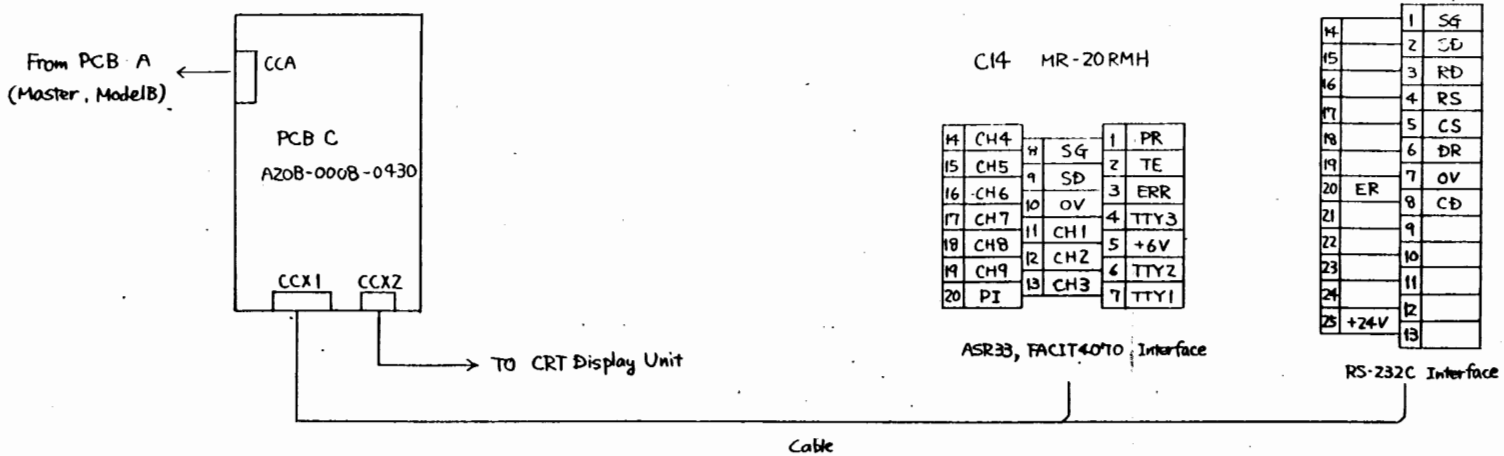


14	CH4	14	SG	1	PR
15	CH5	9	SD	2	TE
16	CH6	10	0V	3	ERR
17	CH7	11	CH1	4	TTY3
18	CH8	12	CH2	5	+6V
19	CH9	13	CH3	6	TTY2
20	PI			7	TTY1

14		1	SG
15		2	SD
16		3	RD
17		4	RS
18		5	CS
19		6	DR
20	ER	7	0V
21		8	CD
22		9	
23		10	
24		11	
25	+24V	12	
		13	

CCA MR-50MA

33	*A02X	19	*A06X	1	*A01X
34	*A04X	20	*A09X	2	*A03X
35	*A07X	21	*A12X	3	*A05X
36	*A10X	22	*A15X	4	*A08X
37	*A13X	23	*EXDEN	5	*A11X
38	*A16X	24	*AMWCX	6	*A14X
39	BAUD	25	*MRDCX	7	0V
40	*CLK0	26	*DTR	8	0V
41	-15V	27	*PCL1	9	0V
42	0V	28	*EXIRQ	10	+5V
43	+24V	29	D00X	11	+5V
44	*EXRDY	30	D04X	12	+5V
45	D02X	31	D07X	13	D01X
46	D05X	32		14	D03X
47				15	D06X
48				16	
49				17	
50				18	

CCX1 MR-50RMA

33		19		1	TTY1
34	RS	20		2	TTY2
35	CS	21		3	TTY3
36	DR	22		4	0V
37	0V	23		5	
38	CD	24		6	
39	0V	25		7	PR
40	SD	26		8	TE
41	RD	27		9	ERR
42	0V	28		10	+6V
43	ER	29		11	CH1
44		30		12	CH2
45		31		13	CH3
46	SD	32	+24V	14	CH4
47	0V			15	CH5
48	CH9			16	CH6
49	PI			17	CH7
50	SG ②			18	CH8

CCX2 MR-20RMA

14	CLKINH	8	0V	1	VIDEO
15	EXCLK1	9	0V	2	HSYNC
16	DTC2	10	0V	3	VSYNC
17	EXCLK0	11	0V	4	
18		12	0V	5	
19		13		6	
20	SG ②			7	

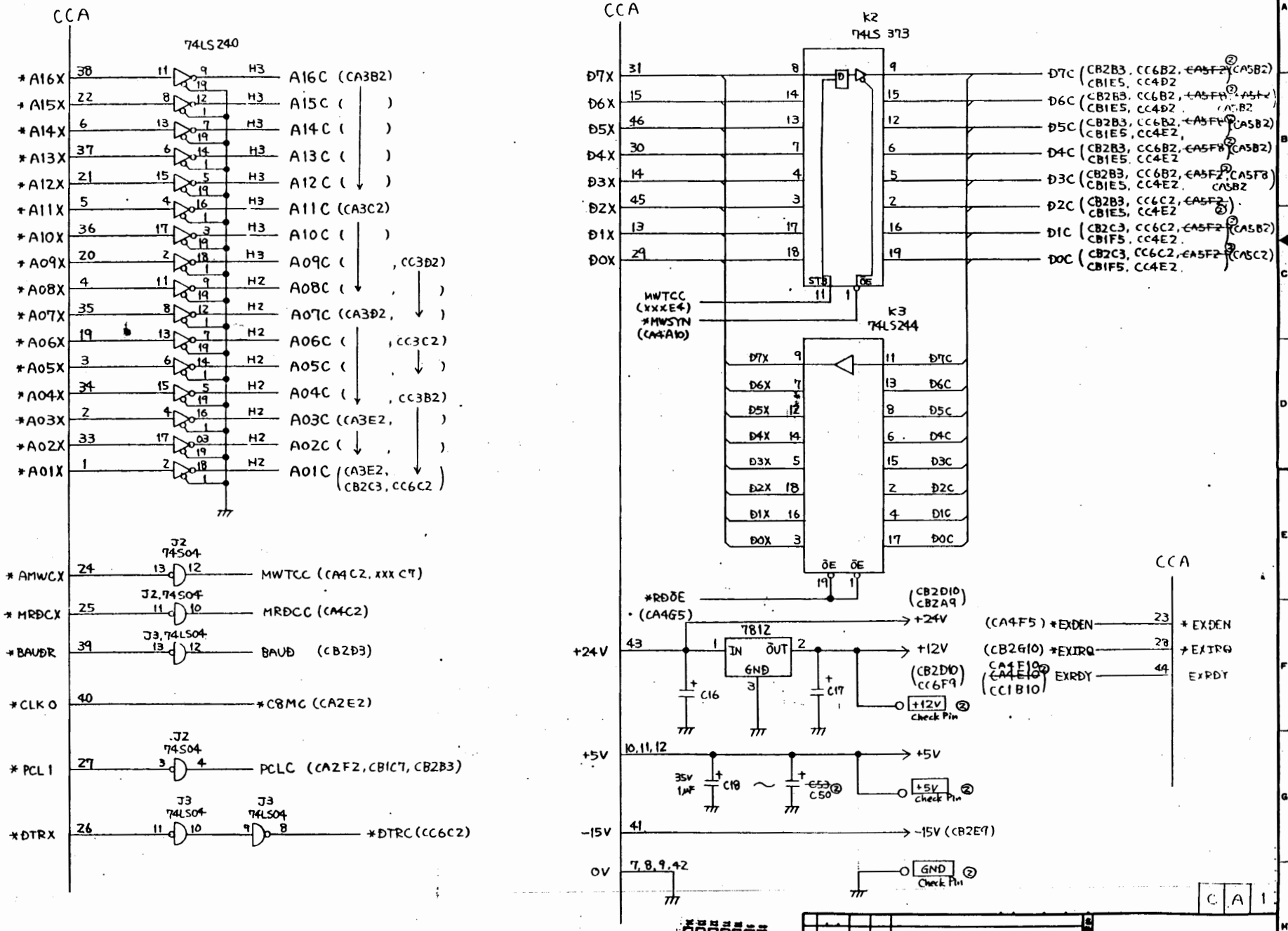
② Note) For Edition 01A, refer to the circuit befor revised to 02 and Page 015 to 018
注) 01A版については 02版 改版前の回路図 及び 015～018 ページ 参照のこと。
(Appendix 付 1～17.)

