

IBM 5110 System Logic Manual

SY31-0552-3

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Fourth Edition (February 1979)

This is a reprint of SY31-0552-2 incorporating changes released in technical newsletter SN31-6241.

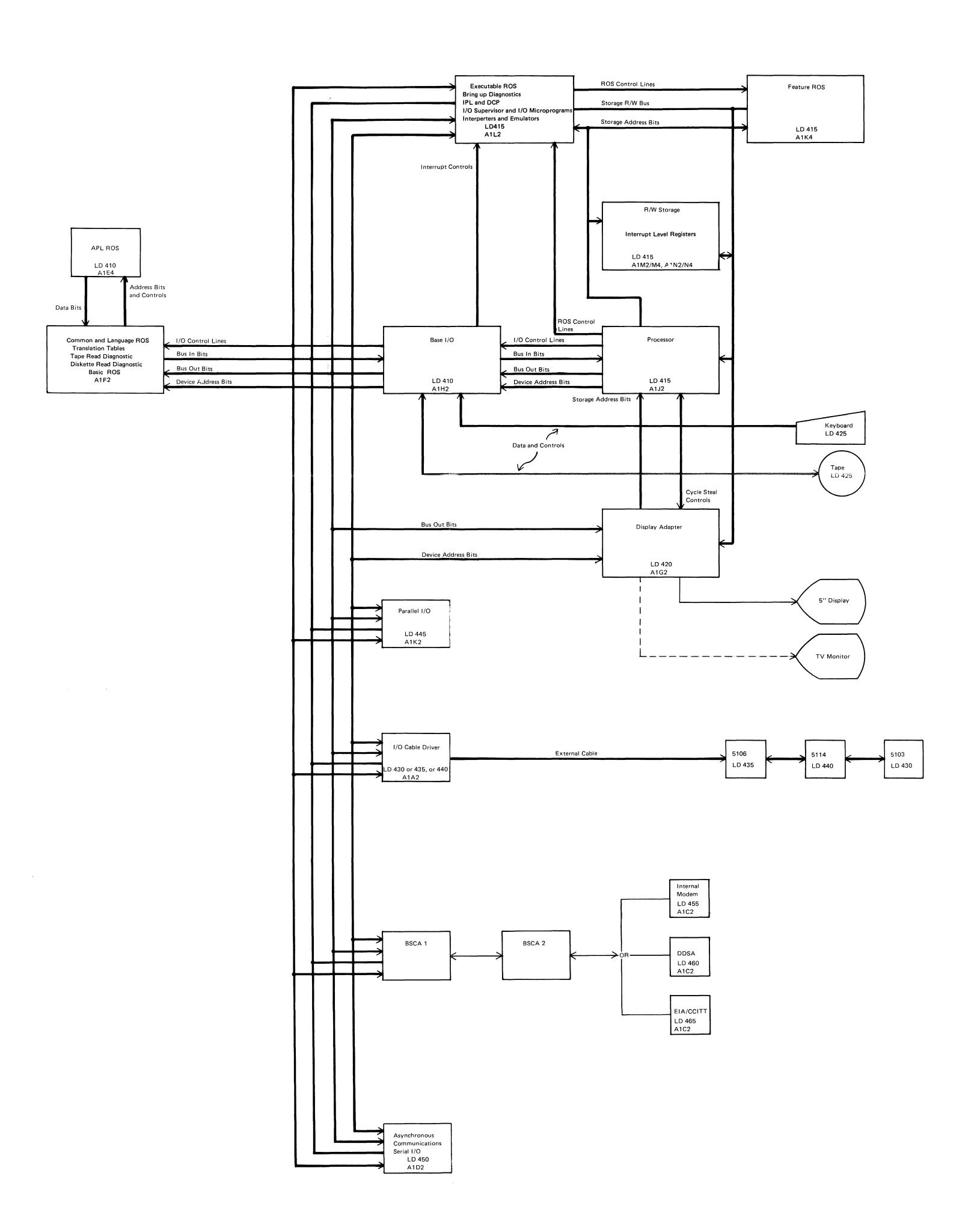
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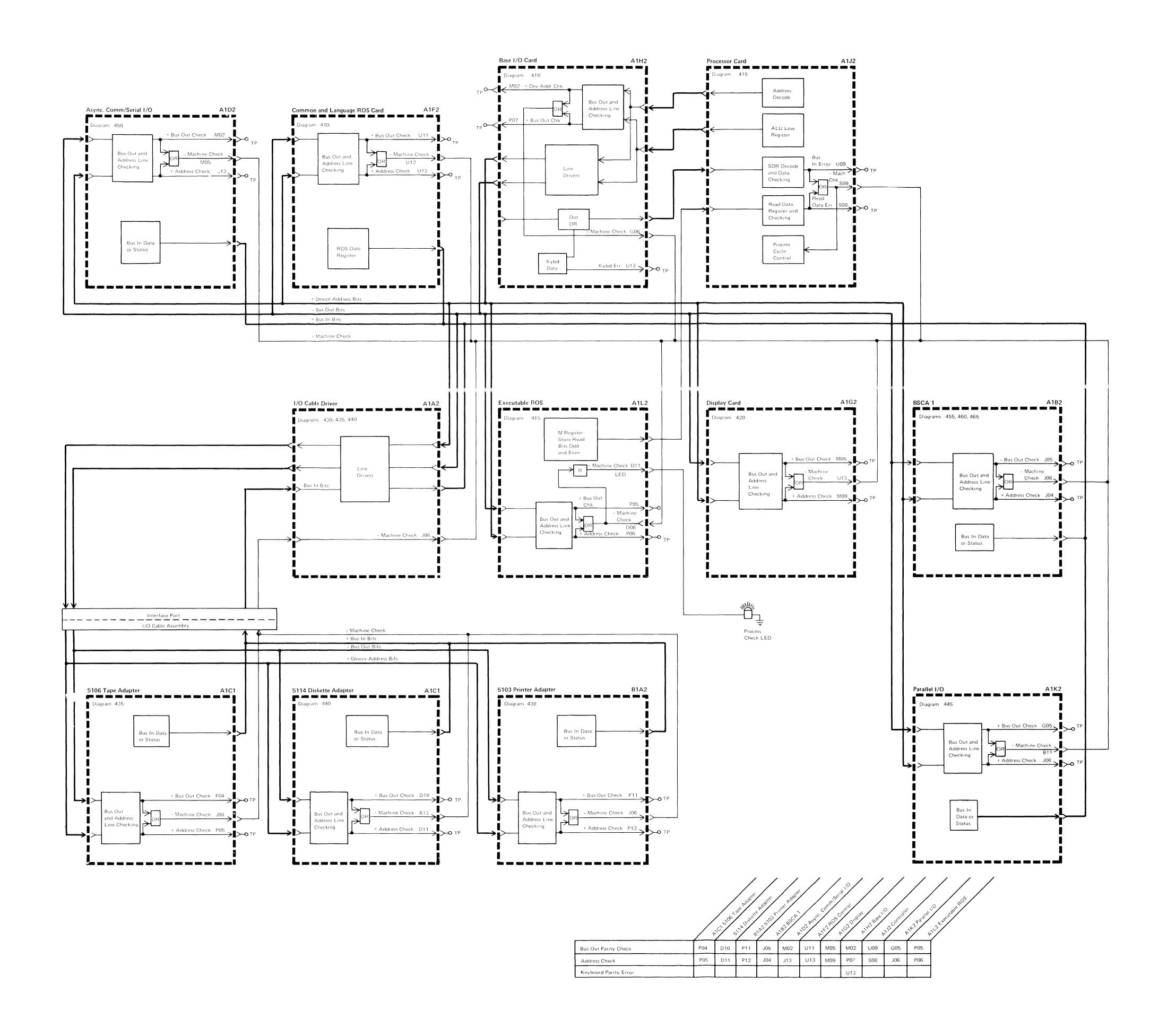
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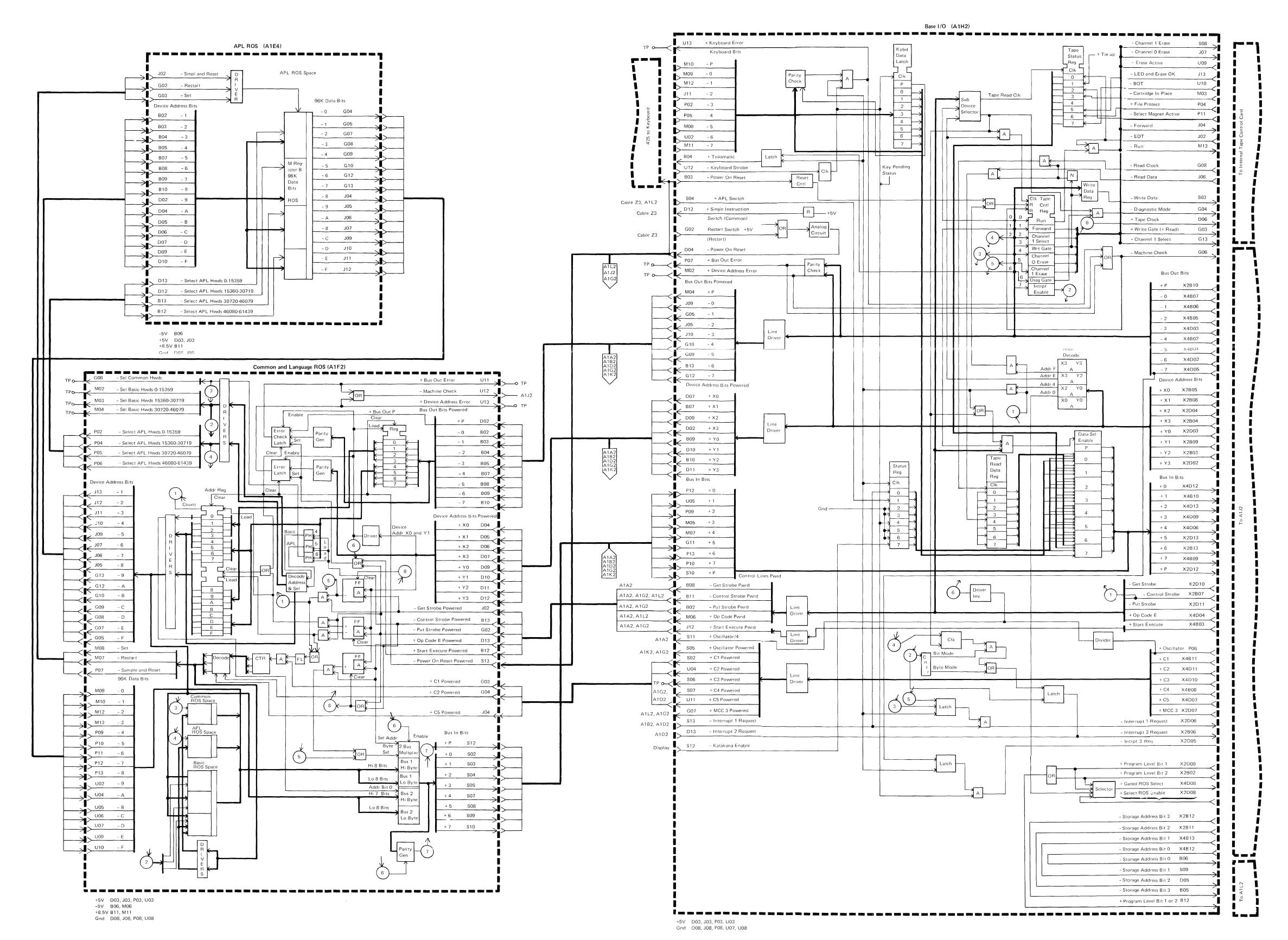




