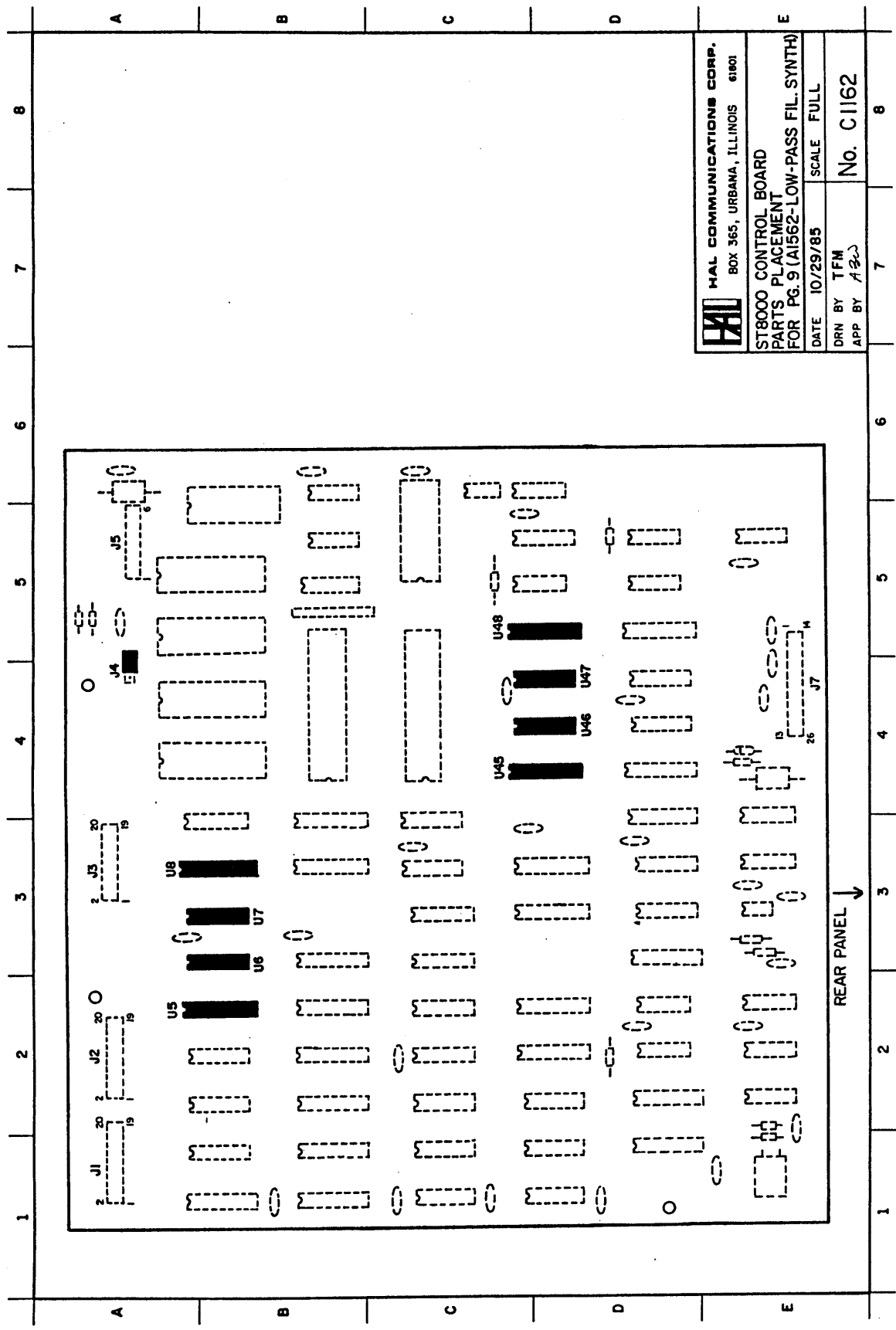


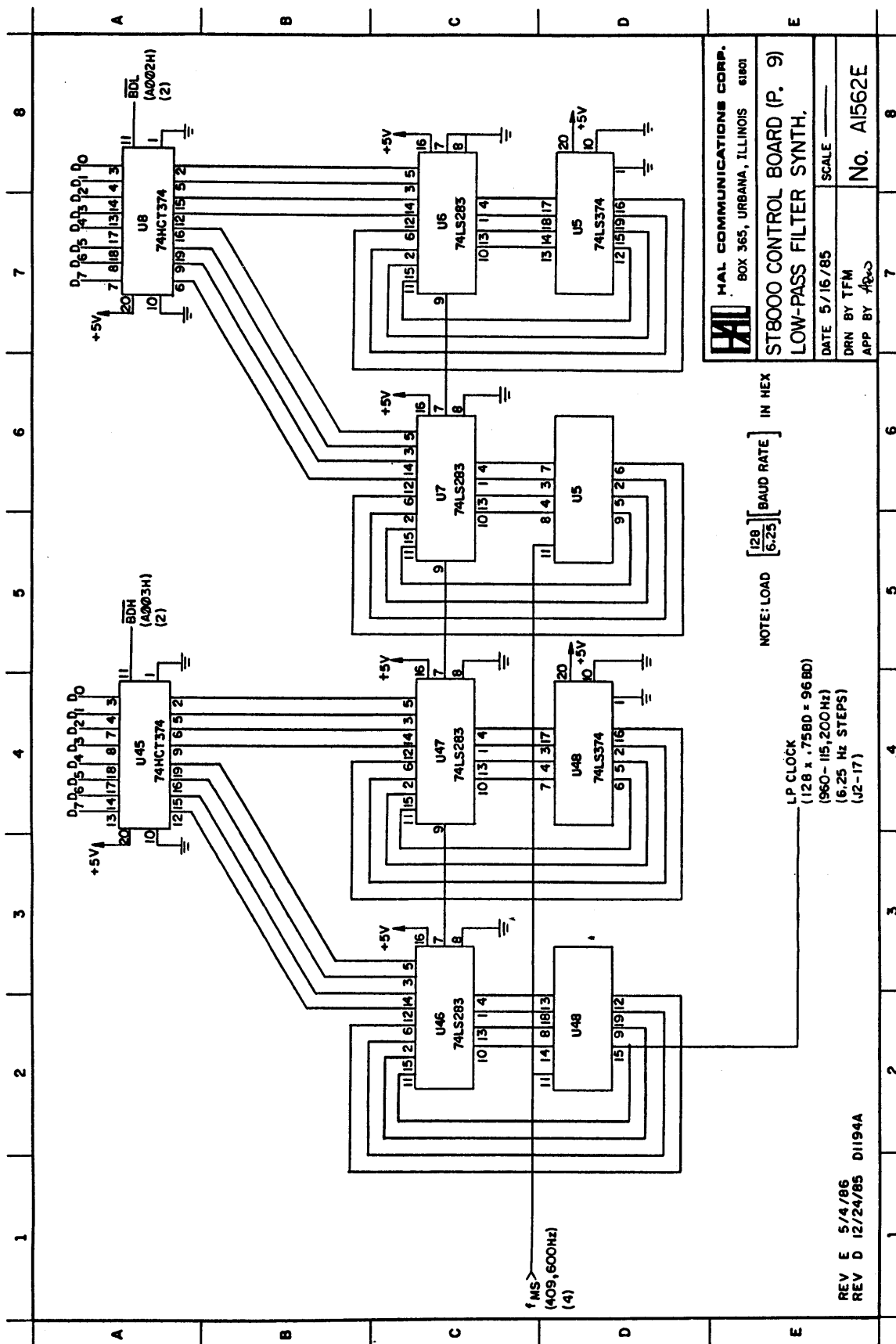
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