C01

14-PIN. IC

CRTC/PUNCHER
A20C-0008-0430/01

AW1-319435 Zd

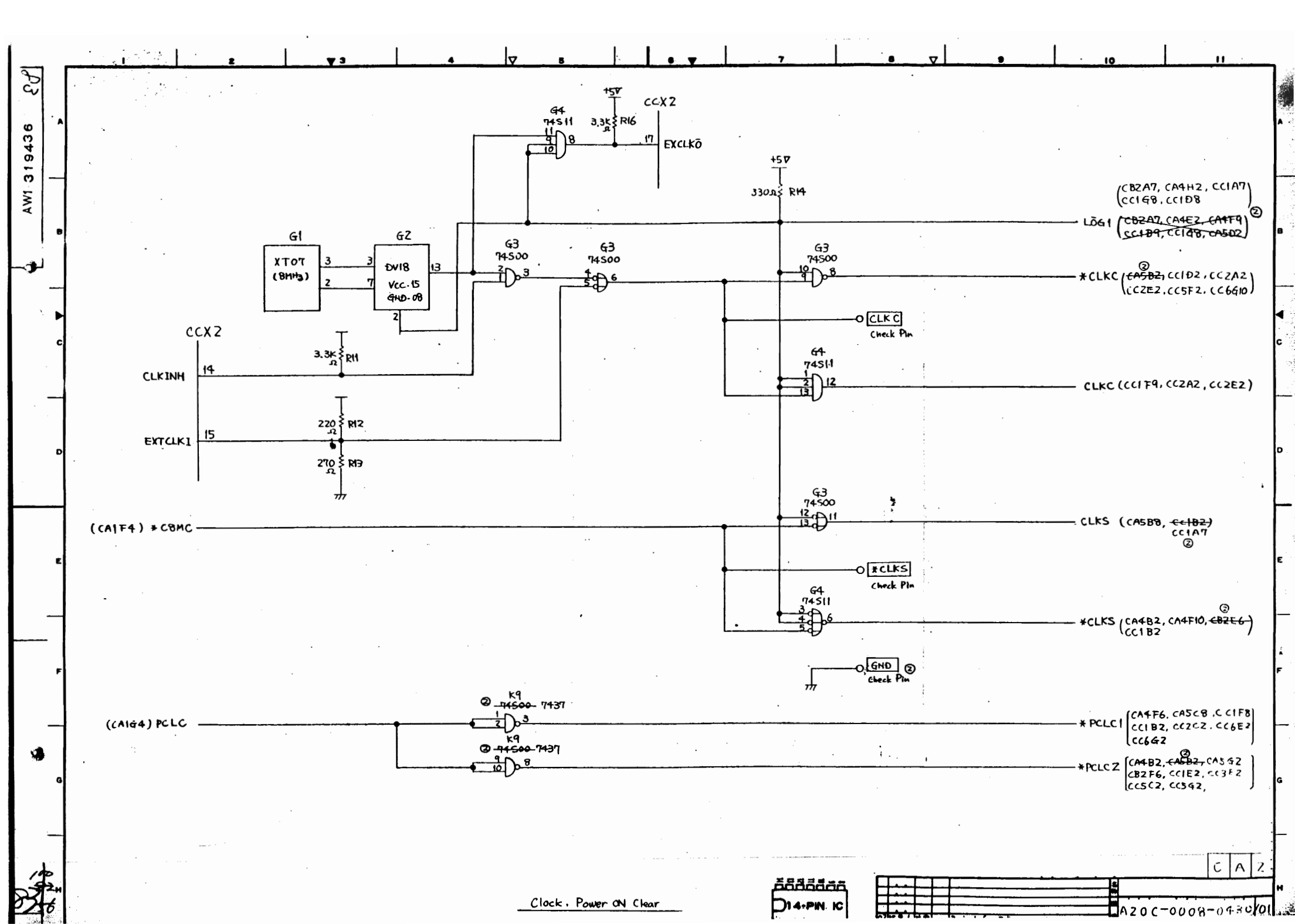


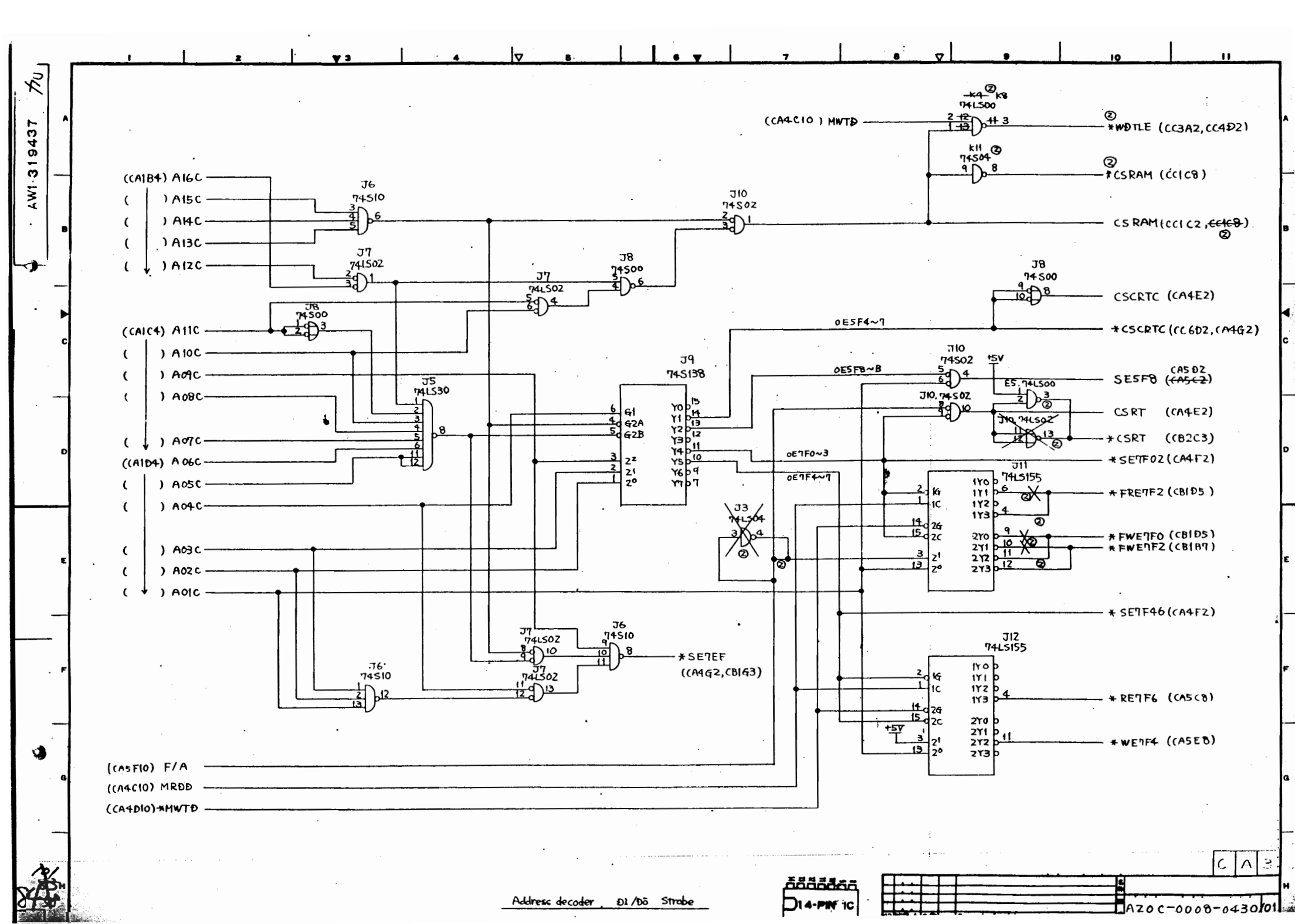
Interface for Master PCB

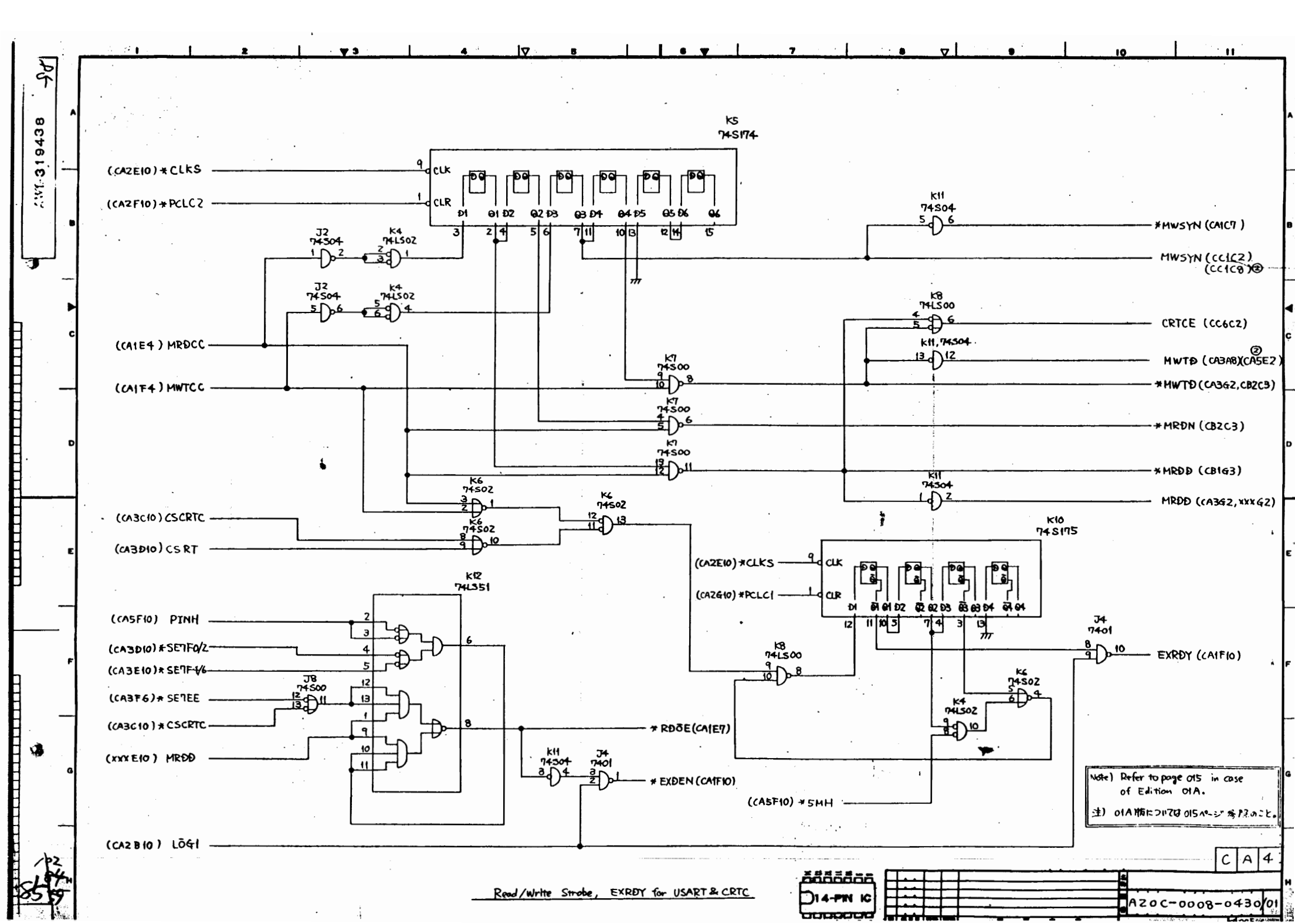
14-PIN IC

C A 1

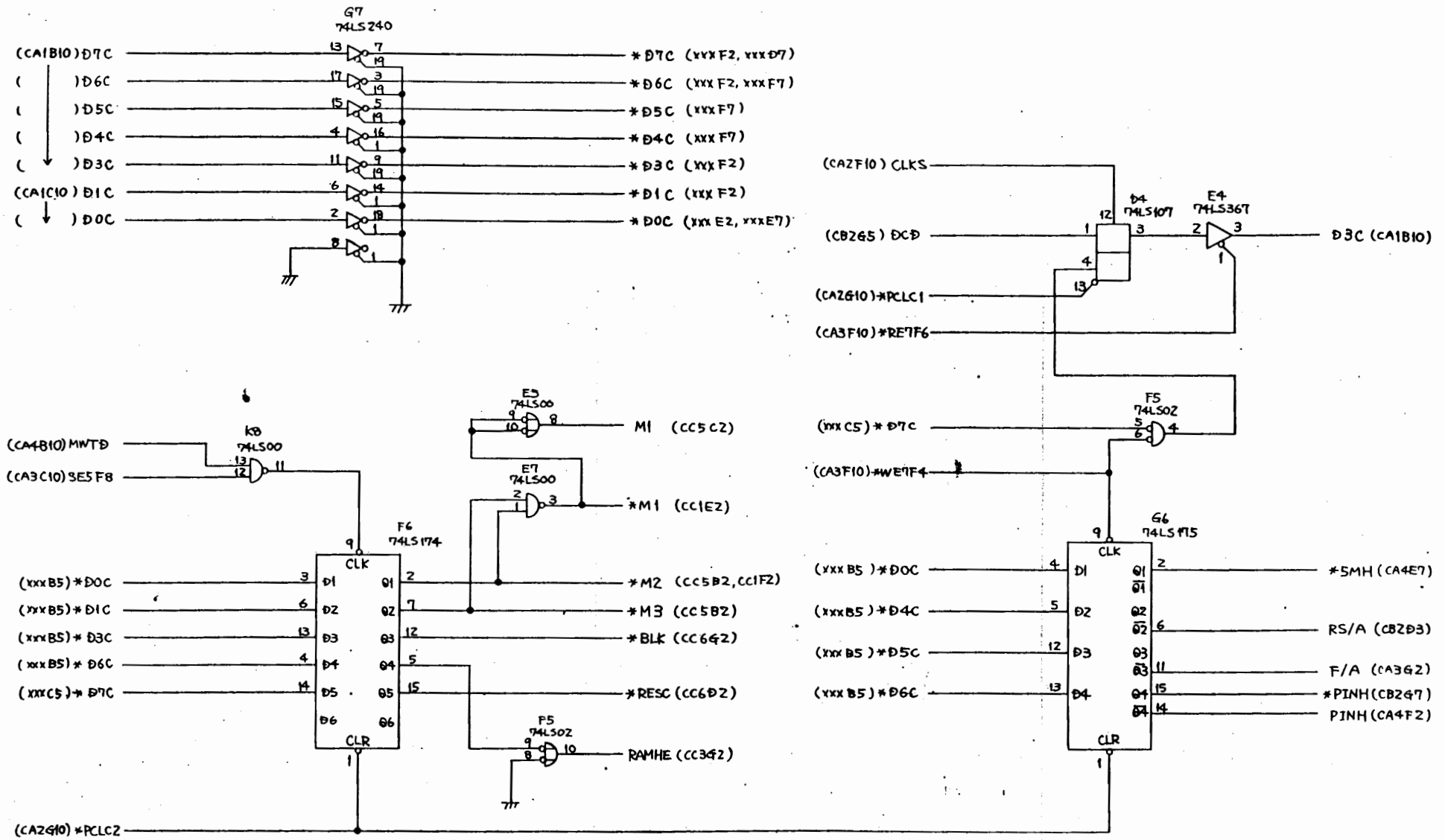
A20C-0008-0430/01


AW1 319436
CCX2
EXCLKO
+5V
330Ω R14
3.3K Ω R16
G4 74S11
G1
XTOT (8MHz)
G2
DV18
Vcc-15
GND-08
G3 74S00
3.3K Ω R11
CLKINH
14
220 Ω R12
EXTCLK1
15
270 Ω R13
(CA1F4) *C8MC
(CA1G4) PCLC
K9 74S00 7437
LOG1
(CB2A7, CA4H2, CC1A7 CC1G8, CC1D8
CB2A7, CA4E2, CA4F9 CC1B9, CC1D8, CA5D2
*CLKC
CA5B2, CC1D2, CC2A2 CC2E2, CC5F2, CC6G10
CLK C
Check Pin
G4 74S11
CLKC (CC1F9, CC2A2, CC2E2)
CLKS (CA5B8, CC1B2) CC1A7
*CLKS
Check Pin
*CLKS (CA4B2, CA4F10, CB2E6) CC1B2
GND
Check Pin
*PCLC1 (CA4F6, CA5C8, CC1F8 CC1B2, CC2C2, CC6E2 CC6G2
*PCLC2 (CA4B2, CA5B2, CA5G2 CB2F6, CC1E2, CC3F2 CC5C2, CC5G2,
Clock, Power ON Clear
14-PIN IC
A20C-0008-0430/01


AW1-319437
(CA1B4) A16C
( ) A15C
( ) A14C
( ) A13C
( ) A12C
(CA1C4) A11C
( ) A10C
( ) A09C
( ) A08C
( ) A07C
(CA1D4) A06C
( ) A05C
( ) A04C
( ) A03C
( ) A02C
( ) A01C
(CA5F10) F/A
(CA4C10) MRDD
(CA4D10)*MWTD
(CA4C10) MWTD
*WDTLE (CC3A2,CC4D2)