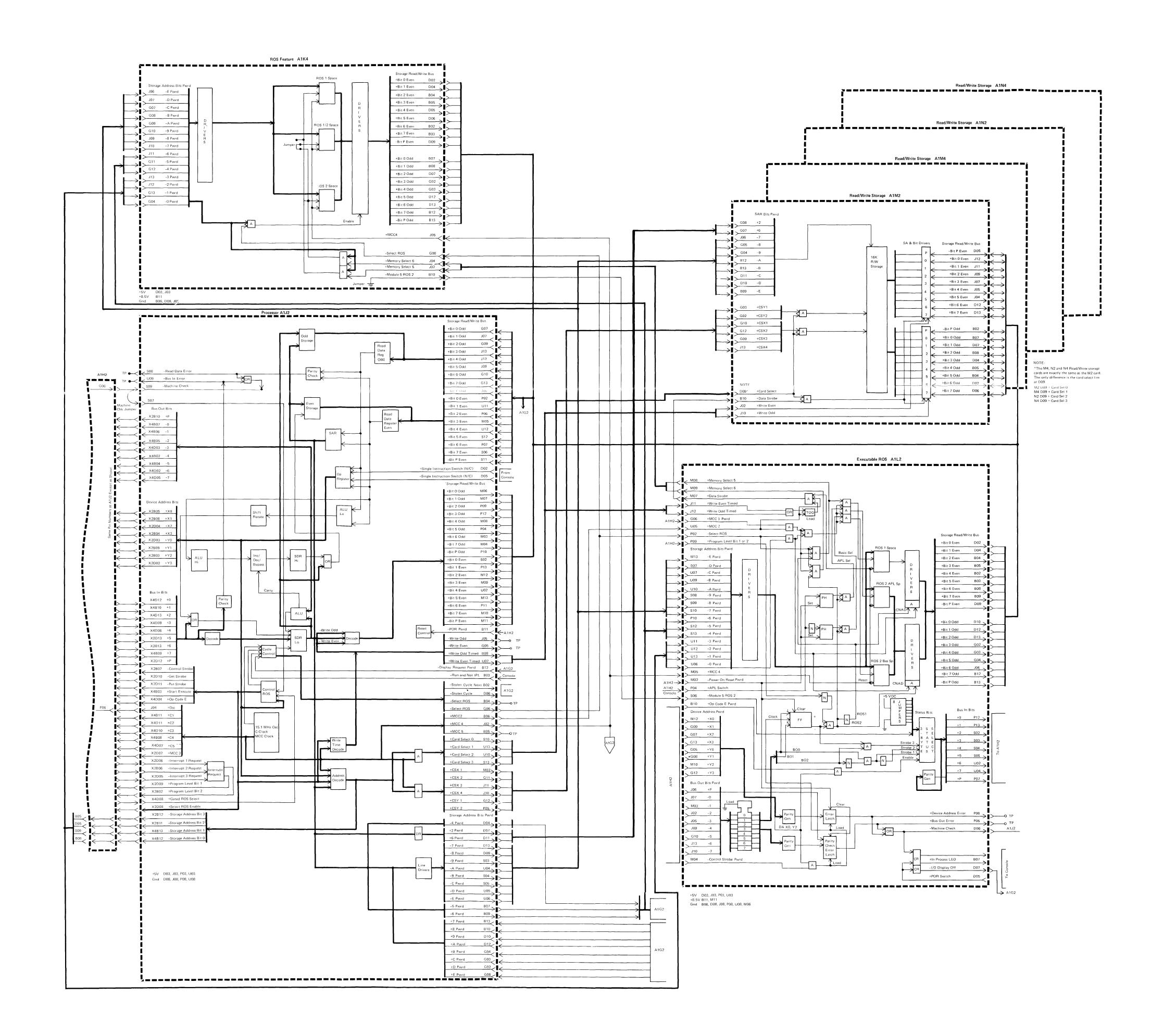
Data Flow 400



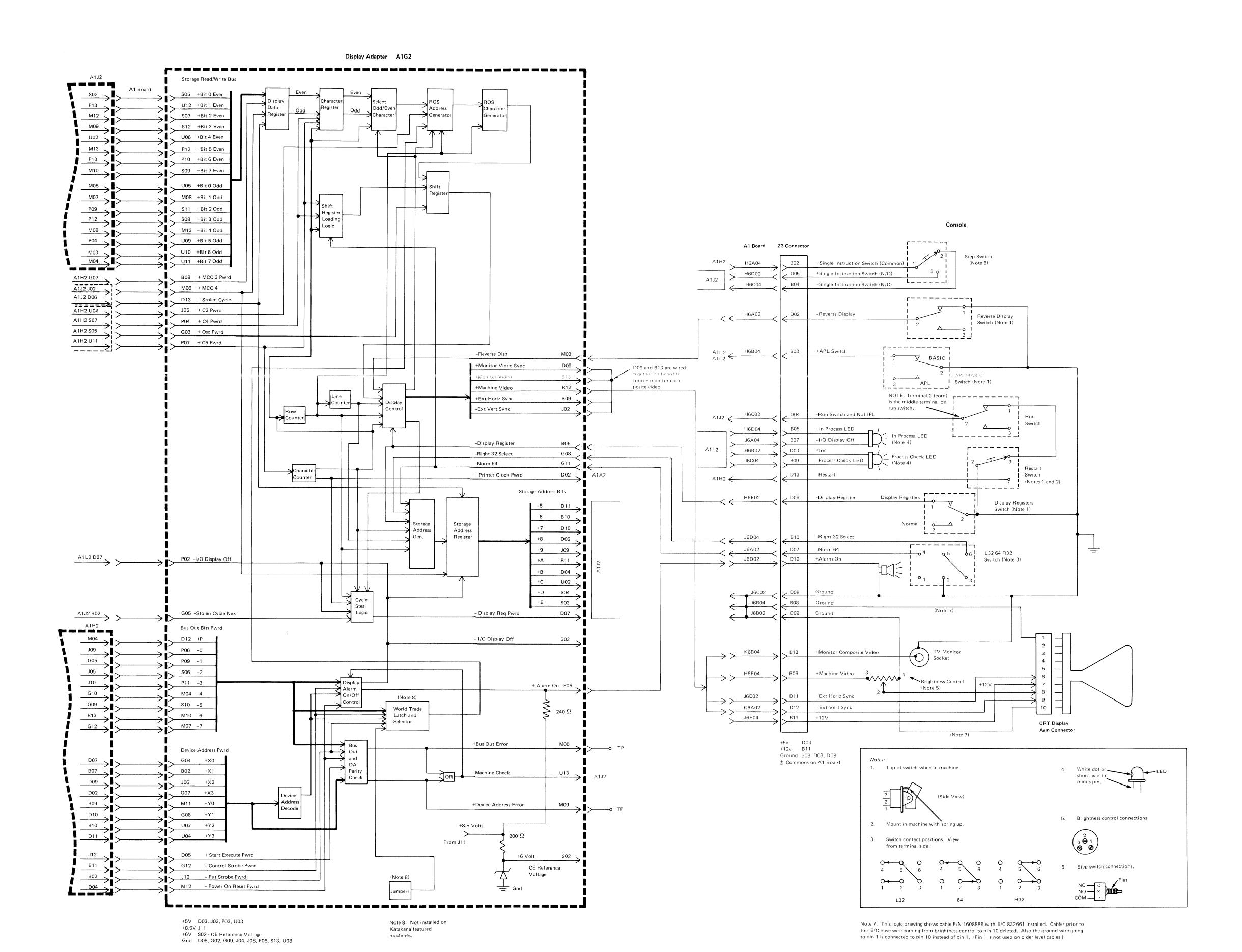
Process Check Chart 405



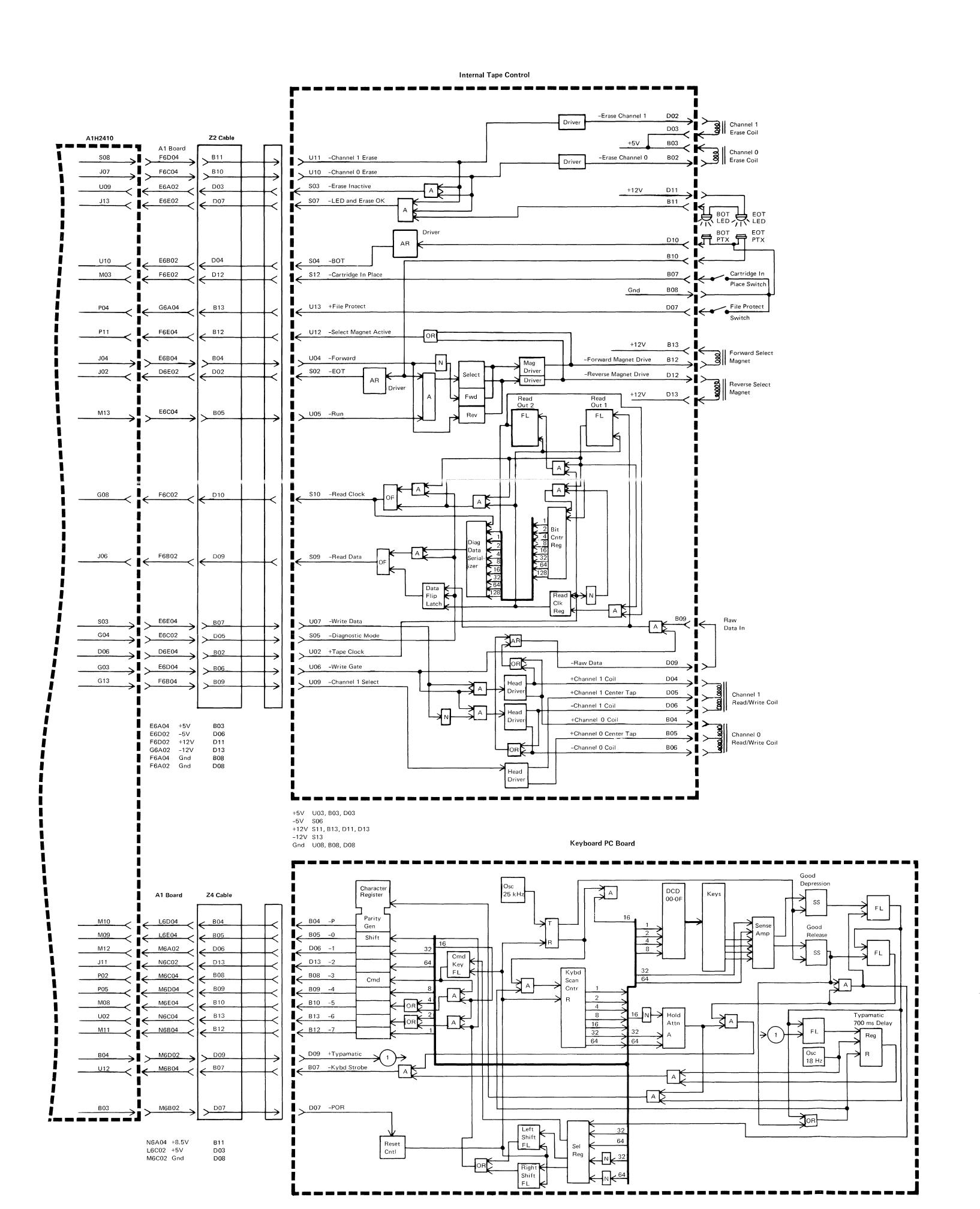