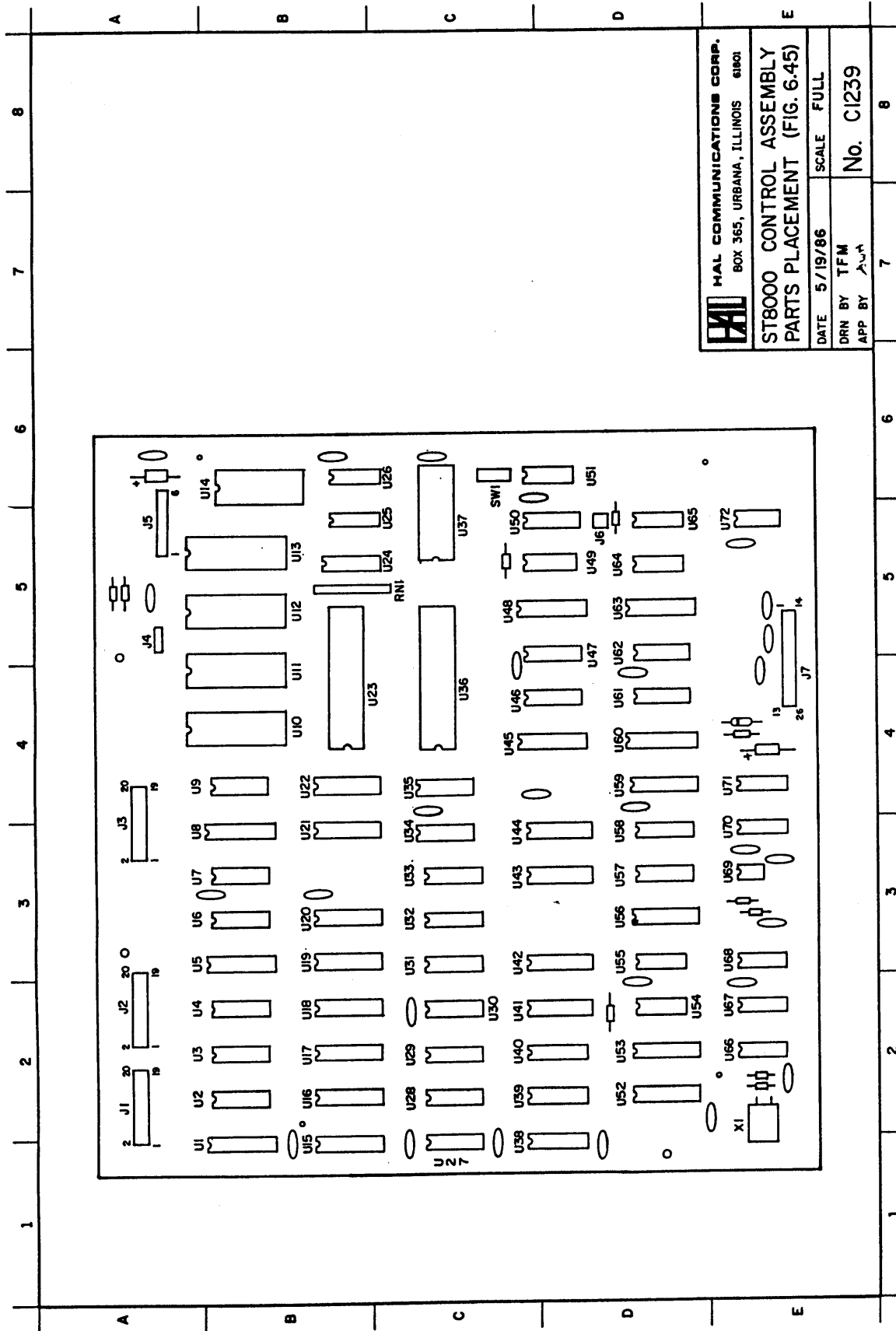
ST8000 CONTROL BOARD (P. 8)
BAND-PASS FILTER SYNTH

DATE 5/16/85 SCALE _____
DRN BY TFM