*CSRAM (CC1C8)
CSRAM(CC1C2,CC1C8)
CSCRTC (CA4E2)
*CSCRTC(CC6D2,CA4G2)
OE5F4~7
OE5F8~B
SE5F8 (CA5D2)
CSRT (CA4E2)
*CSRT (CB2C3)
OE7F0~3
*SE7F02(CA4F2)
OE7F4~7
*FRE7F2(CB1D5)
*FWE7F0 (CB1D5)
*FWE7F2(CB1B7)
*SE7F46(CA4F2)
*SE7EF
(CA4G2,CB1G3)
*RE7F6 (CA5C8)
*WE7F4 (CA5E8)
+5V
J5 74LS30
J6 74S10
J7 74LS02
J8 74S00
J9 74S138
J10 74S02
J11 74LS155
J12 74LS155
J3 74LS04
ES. 74LS00
Address decoder, D1/D0 Strobe
14-PIN IC
A20C-0008-0430/01


K5 74S174
(CA2E10) *CLKS
(CA2F10) *PCLC2
CLK
CLR
D1 Q1 D2 Q2 D3 Q3 D4 Q4 D5 Q5 D6 Q6
K11 74S04
*MWSYN (CA1C7)
MWSYN (CC1C2) (CC1C8)②
J2 74S04
K4 74LS02
(CA1E4) MRDCC
(CA1F4) MWTCC
K7 74S00
K8 74LS00
CRTCE (CC6C2)
K11, 74S04
MWTD (CA3A8)(CA5E2)②
*MWTD (CA3G2, CB2C3)
*MRDN (CB2C3)
*MRDD (CB1G3)
MRDD (CA3G2, xxxG2)
K6 74S02
(CA3C10) CSCRTC
(CA3D10) CS RT
K10 74S175
(CA2E10) *CLKS
(CA2G10) *PCLC1
J4 7401
EXRDY (CA1F10)
K12 74LS51
(CA5F10) PINH
(CA3D10) *SETF0/2
(CA3E10) *SETF1/3
(CA3F6) *SETEE
(CA3C10) *CSCRTC
(xxxE10) MRDD
J8 74S00
*RDDE (CA1E7)
*EXDEN (CA1F10)
(CA5F10) *SMH
(CA2B10) LOG1
Note) Refer to page 015 in case of Edition 01A.
注) 01A版については015ページ参照のこと。
Read/Write Strobe, EXRDY for USART & CRTC
14-PIN IC
A20C-0008-0430/01
C A 4