Base I/O 410
APL ROS
Common/Language ROS



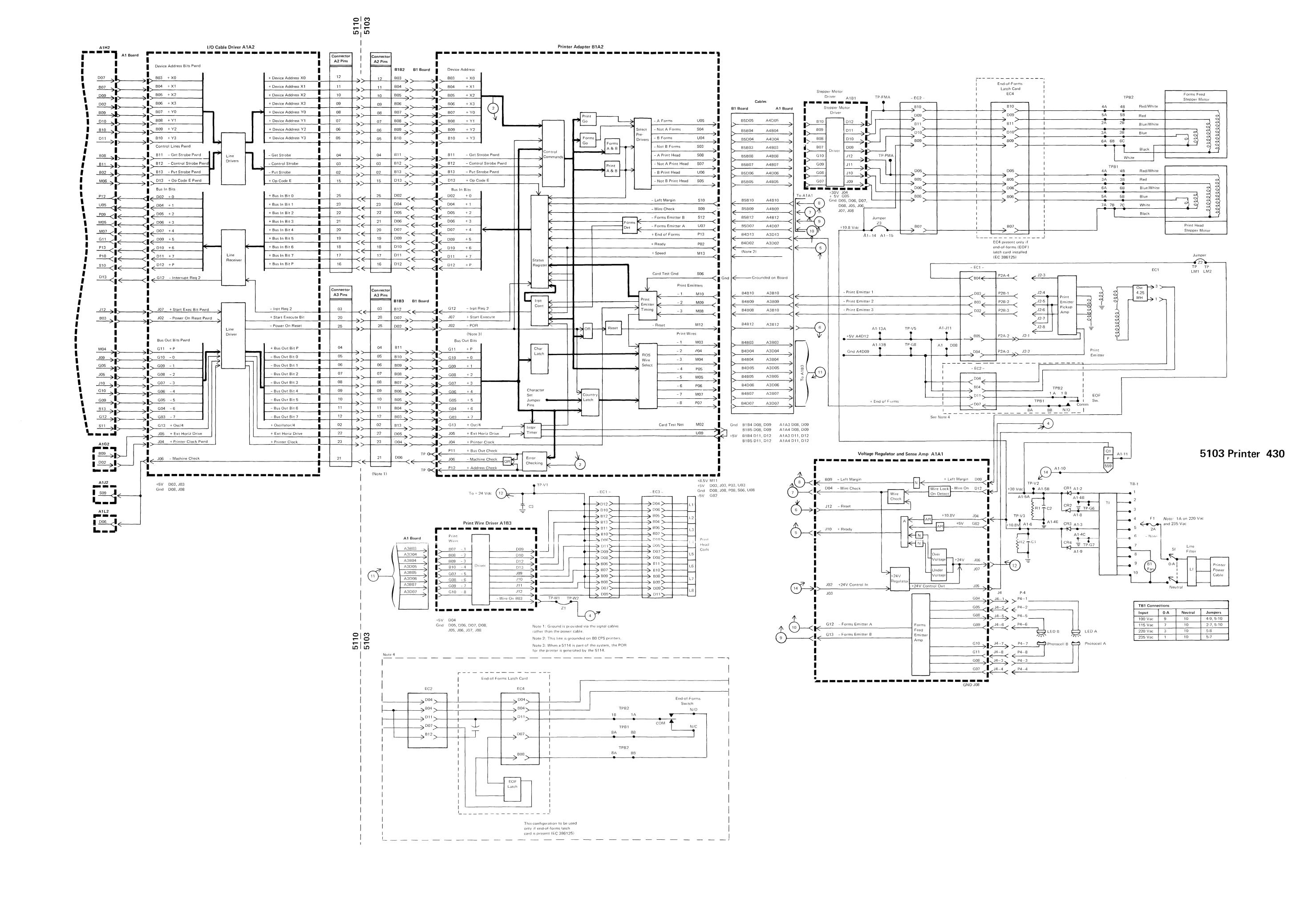
Processor 415 R/W Storage Executable ROS Feature ROS