APP BY ARJ

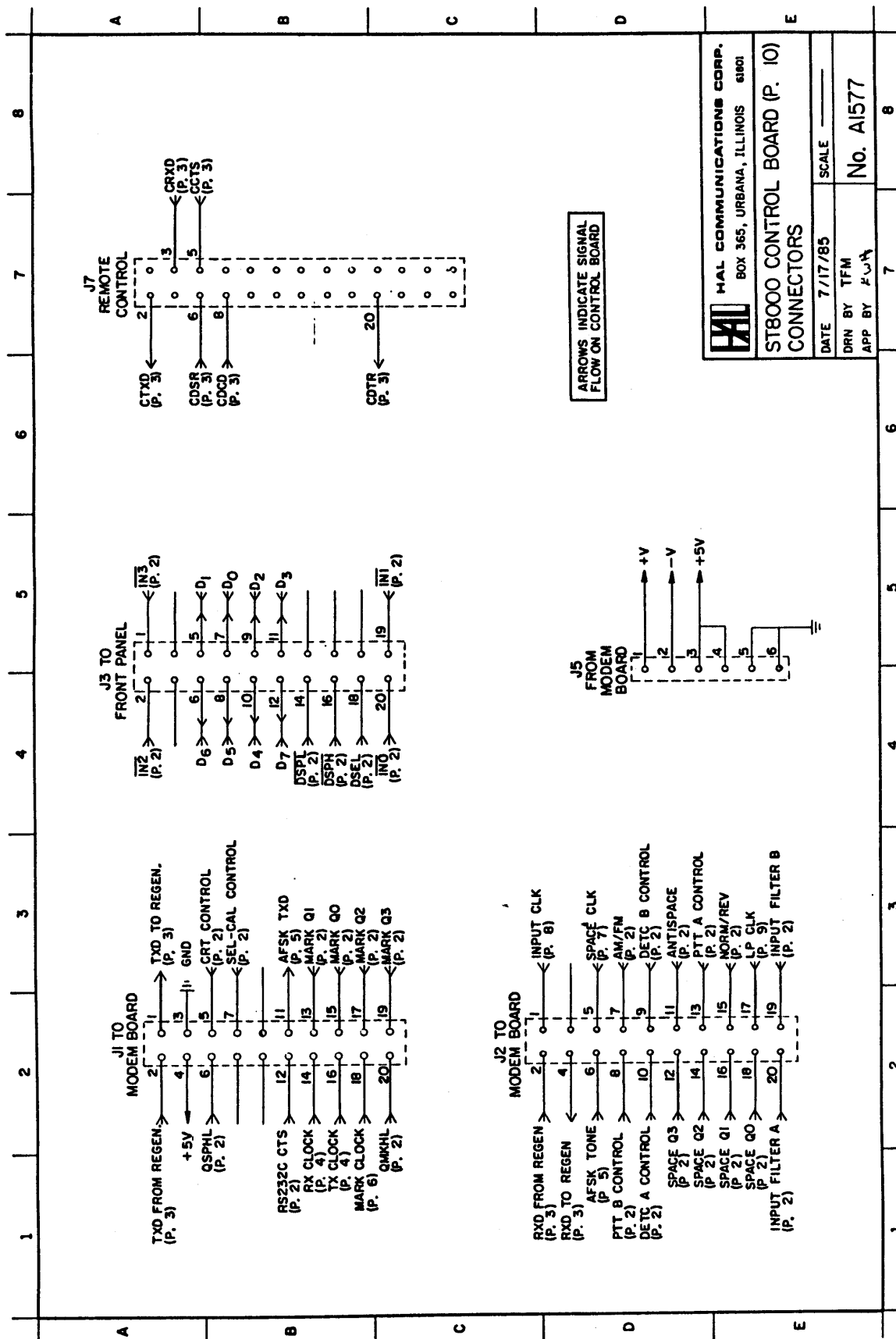
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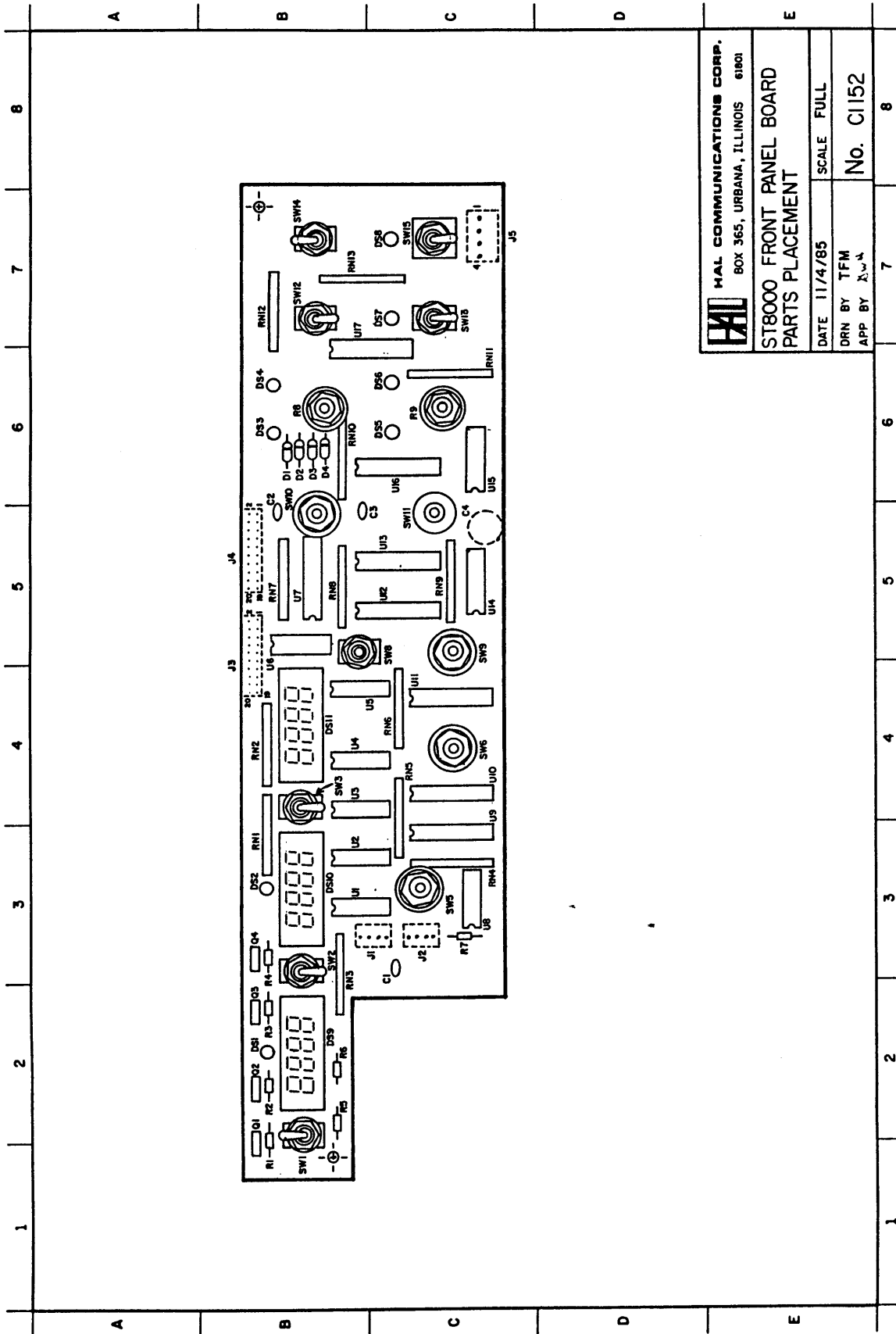