AW: 319439 90



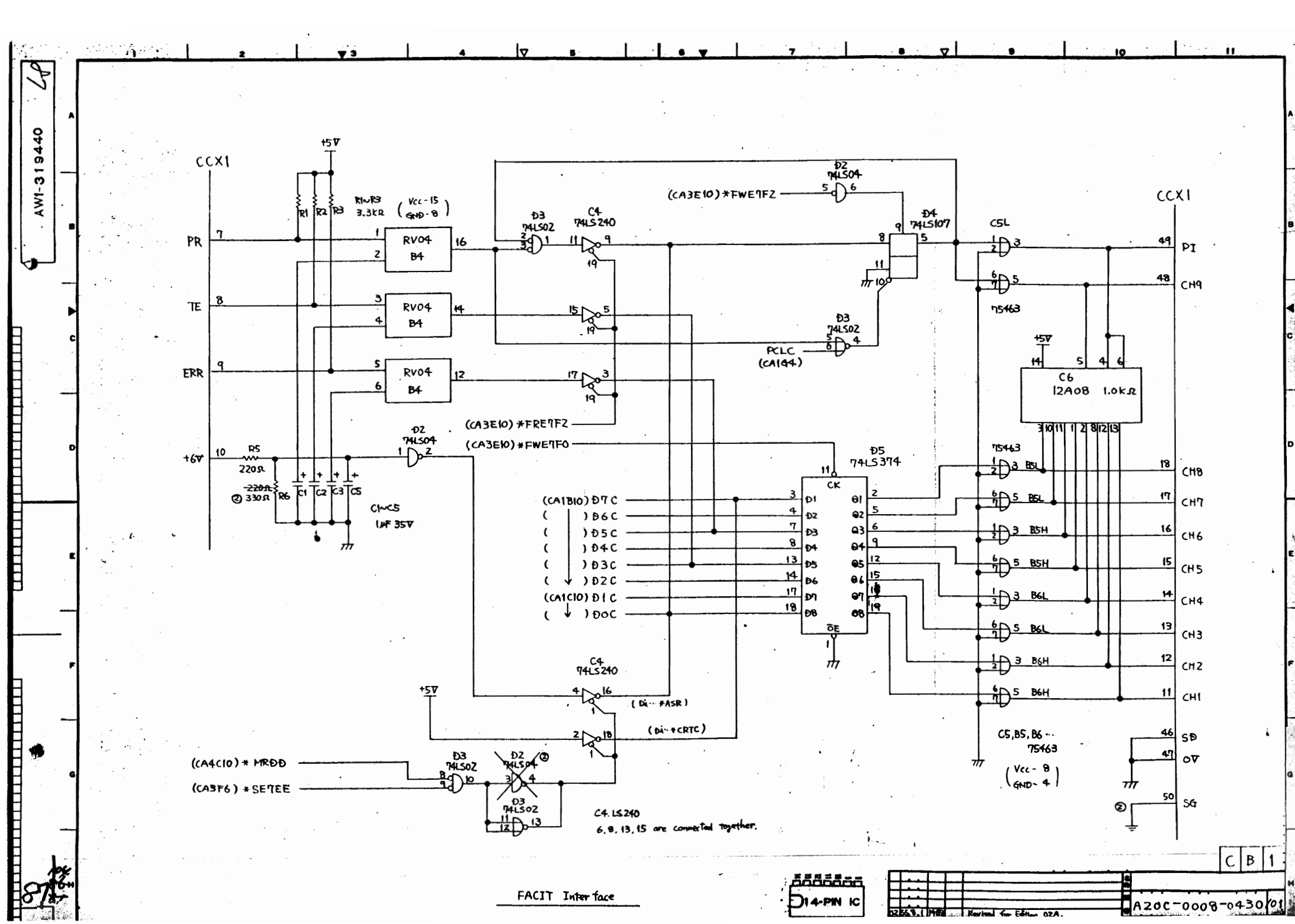
Note) Refer to Page 016 In case of Edition 01A.
注) 01A版については 016 ページ参照のこと。

14-PIN IC

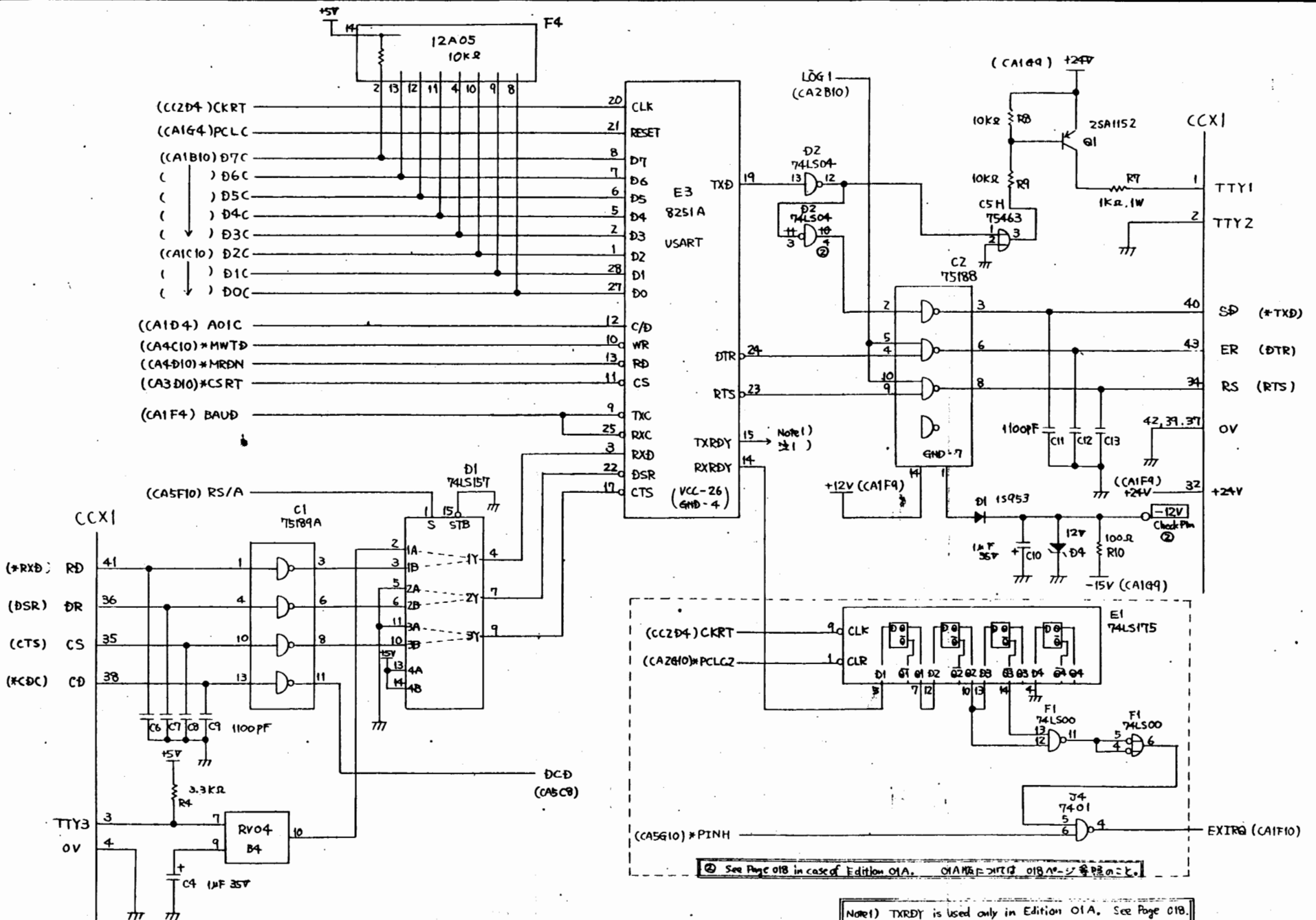
Controll D0 for CRT & Puncher . D1 (*DCD)

C A 5

A20C-0008-0430/01


AW1-319440
CCX1
+5V
R1 R2 R3
R1~R3 3.3kΩ
(Vcc-15 GND-8)
PR
TE
ERR
+6V
RV04 B4
R5 220Ω
R6 330Ω
C1 C2 C3 C5
C1~C5 1μF 35V
D2 74LS04
D3 74LS02
C4 74LS240
D4 74LS107
D5 74LS374
(CA3E10)*FWE7FZ
(CA3E10)*FRE7FZ
(CA3E10)*FWE7F0
PCLC (CA144)
(CA1B10) D7C
( ) D6C
( ) D5C
( ) D4C
( ) D3C
( ) D2C
(CA1C10) D1C
( ) D0C
(Di···FASR)
(Di···FCRTC)
(CA4C10)*MRDD
(CA3F6)*SETEE
C5L
C6 12A08 1.0kΩ
75463
C5,B5,B6··· 75463
(Vcc-8 GND-4)
PI
CH9
CH8
CH7
CH6
CH5
CH4
CH3
CH2
CH1
SD
OV
SG
C4.LS240
6, 8, 13, 15 are connected together.
FACIT Interface
14-PIN IC
A20C-0008-0430/01
Revised for Edition 02A.