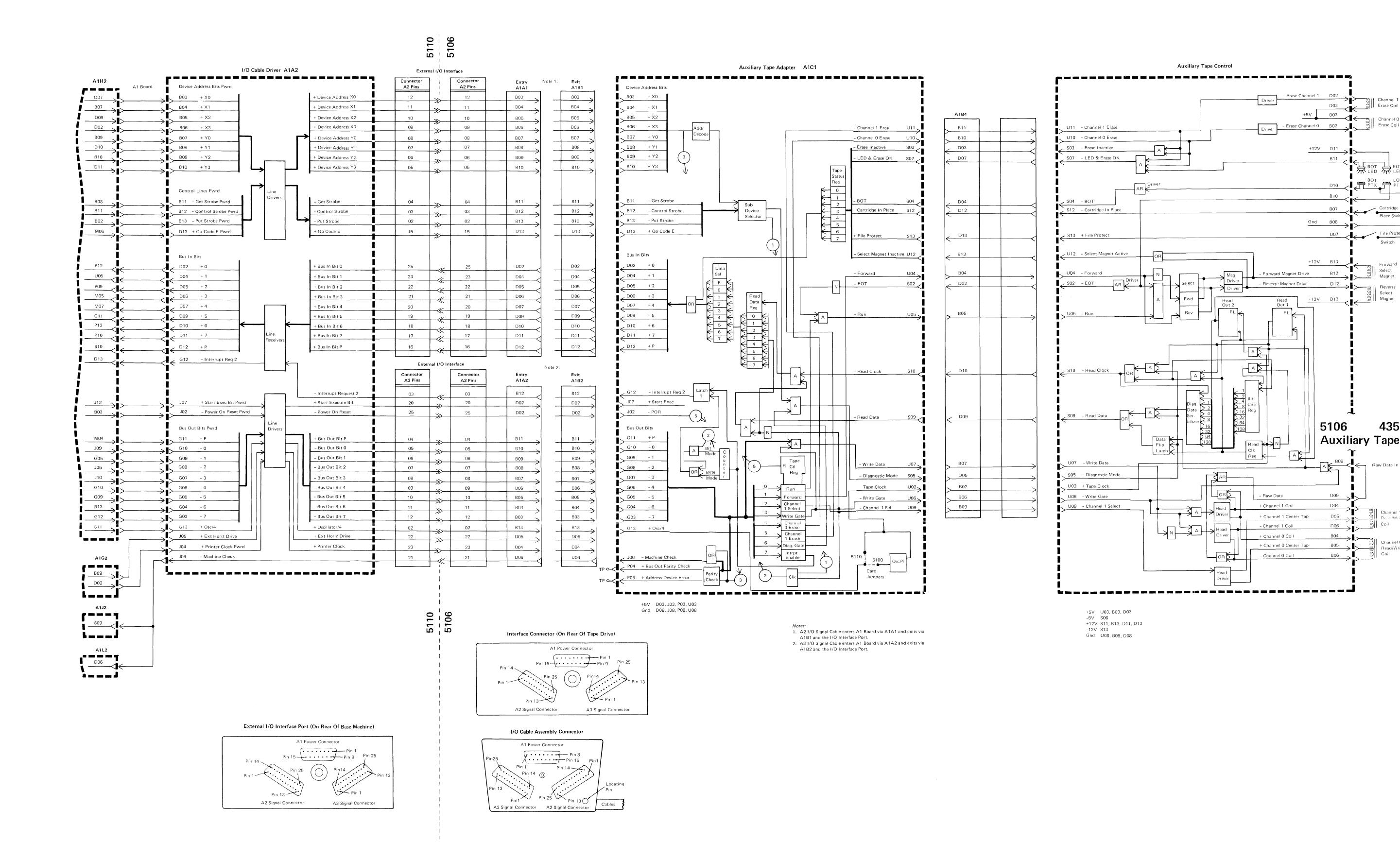


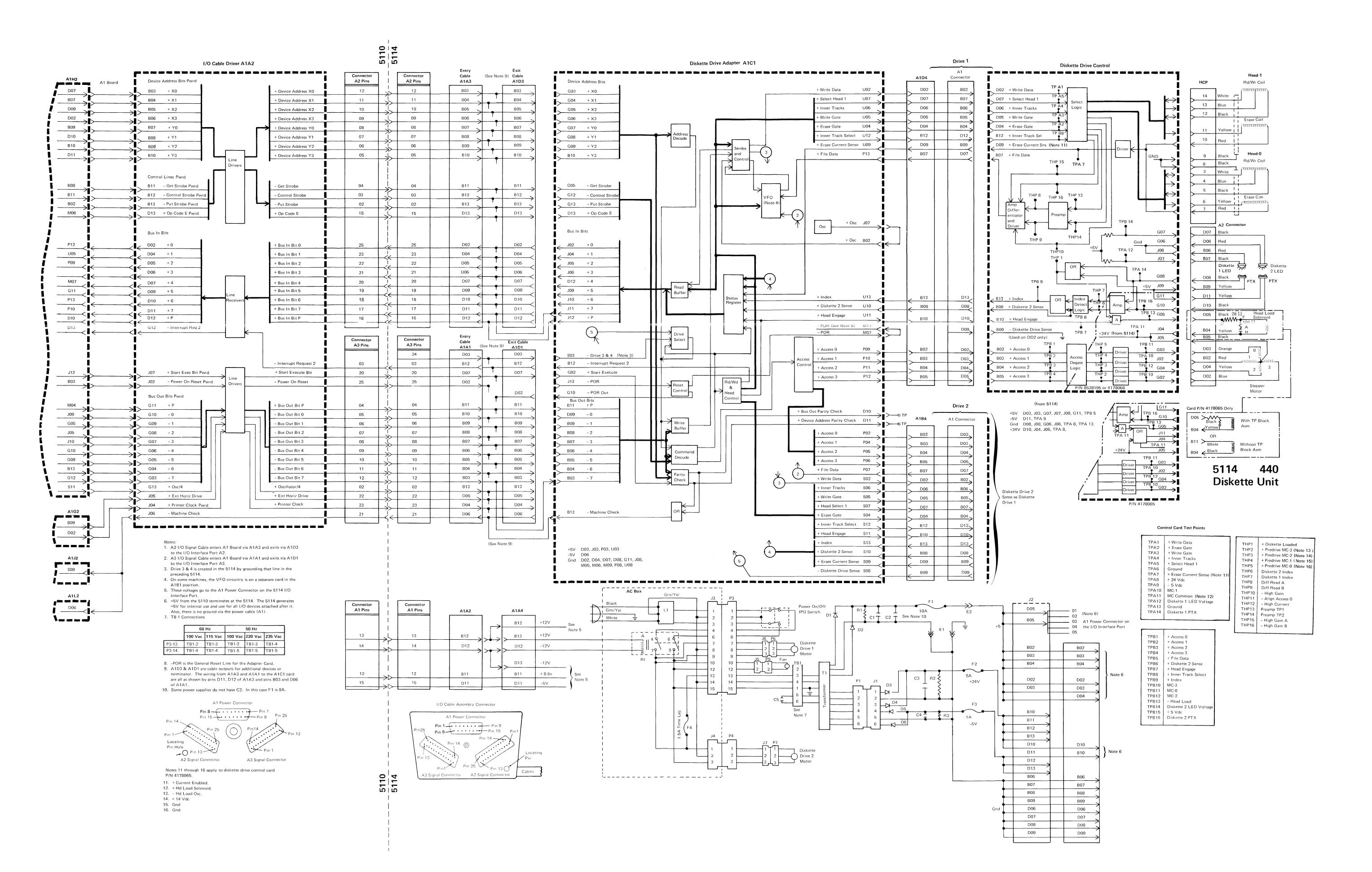
Console 420 Display Adapter

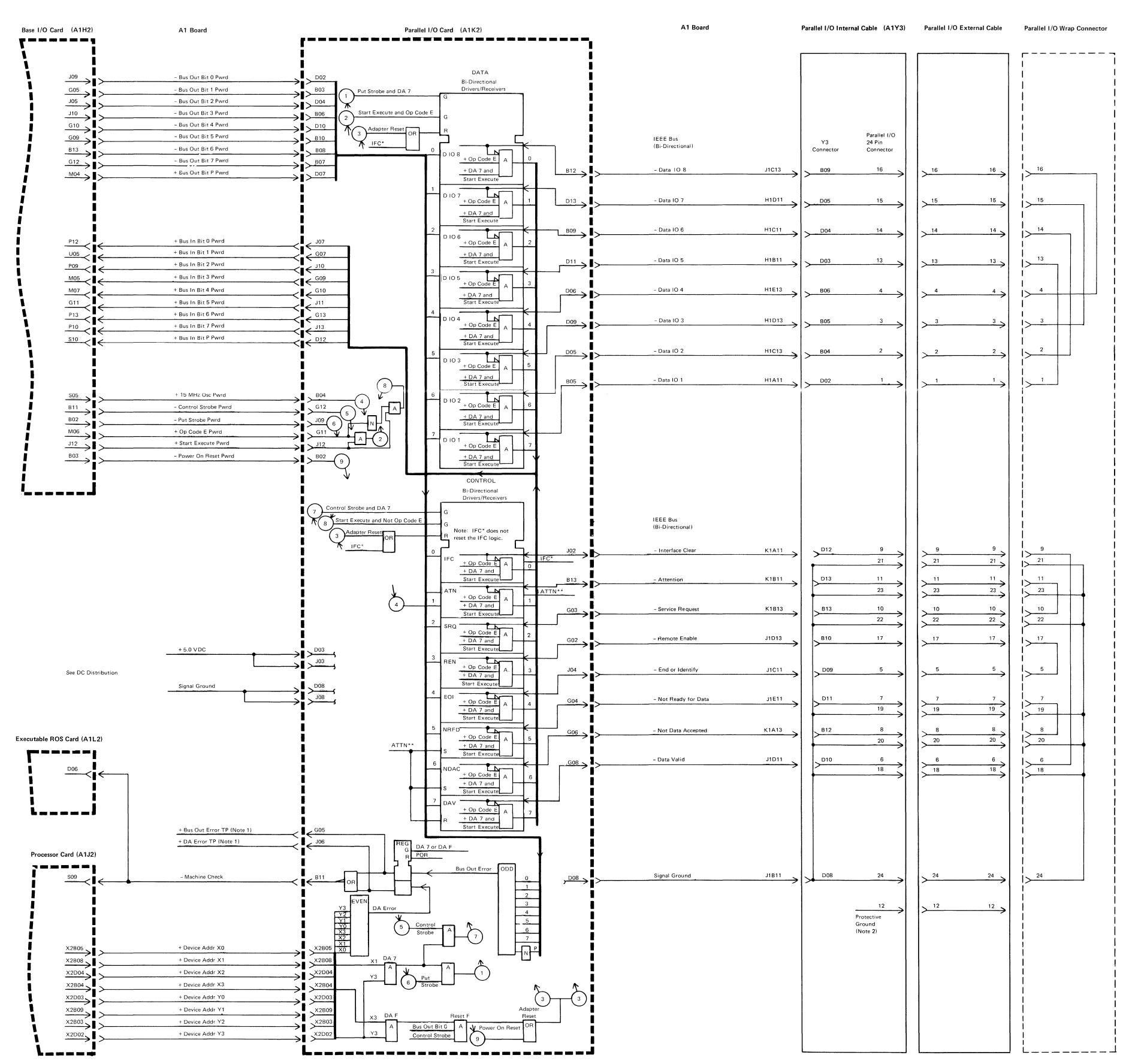


Keyboard 425 Internal Tape



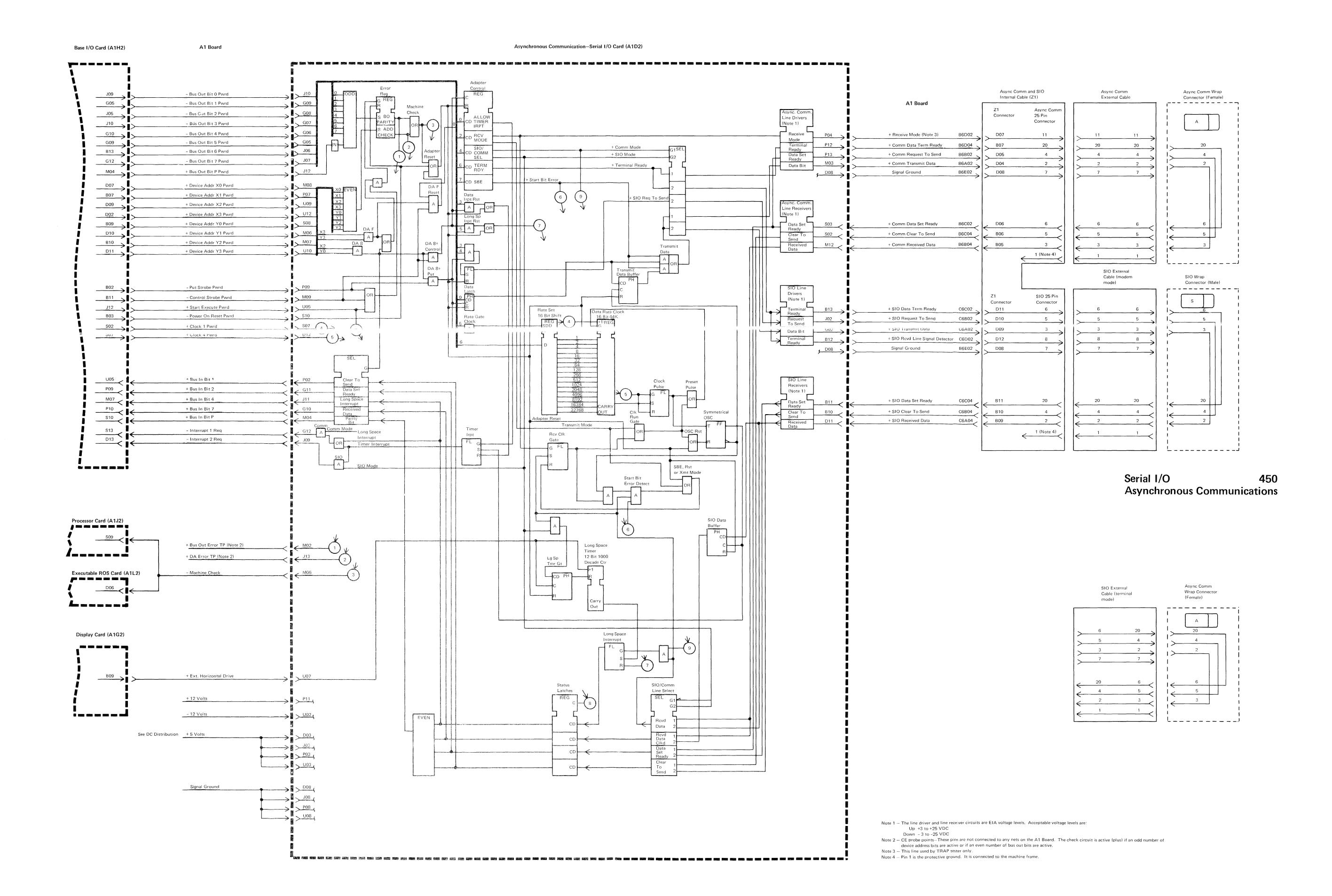