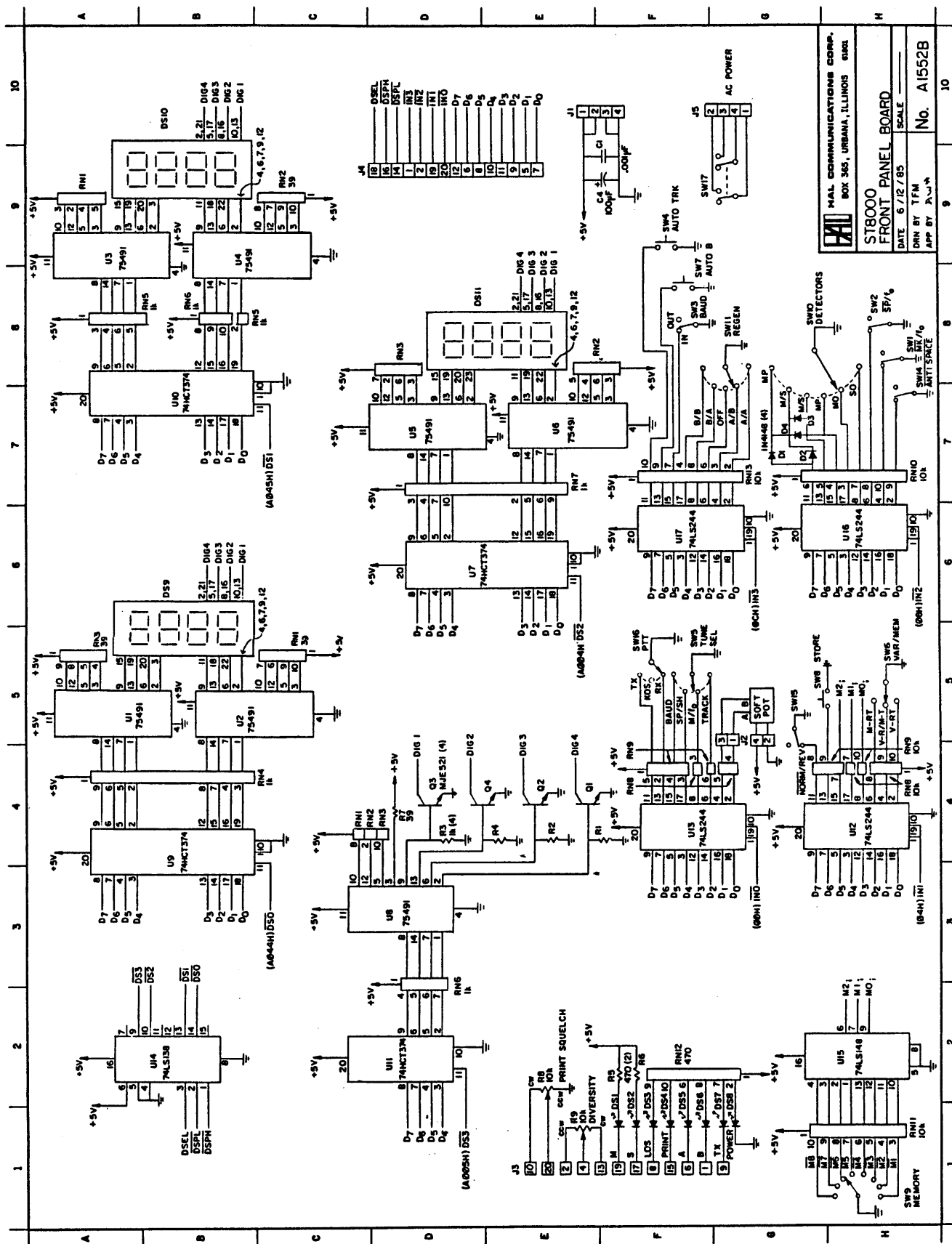


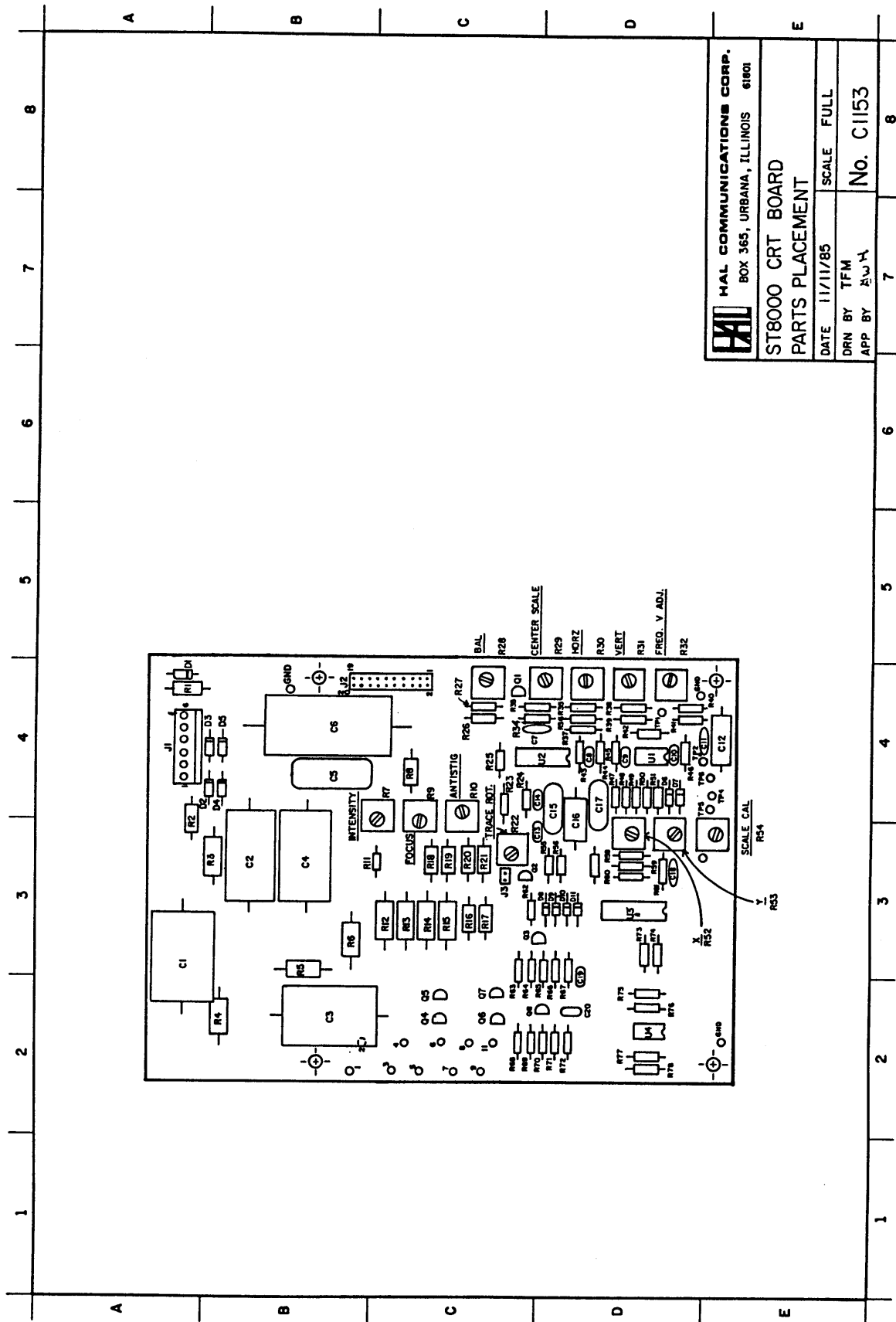


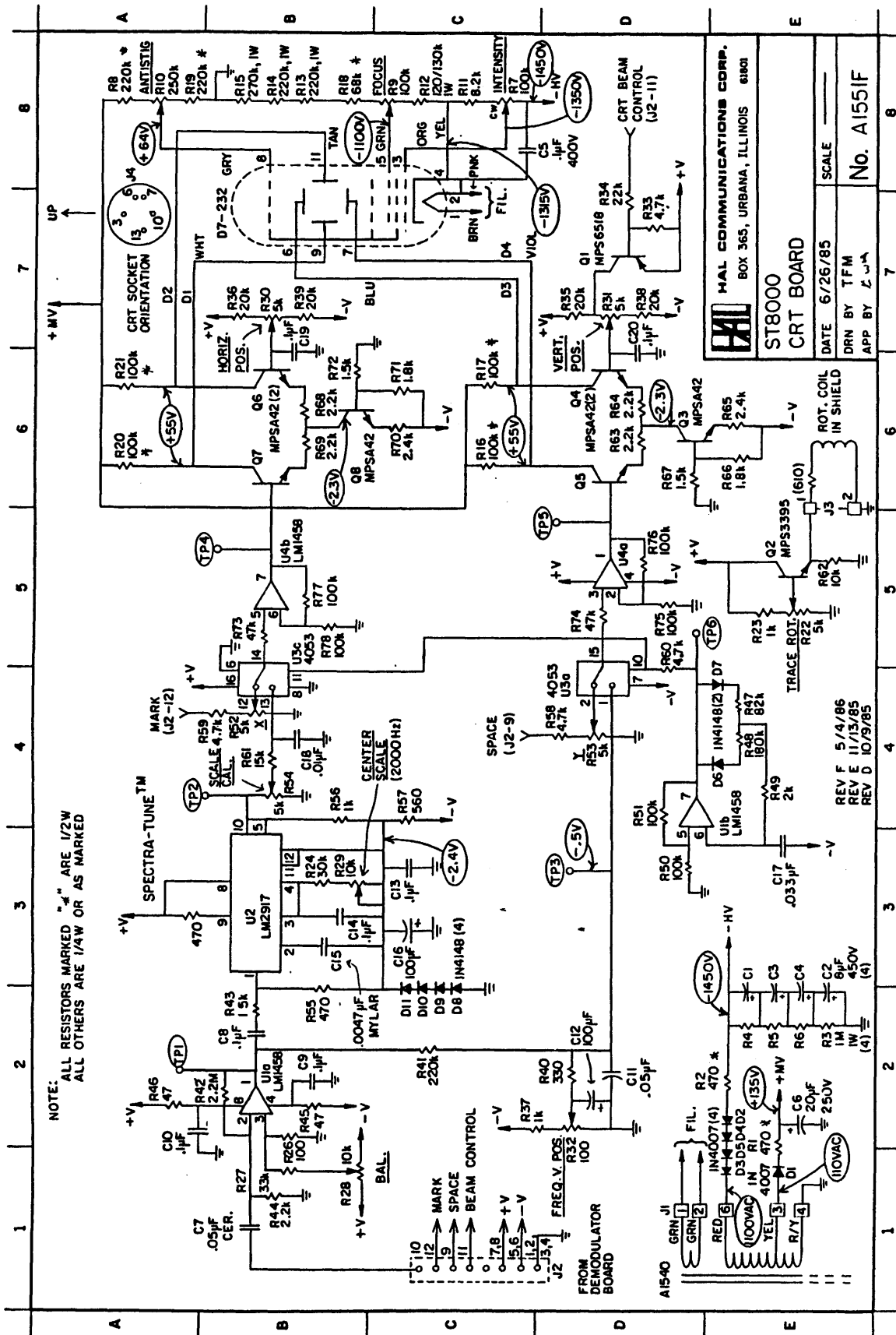