AW1-319441

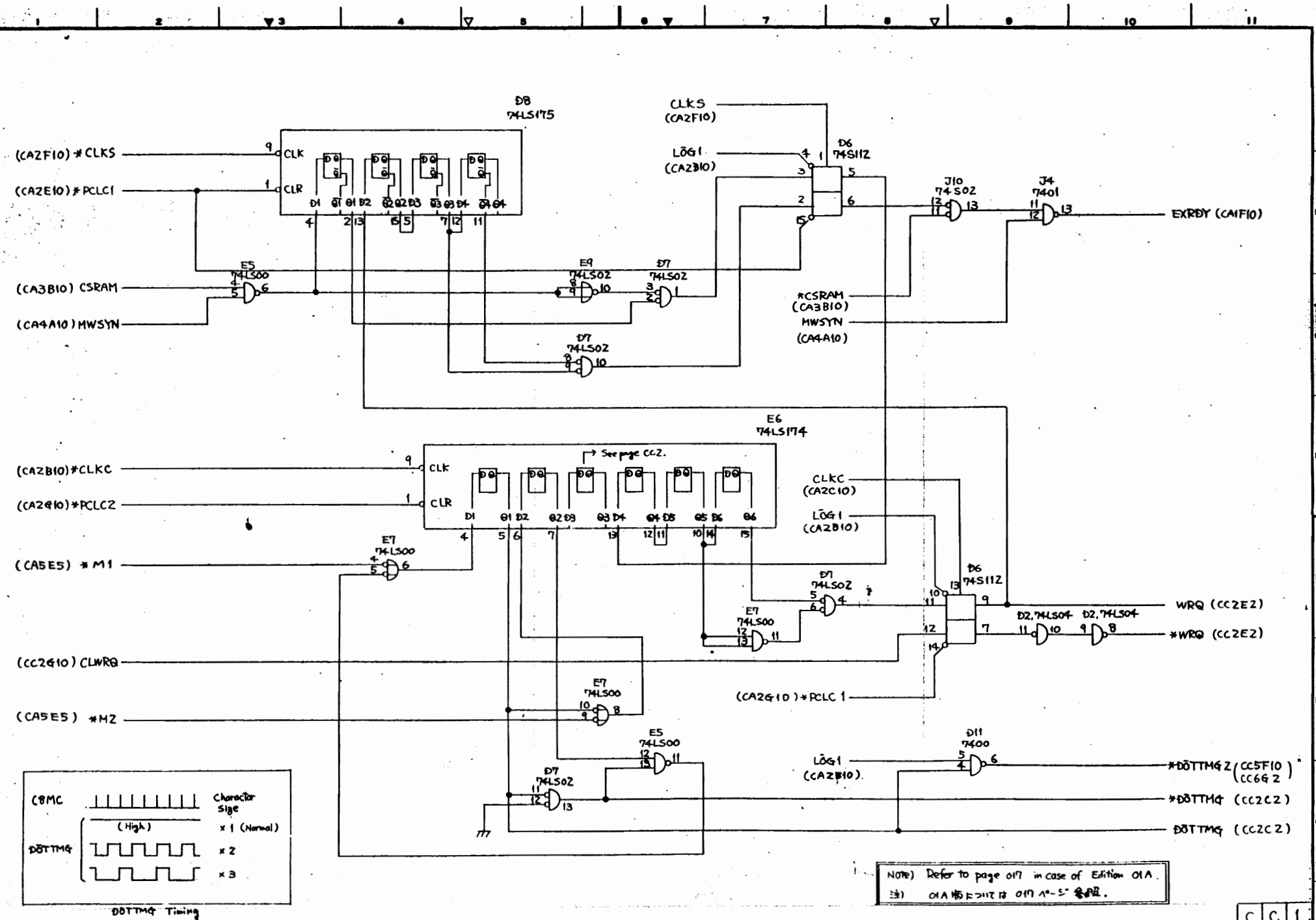


RS232C, ASR33 Interface

14-PIN IC

A20C-0000-0430/01

AW1 319442 6P



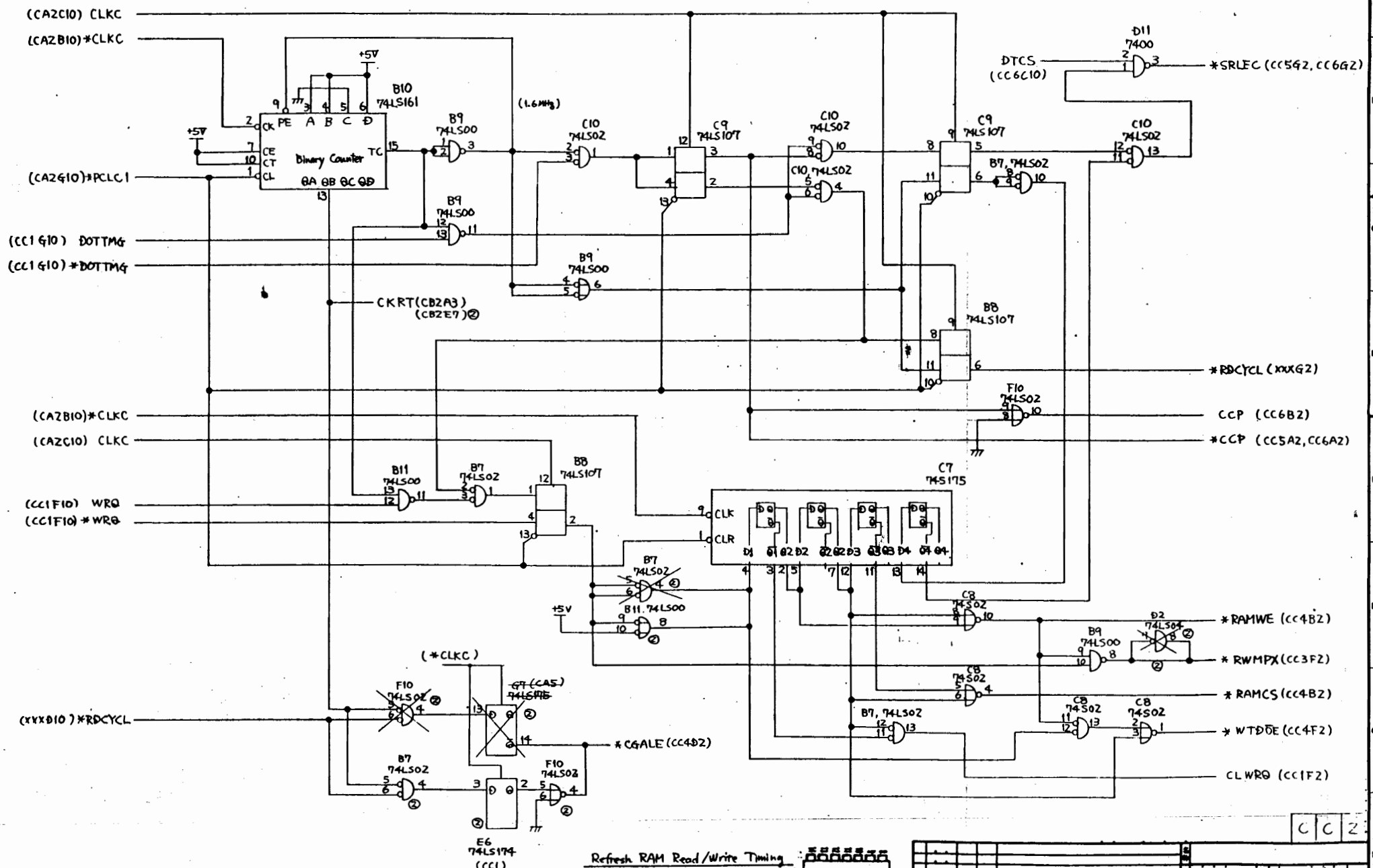
Note) Refer to page 017 in case of Edition 01A.
注) 01A 版については 017 ページ参照.