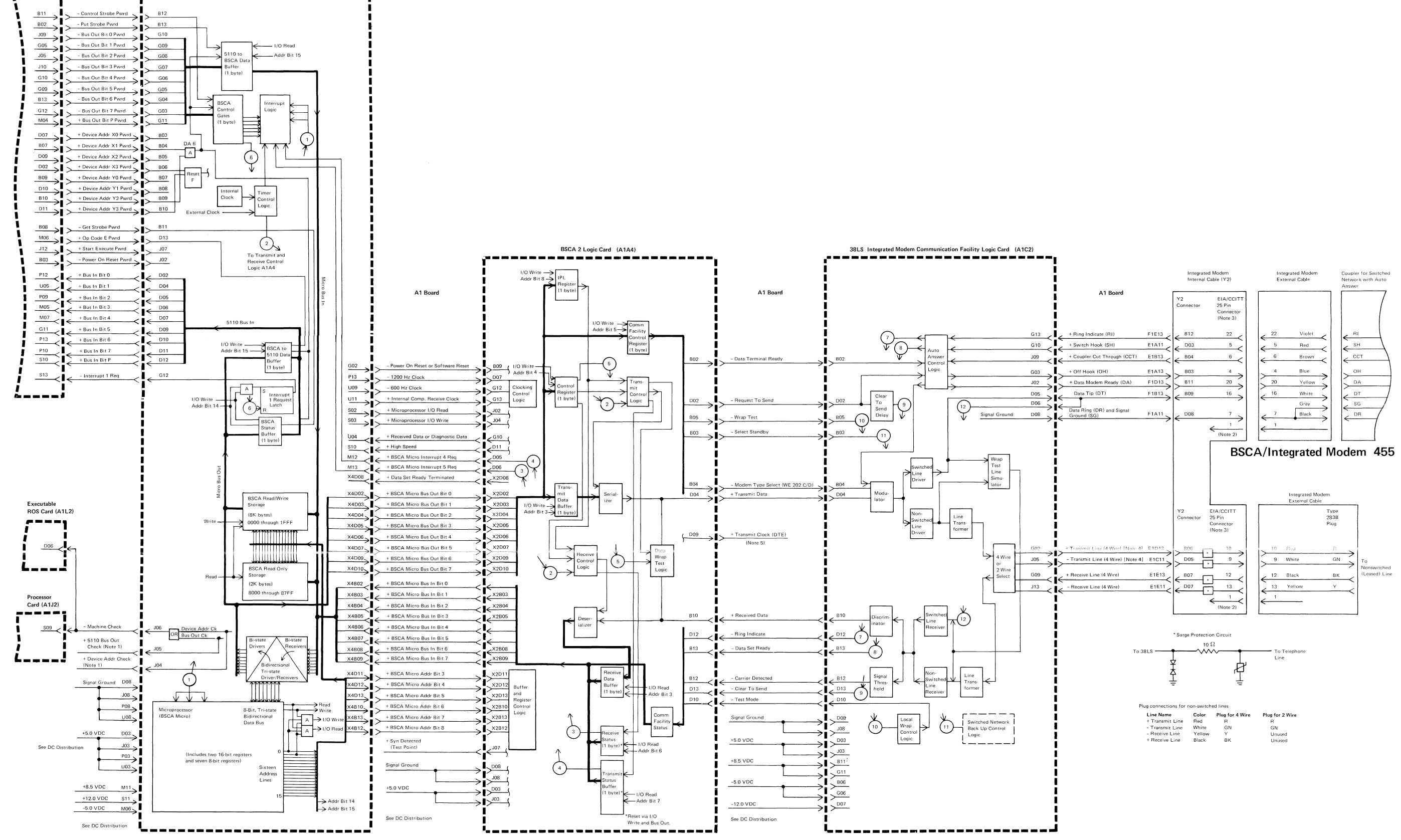




Note 1 — CE probe points—These pins are not connected to any nets on the A1 Board. The check circuit is active (plus) if an odd number of device address bits are active or if an even number of bus out bits are active.