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ST8000 CONTROL ASSEMBLY PARTS PLACEMENT (FIG. 6.45)	
DATE 5/19/86	SCALE FULL
DRN BY TFM	No. C1239
APP BY AUA	

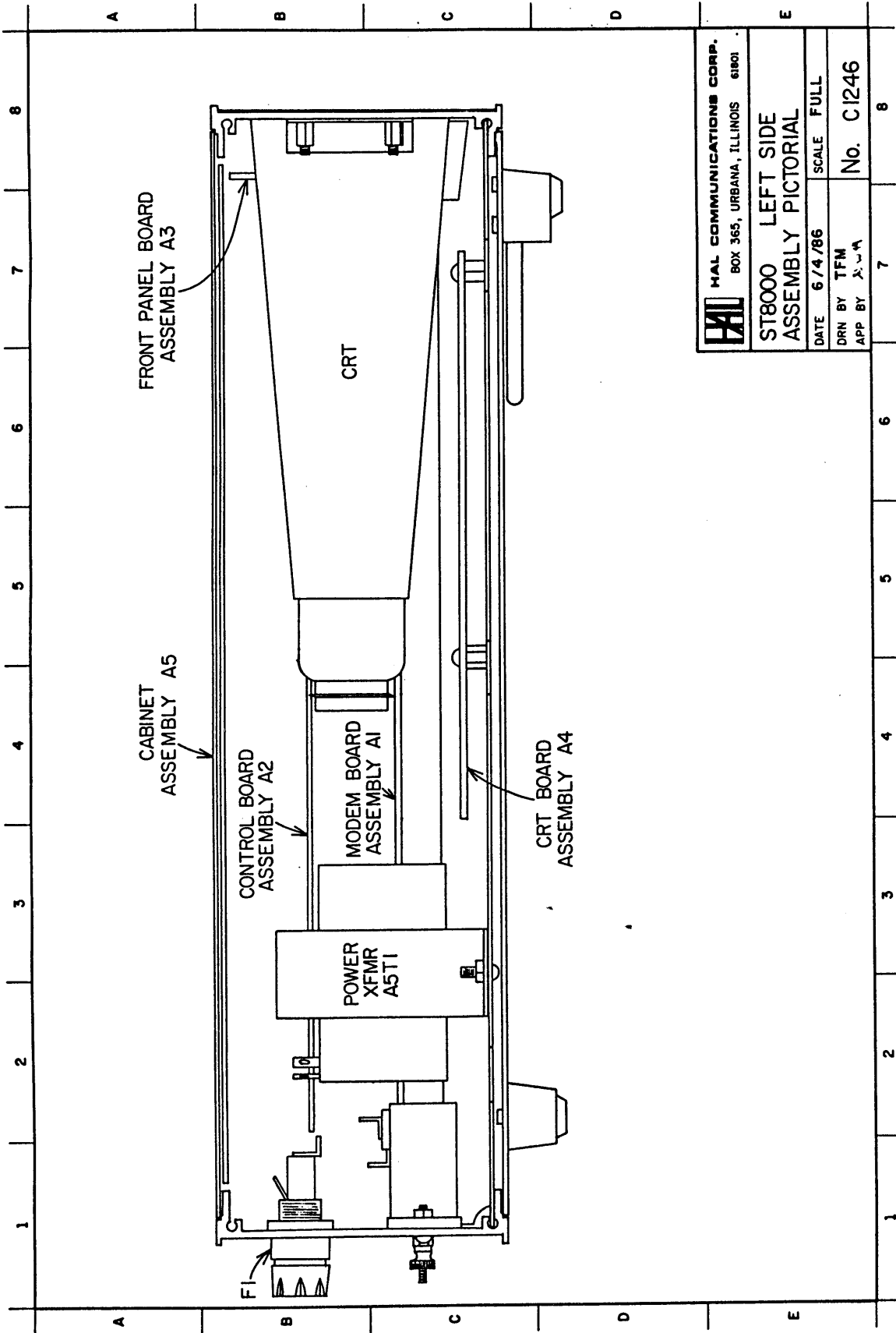










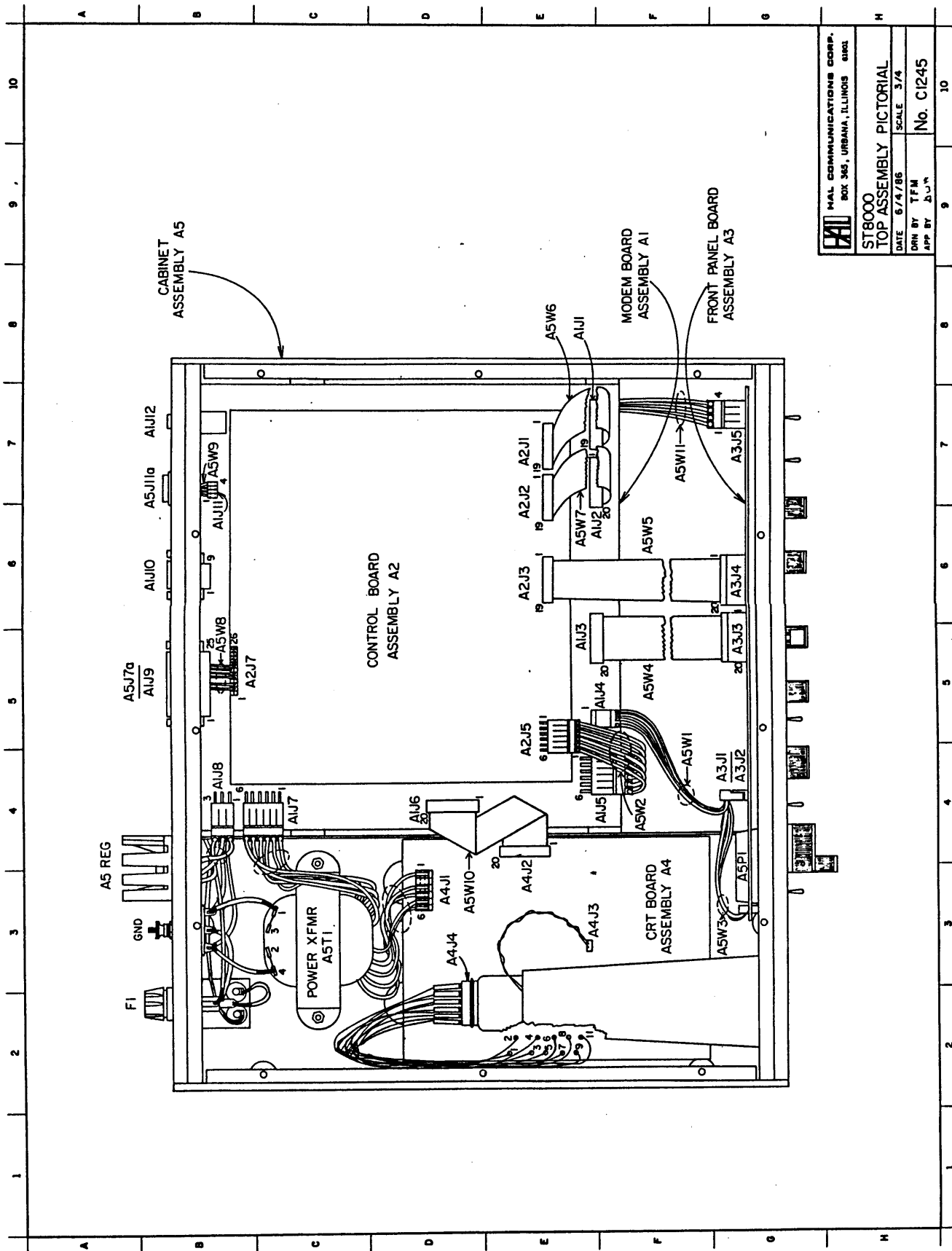


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**ST8000 LEFT SIDE
 ASSEMBLY PICTORIAL**

DATE 6/4/86 SCALE FULL

DRN BY TFM
 APP BY J. J. M. No. C1246



ST8000 TOP ASSEMBLY PICTORIAL		DATE 6/4/86 SCALE 3/4"	
DRN BY TFM APP BY DJM		No. C1245	