Write timing and EXRDY for Refresh RAM's

14-PIN IC

C C 1

A20C-0008-0430/01



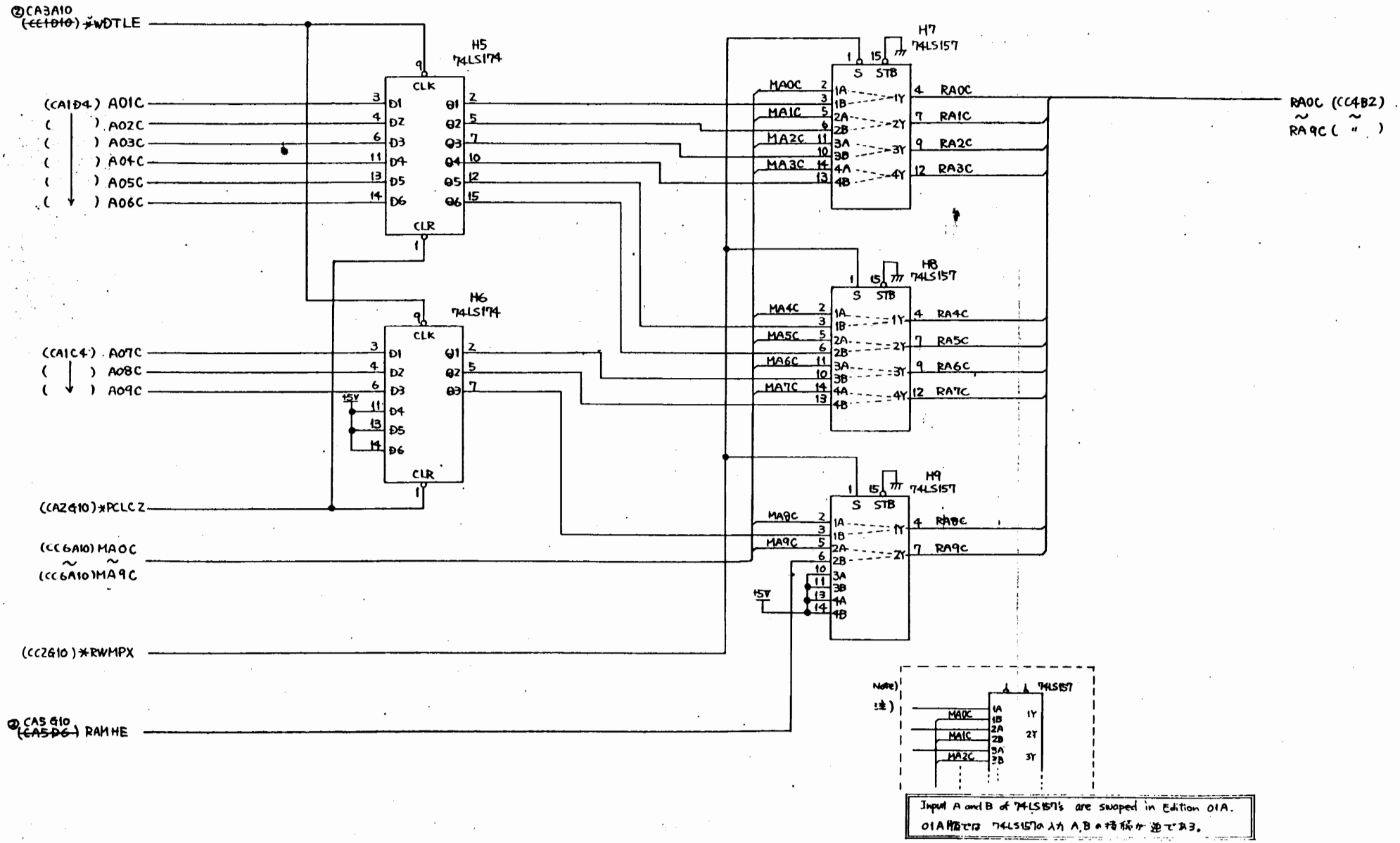
Refresh RAM Read/Write Timing

14-PIN IC

C C 2

A20C-0008-0430/01

AW1-319444 16



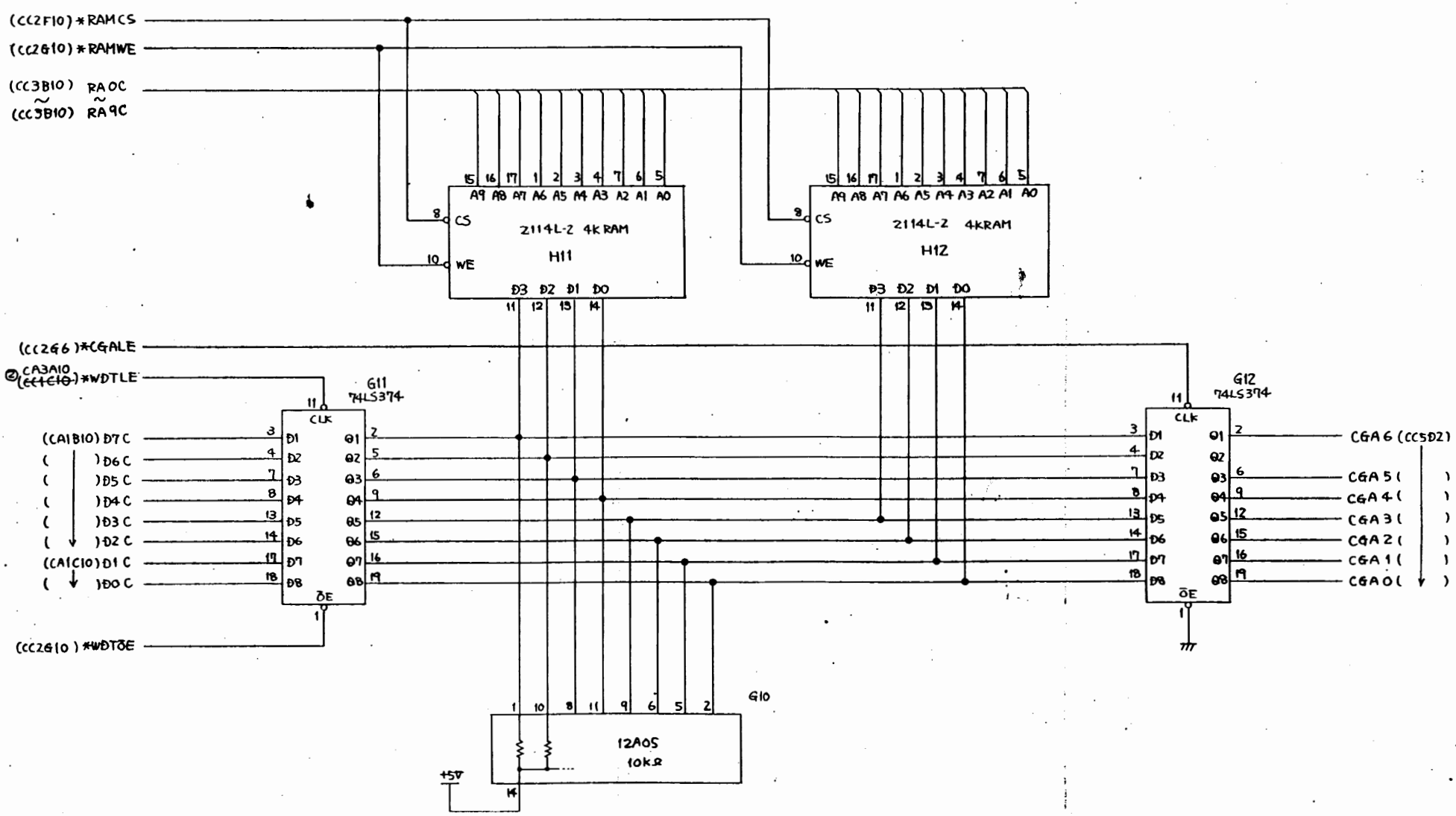
Address multiplexer for Refresh RAM's

14-PIN IC

CC3

A20C-0009-0430/01

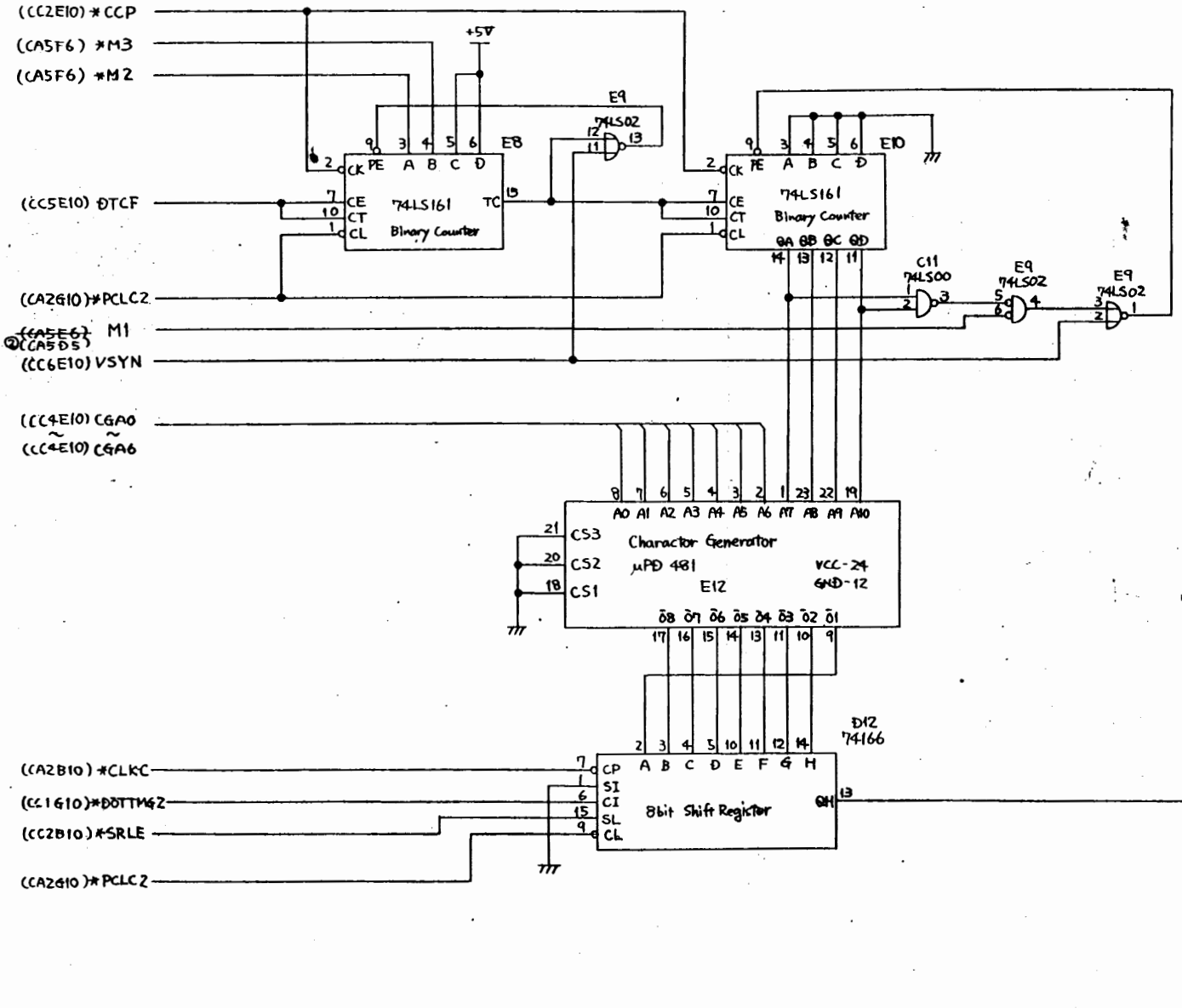
9/12



Refresh RAM's

14-PIN IC

AW1-319446 06

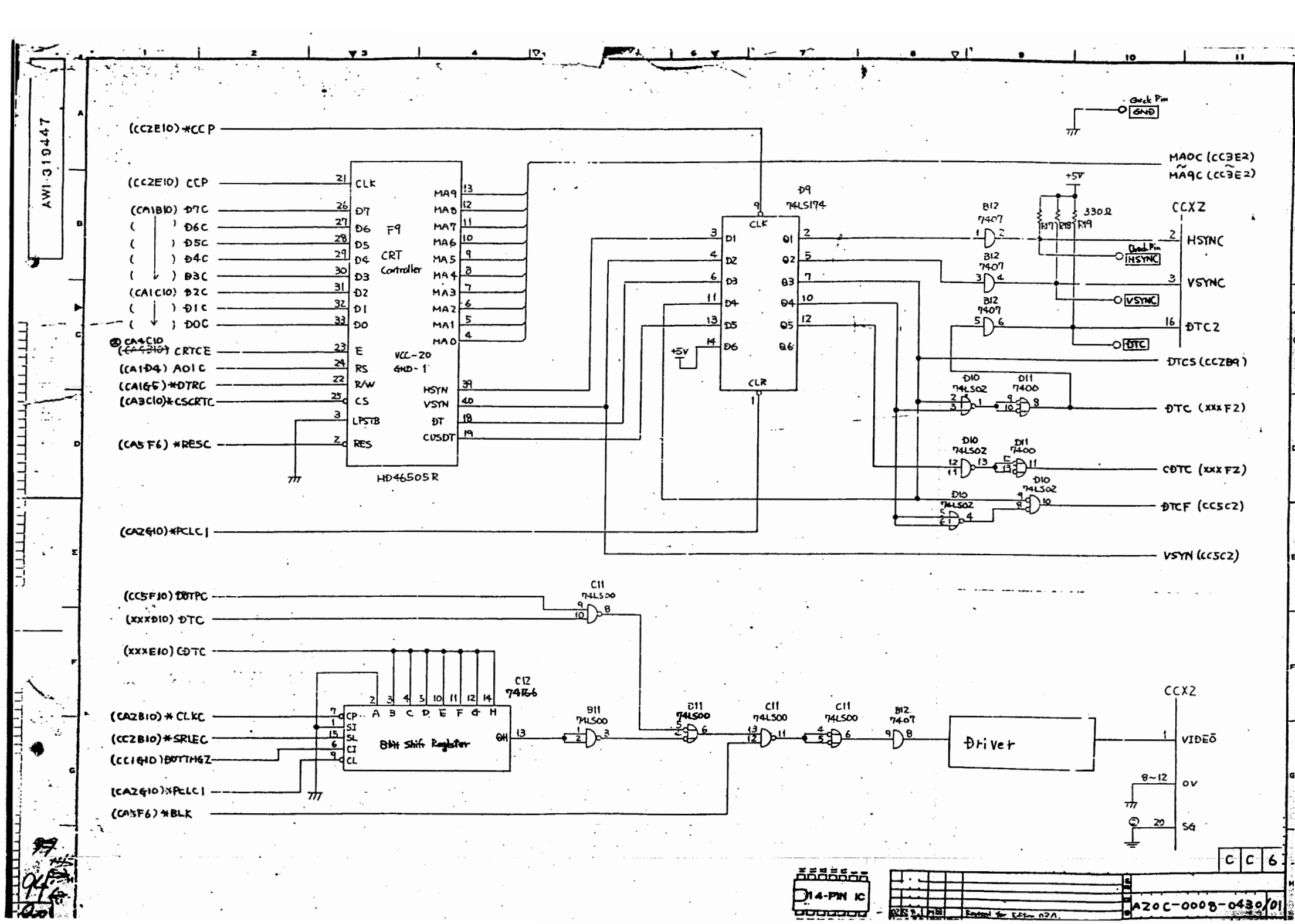


Character generator

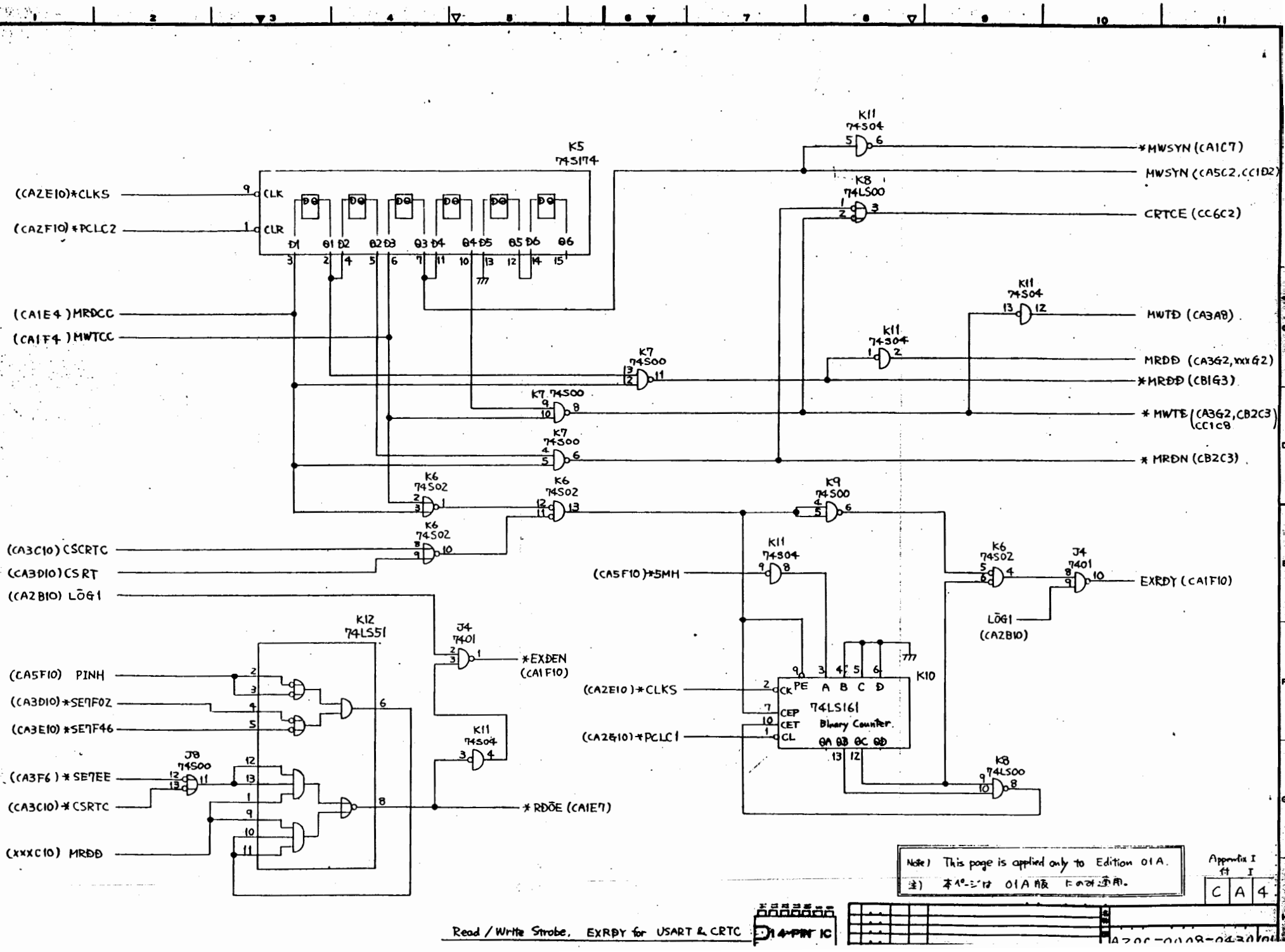
14-PIN IC

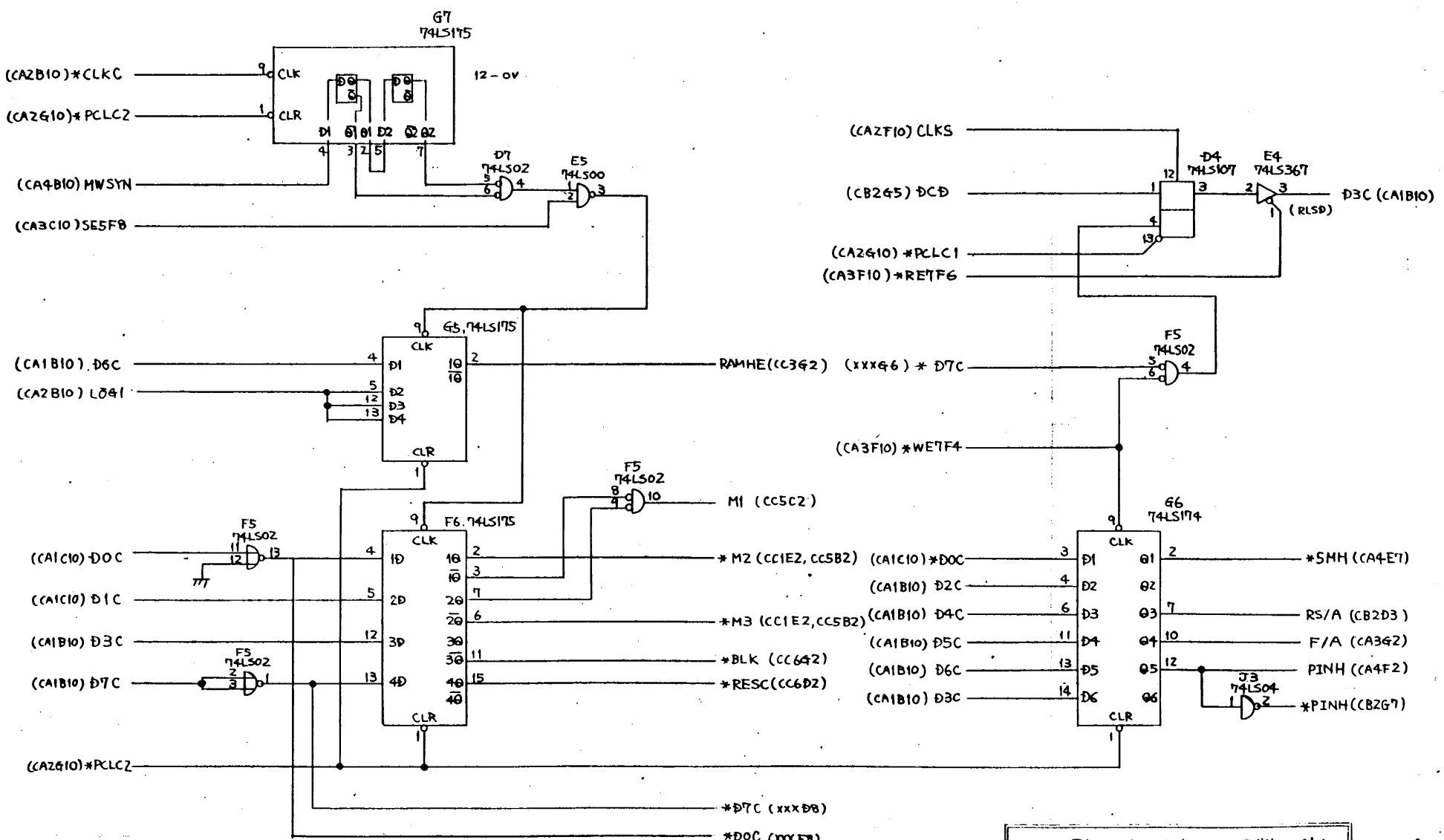
CC5

A20C-0008-0430/01


AW1-319447
(CC2E10)*CCP
(CC2E10) CCP
(CA1B10) D7C
( ) D6C
( ) D5C
( ) D4C
( ) D3C
(CA1C10) D2C
( ) D1C