Note 2 — Pin 12 is the protective ground. It is connected to the machine frame. $\stackrel{\bullet}{\bullet}$ Parallel I/O 445





Note 1 — CE probe points — These pins are not connected to any nets on the A1 Board. The check circuit is active (plus) if an odd number of device address bits are active or if an even number of bus out bits are active.

Base I/O Card (A1H2) A1 Board

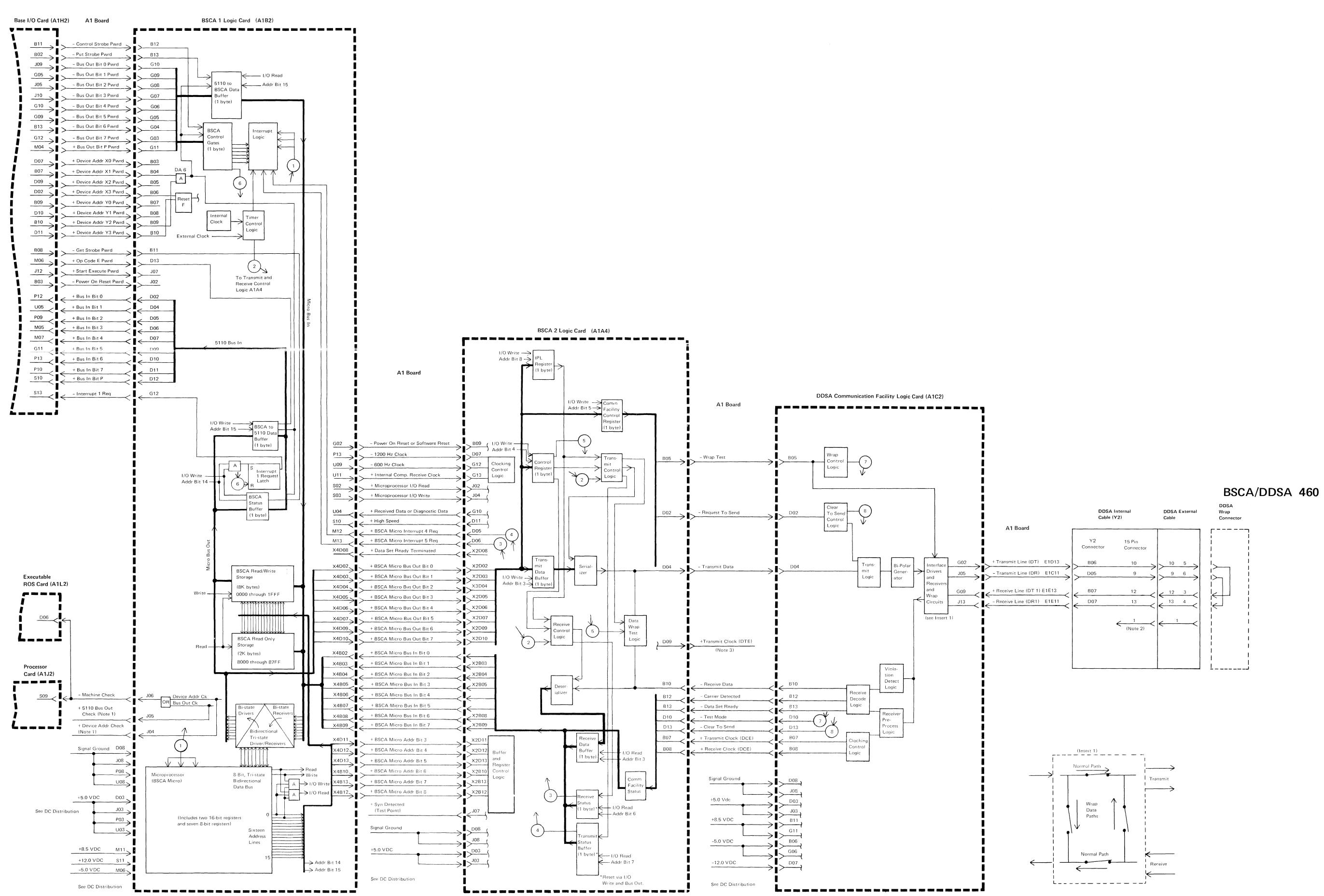
BSCA 1 Logic Card (A1B2)

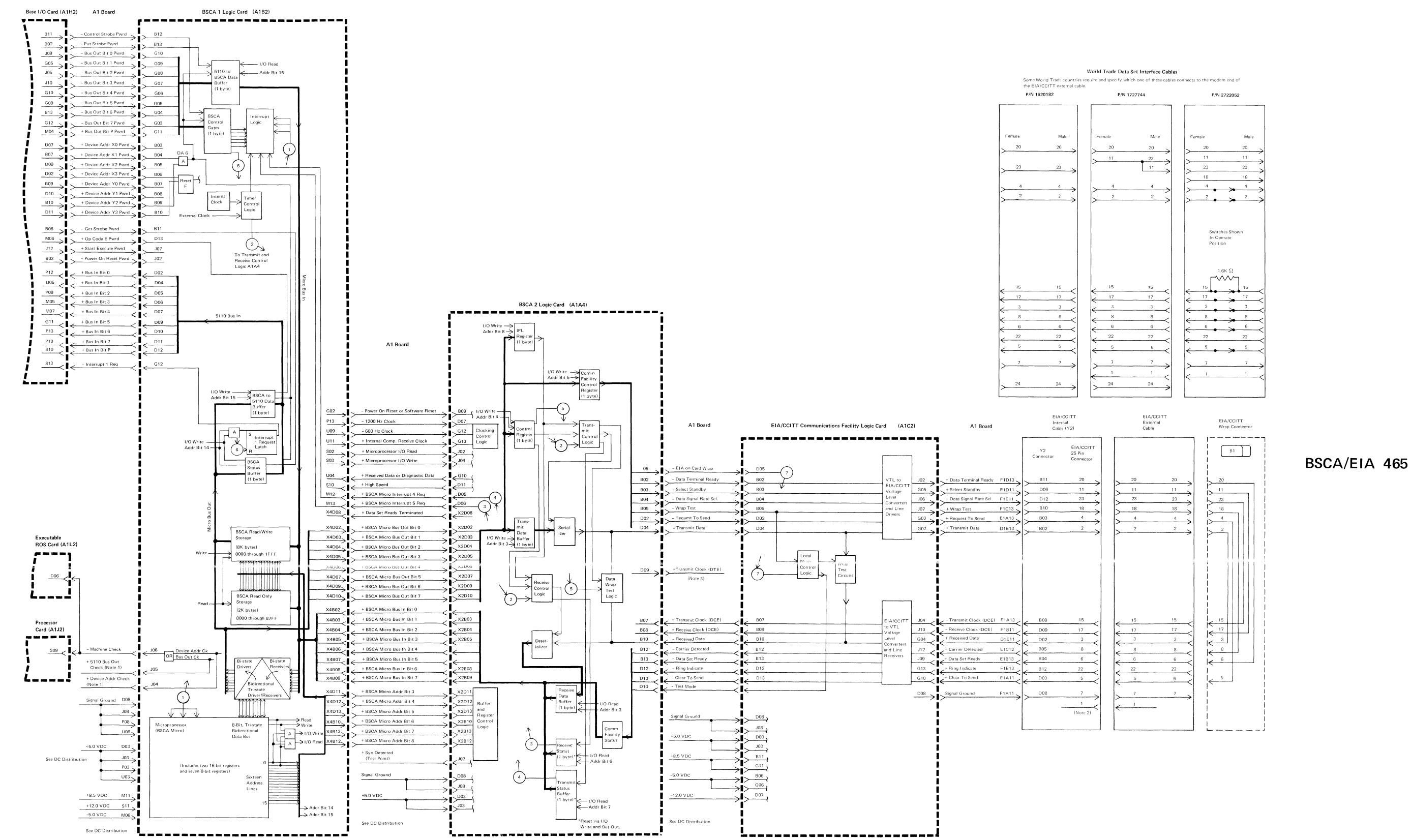
Note 2—Pin 1 is the protective ground wire. It is connected to the machine frame.

Note 3—Only one EIA/CCITT 25 pin connector is used unless the switched network backup (SNBU) feature is installed. Switched Network Backup requires an additional EIA/CCITT 25 pin connector.

Note 4—This line used for 2 wire connection.