( ) D0C
(CA4C10) CRTCE
(CA1D4) A01C
(CA1G5)*DTRC
(CA3C10)*CSCRTC
(CA5F6) *RESC
CLK
D7
D6
D5
D4
D3
D2
D1
D0
E
RS
R/W
CS
LPSTB
RES
F9
CRT Controller
VCC-20
GND-1
HD46505R
MA9
MA8
MA7
MA6
MA5
MA4
MA3
MA2
MA1
MA0
HSYN
VSYN
DT
CUSDT
MA0C (CC3E2)
MA9C (CC3E2)
D9
74LS174
CLK
D1
D2
D3
D4
D5
D6
CLR
Q1
Q2
Q3
Q4
Q5
Q6
+5V
330Ω
B12
7407
CCXZ
HSYNC
VSYNC
DTC2
Check Pin
GND
HSYNC
VSYNC
DTC
DTCS (CC2B9)
D10
74LS02
D11
7400
DTC (xxxF2)
CDTC (xxxF2)
DTCF (CC5C2)
(CA2G10)*PCLC1
VSYN (CC5C2)
(CC5F10) DDTPC
(xxxD10) DTC
(xxxE10) CDTC
C11
74LS00
C12
74166
Bit Shift Register
B11
74LS00
(CA2B10)*CLKC
(CC2B10)*SRLEC
(CC1G10) BOTTMGZ
(CA2G10)*PCLC1
(CA5F6)*BLK
Driver
VIDEO
8~12
0V
20
5G
14-PIN IC
A20C-0008-0430/01