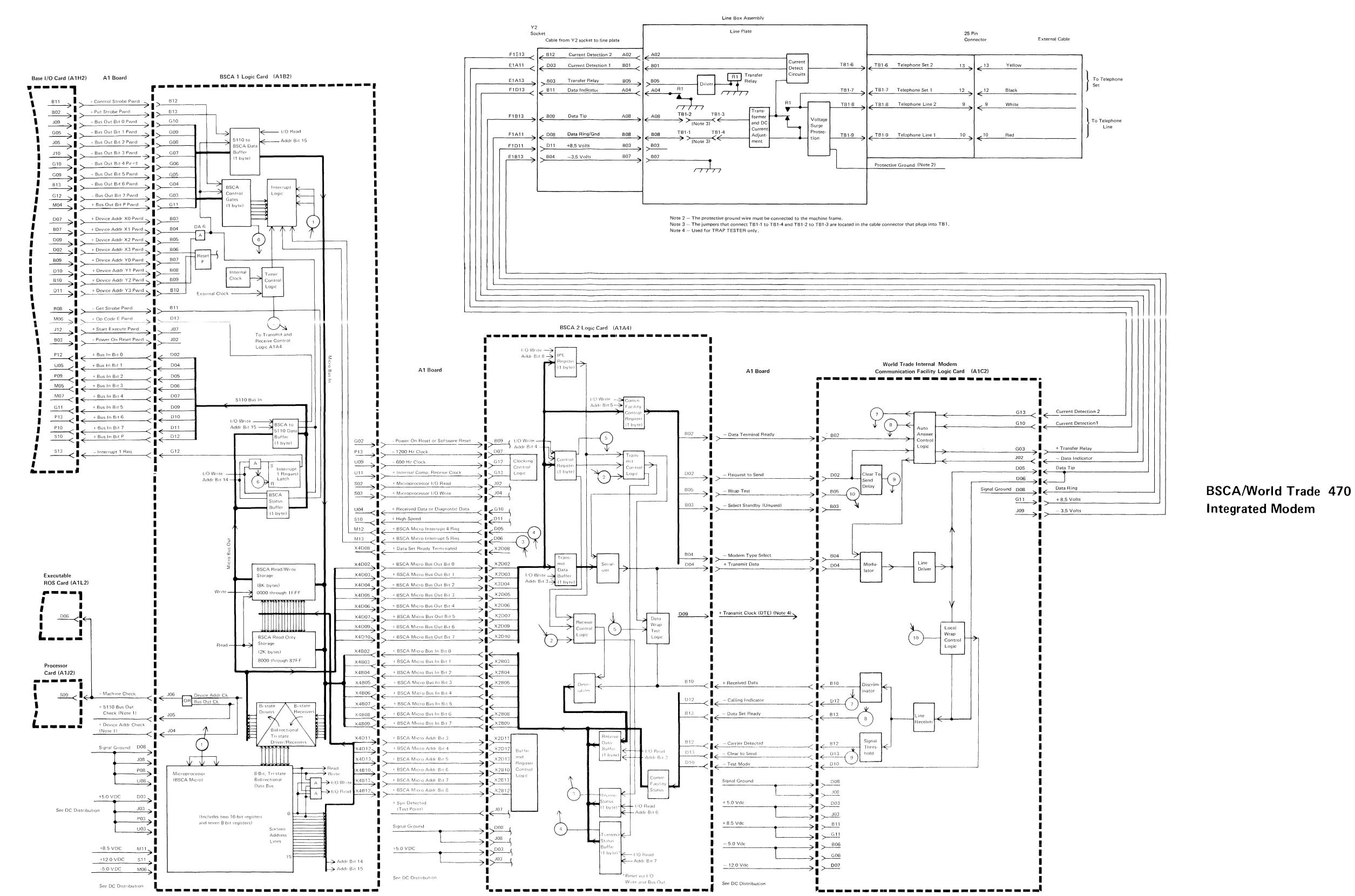
Note 5—Used by TRAP tester only.



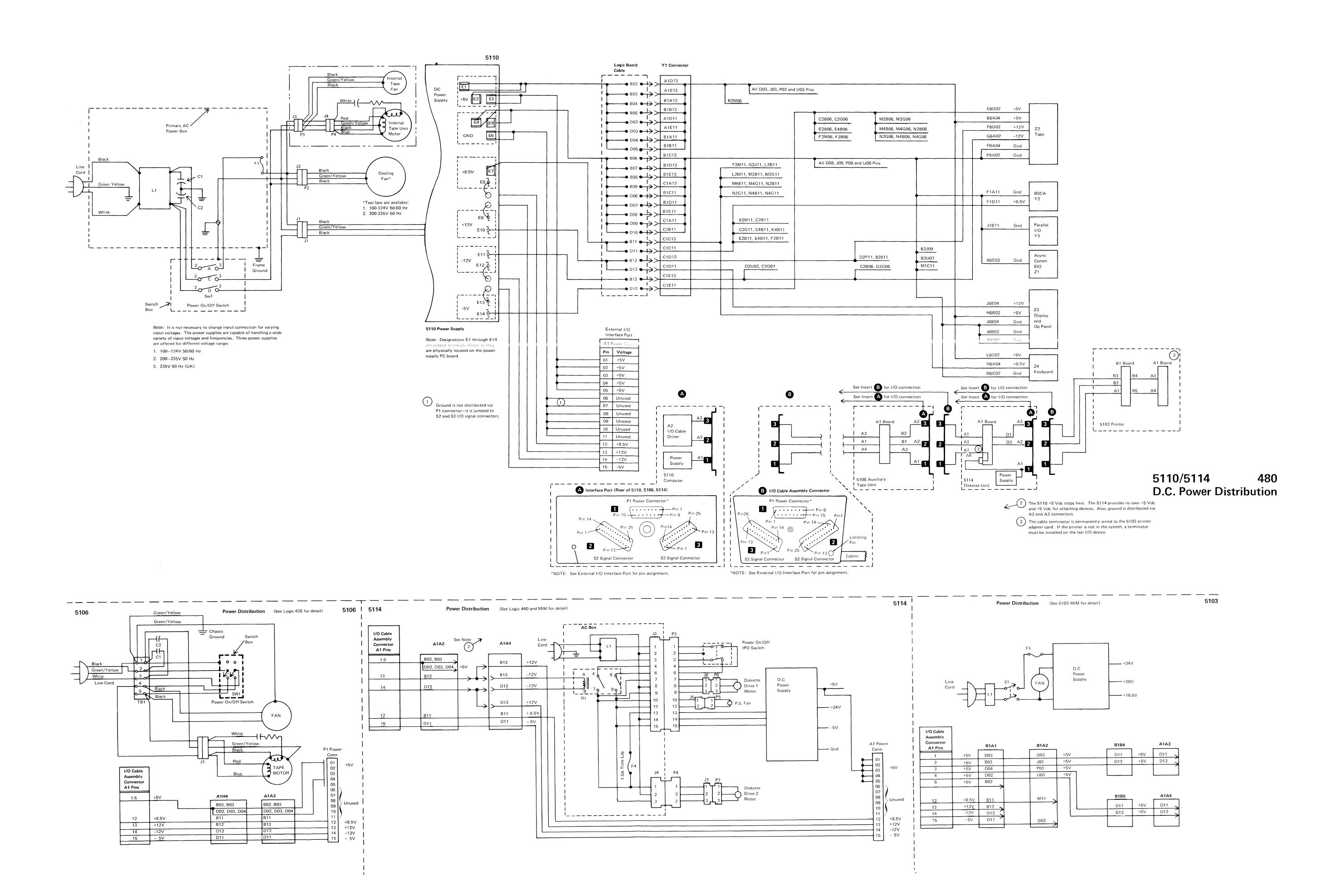


Note 1 — CE probe points — These pins are not connected to any nets on the A1 Board. The check circuit is active (plus) if an odd number of device address bits are active or if an even number of bus out bits are active.

Note $2-\mathrm{Pin}\ 1$ is the protective ground. It is connected to the machine frame. Note $3-\mathrm{Used}\ \mathrm{by}\ \mathsf{TRAP}\ \mathrm{tester}\ \mathrm{only}.$



Note 1 – CE probe points – These pins are not connected to any nets on the A1 Board. The check circuit is active (plus) if an odd number of device address hits are active or if an even number of bus out bits are active.



жининининининининининининин LINE NAME	жжжжжжжжж А2 А4	еккикикики В2 С2	************** C4 D2 E4	: жининининини F2 G2	нининия: H2	жжжжжжжжжж J2 K2	жинини кин ка	M2 CABLE	жикиникиникиникиникиникиникиники LINE NAME A2
жининининининининининининининининин + APL SWITCH	****	*****	************	************	******* \$04	*****	жинининий Р04	**************************************	并并近近近年的 1 年 1 年 1 年 1 年 1 年 1 年 1 年 1 年 1 年 1
+BUS IN BIT P	D12	D12	M 0 4	S12	S10	D12	P07	23503(116504)	-STORAGE ADDR BIT 2 -STORAGE ADDR BIT 2 PWRD
+BUS IN BIT P +BUS IN BIT 0	D02	D02		S02	X2D1; P12	2 X2D12 D12 J07	P12		-STORAGE ADDR BIT 3
+BUS IN BIT 0	1.0 %	13.0 20		302		2 X4D12	r i s		-STORAGE ADDR BIT 3 -STORAGE ADDR BIT 4 PWRD
+BUS IN BIT 1	D 0 4	D O 4	P02	S03	U05	607	P13		-STORAGE ADDR BIT 5
+BUS IN BIT 1 +BUS IN BIT 2	D05	D05	G11	S04	X4B10 P09	0 X4B10 J10	S02		-STORAGE ADDR BIT 6 -STORAGE ADDR BIT 7 PWRD
+BUS IN BIT 2					X41010	3 X4D13			-STORAGE ADDR BIT 8 PWRD
+BUS IN BIT 3	<u>D06</u>	<u> </u>		<u> </u>	M05	<u> </u>	<u> </u>		-STORAGE ADDR BIT 9 PWRD
+BUS IN BIT 3 +BUS IN BIT 4	po7	D07	J11	S07	74DU: M07	9 X4D09 G10	S04		-STORAGE R/W BUS BIT P EVEN -STORAGE R/W BUS BIT P EVEN
+BUS IN BIT 4	wee, pr. pr.					6 X4D06	m o m		-STORAGE R/W BUS BIT P ODD
+BUS IN BIT 5 +BUS IN BIT 5	D09	D09		S08	G11 X2D13	J11 3 X2D13	S05		-STORAGE R/W BUS BIT P ODD +STORAGE R/W BUS BIT O EVEN
+BUS IN BIT 6	D 1 0	D10		509	P13	G13	U02		+STORAGE R/W BUS BIT 0 EVEN
+BUS IN BIT 6	Y'' 4 4	Y'r d d	C 1 0	C 4 O		3 X2B13	U04		+STORAGE R/W BUS BIT 0 ODD
+BUS IN BIT 7 +BUS IN BIT 7	D11	D 1 1	G10	S10	P10 X4B09	J13 9 X4B09			+STORAGE R/W BUS BIT 0 ODD +STORAGE R/W BUS BIT 1 EVEN
+BUS OUT BIT P		V			X2B1(0 X2B10			+STORAGE R/W BUS BIT 1 EVEN
жиминимимимимимимимимимимими. L.TNE NAME	A2 A4	вениции веници В 2 вениции ве	C4 D2 E4	F2 G2	·共共共共共共。 日2	J2 K2	K4 L2	M2 CABLE	жиниккининикинининининининининининин LINE NAME
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+BUS OUT BIT P -BUS OUT BIT 0 PWRD	G11 G10	G11 G10	J12 J10	D02 D12 B02 P06		D07 D02	J06 J07		+STORAGE R/W BUS BIT 1 ODD +STORAGE R/W BUS BIT 1 ODD
-BUS OUT BIT 1 PWRD	G09	G 0 9	G 0 9	B03 P09	G05	B03	M03		+STORAGE R/W BUS BIT 2 EVEN
-BUS OUT BIT 2 PWRD -BUS OUT BIT 4 PWRD	G08 G06	G08 G0&	G08 G06	B04 S00 B07 M04		1004 1010	J02 J09		+STORAGE R/W BUS BIT 2 EVEN +STORAGE R/W BUS BIT 2 ODD
-BUS OUT BIT 5 PWRD	<u></u> G05	G05		B08 S10		B10	G10		+STORAGE R/W BUS BIT 2 ODD
-BUS OUT BIT 6 PWRD	G04	G 0 4	J06	B09 M10	B13	B08	J13		+STORAGE R/W BUS BIT 3 EVEN
-BUS OUT BIT 7	G03	G03	J07	B10 M07		B07	J10		+STORAGE R/W BUS BIT 3 EVEN
-BUT OUT BIT 3 -CONTROL STROBE PWRD	G07 B12	G07 B12	M09	B05 P11 B13 G12		B06 G12	J05 M04		+STORAGE R/W BUS BIT 3 ODD <u>+STO</u> RAGE R/W BUS BIT 3 ODD
+C1 PWRD			507	G 0 3	502	***************************************			+STORAGE R/W BUS BIT 4 EVEN
+C2 PWRD +C4 PWRD			012	G04 J05 P04					+STORAGE R/W BUS BIT 4 EVEN +STORAGE R/W BUS BIT 4 ODD
+C5 PWRD			7.º 1. 7	J04 P0	U11				+STORAGE R/W BUS BIT 4 ODD
+DEVICE ADDR X0		,,, ,,, ,,, ,,, ,,, ,,, ,,, ,,, ,		· ···· ··· ··· ··· ··· ··· ··· ··· ···		5_X2B05_X2B05	**** **** **** **** **** **** **** **** ****		+STORAGE R/W BUS BIT 5 EVEN
+DEVICE ADDR XO PWRD +DEVICE ADDR X1	B03	B03	80M	DO4 GOL		8 X2B08 X2B08	M12		+STORAGE R/W BUS BIT 5 EVEN +STORAGE R/W BUS BIT 5 ODD
+DEVICE ADDR X1 PWRD	E 04	B 04	P07	D05 B02		G 742.000 742.4700	G09		+STORAGE R/W BUS BIT 5 ODD
+DEVICE ADDR X2	ri o er	Y. O E.	U09	m o 2 10 2		4 X2D04 X2D04	G07		+STORAGE R/W BUS BIT 6 EVEN
+DEVICE ADDR X2 PWRD	B05 ********	B05 • • • • • • • • • • • • • • • • • • •	UU7	оо дос Онининининин) DO9 :*******	************	7 U C) ЖЖЖЖЖЖЖЖЖЖЖЖ	*****	+STORAGE R/W BUS BIT 6 EVEN
LINE NAME	A2 A4	mm (2.73	Oh no m						
	ink. ran	DZ GZ	CH DZ EH	F2 G2	H2	J2 K2	K4 L2	M2 CABLE	LINE NAME A2
并投资投资投资投资投资投资投资股份资金投资股份股份股份	**************************************	以及	医环 拉索 医环境 医环境 医环境 医环境 医环境 医牙髓 医二甲二甲二甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲	F2 G2 (жинининий)	H2 ******* X2B0	J2 К2 жжжжжжжжжж 4 Х2ВО4 Х2ВО4	К	M2 CABLE жинининининининин	州州州州州州州州州州州州州州州州州州州州州州州州州州州州州州州州州州
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**************************************	вос Вос			1007 Go	' D02 X2D00	J2 K2 ************* 4 X2B04 X2B04 3 X2D03 X2D03	G13		**************************************
**************************************	************	ва Са енининининин ВОС ВОТ	U1 2 E4 ***********************************	[美英英英英英英英英英	' D02 X2D03 B09		G13 G05		**************************************
**************************************	вос Вос			1007 Go	D02 X2D03 B09 X2B09 D10	3 X2D03 X2D03 9 X2B09 X2B09	G13 G05 G08		**************************************
**************************************	B06 B07	B07	808	D07 G0	7 D02 X2D03 B09 X2B09 D10 X2B03	3 X2D03 X2D03	G13 G05 G08		**************************************
**************************************	B06 B07 B08 B09	B07 B08 B09	808 M04 M07	DO7 GO DO9 M1: D10 GO D11 U0	D02 X2D03 B09 X2B03 D10 X2B03 B10 X2D03	3 X2D03 X2D03 9 X2B09 X2B09	G13 G05 G08 M10		**************************************
**************************************	B06 B07 B08	B07 B08	508 	D07 G0 D09 M1:	7 D02 X2D0; B09 X2B0; D10 X2B0; B10 X2D0; D11	3 X2D03 X2D03 9 X2B09 X2B09 3 X2B03 X2B03 2 X2D02 X2D02	G13 G05 G08 M10 G12		**************************************
**************************************	B06 B07 B08 B09	B07 B08 B09	808 M04 M07	DO7 GO DO9 M1: D10 GO D11 U0	7 D02 X2D03 B09 X2B09 0 D10 X2B03 B10 X2D03 D11 X2B09	3 X2D03 X2D03 <u>9 X2B09 X2B09</u> 3 X2B03 X2B03	G13 G05 G08 M10 G12		**************************************
**************************************	**************************************	B07 B08 B09 B10 B11	\$08 M04 M07 U10 U07	D07 G0° D09 M1: D10 G04 D11 U0°	D02 X2D03 B09 X2B03 D10 X2B03 B10 X2D03 D11 X2B03	3 X2D03 X2D03 9 X2B09 X2B09 3 X2B03 X2B03 2 X2D02 X2D02	G13 G05 G08 M10 G12	**************************************	**************************************
**************************************	**************************************	B07 B08 B09 B10	\$08 M06 M07 U10	DO7 GODO DO9 M1: D10 GOO D11 U0 D12 U0 B09	D02 X2D03 B09 X2B03 D10 X2B03 B10 X2D03 D11 X2B03	3 X2D03 X2D03 9 X2B09 X2B09 3 X2B03 X2B03 2 X2D02 X2D02	G13 G05 G08 M10 G12	**************************************	**************************************
**************************************	**************************************	B07 B08 B09 B10 B11	\$08 M04 M07 U10 U07	DO7 GODO DO9 M1: D10 GOO D11 U0 D12 U0 B09	D02 X2D03 B09 X2B03 D10 X2B03 B10 X2D03 D11 X2B03 B08 S13 X2D04 D13	3 X2D03 X2D03 9 X2B09 X2B09 3 X2B03 X2B03 2 X2D02 X2D02 9 X2B09 X2B09	G13 G05 G08 M10 G12	**************************************	**************************************
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