AW1-319448


K5 74S174
(CA2E10)*CLKS
(CA2F10)*PCLC2
(CA1E4)MRDCC
(CA1F4)MWTCC
(CA3C10)CSCRTC
(CA3D10)CSRT
(CA2B10) LOG1
K11 74S04
*MWSYN (CA1C7)
MWSYN (CA5C2, CC1D2)
K8 74LS00
CRTCE (CC6C2)
MWTD (CA3A8)
MRDD (CA3G2, xxxG2)
*MRDD (CB1G3)
* MWTE (CA3G2, CB2C3 CC1C8)
* MRDN (CB2C3)
K7 74S00
K6 74S02
K9 74S00
(CA5F10)*5MH
J4 7401
EXRDY (CA1F10)
LOG1 (CA2B10)
K12 74LS51
(CA5F10) PINH
(CA3D10)*SEL F0Z
(CA3E10)*SEL F46
(CA3F6)*SEL EE
(CA3C10)*CSRTC
(xxxC10) MRDD
*EXDEN (CA1F10)
*RDOE (CA1E7)
K10 74LS161 Binary Counter.
(CA2E10)*CLKS
(CA2G10)*PCLC1
Note) This page is applied only to Edition 01A.
注) 本ページは 01A 版 にのみ適用.
Appendix I
C A 4
Read / Write Strobe, EXRDY for USART & CRTC
14-PIN IC
A20C-0008-0430



Note) This page is applied only to Edition 01A.
注) 本ページは 01A版 にのみ適用。

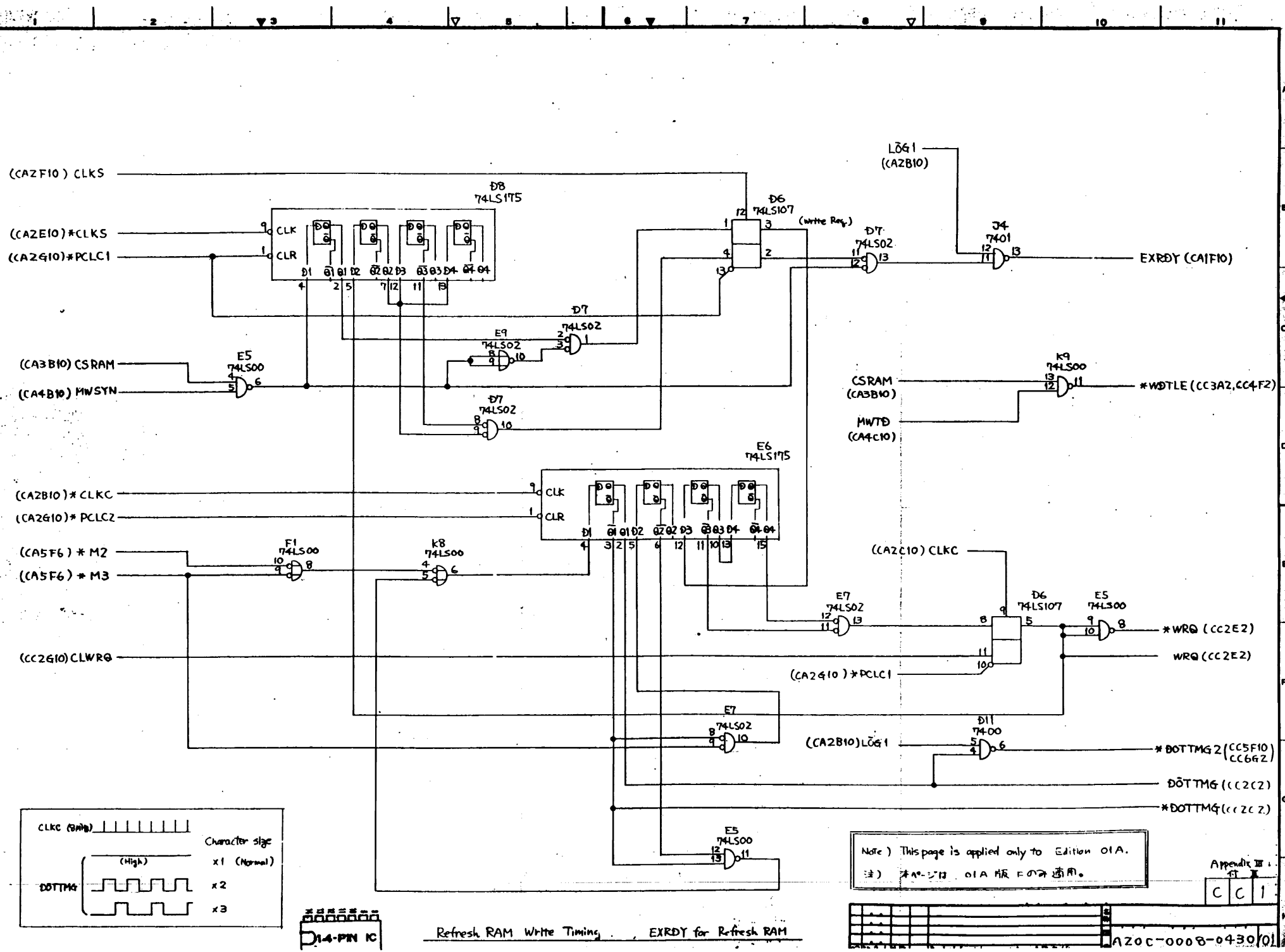
Controll D0 for CRT & Puncher, D1 (RLSD)

14-PIN IC

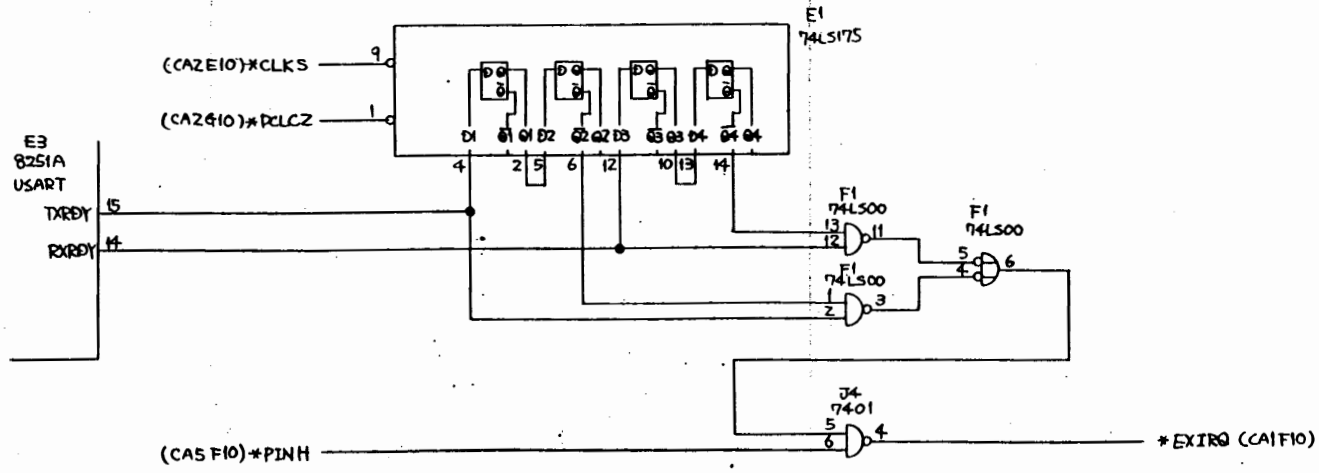
Appendix II

C A 5

A20C-0008-0430/01


(CA2F10) CLKS
(CA2E10)*CLKS
(CA2G10)*PCLC1
(CA3B10) CSRAM
(CA4B10) MWSYN
(CA2B10)*CLKC
(CA2G10)*PCLC2
(CA5F6) * M2
(CA5F6) * M3
(CC2G10) CLWRQ
LŌG1 (CA2B10)
CSRAM (CA3B10)
MWTD (CA4C10)
(CA2C10) CLKC
(CA2G10)*PCLC1
(CA2B10) LŌG1
D8 74LS175
D6 74LS107
(write Reg.)
D7 74LS02
J4 7401
E9 74LS02
E5 74LS00
D7 74LS02
E6 74LS175
F1 74LS00
k8 74LS00
E7 74LS02
k9 74LS00
D6 74LS107
E5 74LS00
E7 74LS02
D11 74-00
E5 74LS00
EXRDY (CA1F10)
*WDTLE (CC3A2, CC4F2)
*WRQ (CC2E2)
WRQ (CC2E2)
*DOTTMG2 (CC5F10 CC6G2)
DOTTMG (CC2C2)
*DOTTMG (CC2C2)
CLKC (5mHz)
DOTTMG
(High)
Character size
x1 (Normal)
x2
x3
14-PIN IC
Refresh RAM Write Timing
EXRDY for Refresh RAM
Note) This page is applied only to Edition 01A.
注) 本ページは 01A 版 のみ適用。
Appendix III
C C 1
A20C-0008-0430 01

AWI 319451



Note) This page is applied only to Edition 01A.

注) 本ページは01A版にのみ適用のこと。

14-PIN IC

Appendix IV

C B 2

A20C-0008-0430