

# service & operation manual



**DE** DATA EAST USA, INC.

780-0026-00

RING KING OPERATION & SERVICE MANUAL

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DATA EAST USA INC.  
470 Needles Street  
San Jose, CA. 95112

## 1. GAME INSPECTION AND SET UP.

This new game is ready to operate upon removal from the shipping carton. However, your careful inspection prior to applying power is highly recommended. Please follow these steps to ensure that your new game has been delivered to you in good condition.

- a. Carefully examine the exterior of the game cabinet for dents, scratches, chips, or broken parts.
- b. Open the coin door with the keys attached to the joystick. Inside the coin door you will find the cashbox door and rear access door keys. Unlock and remove the rear access door. Inspect the following items:
  - \* Check that all plug-in connectors in the game harnessing are firmly plugged in. Replug any connectors found to be loose or unplugged.
  - \* Check that all socketed integrated circuits on the logic PCBs are firmly seated in their sockets.
  - \* Check all major subassemblies (power supply, monitor, and control panel) for secure mounting.
- c. Plug in the game and watch the screen for the attract mode video. Allow 2 full minutes for the monitor to warm up completely. If you have discovered any problems up to this point, contact your distributor immediately.

## 2. POWER SWITCH & FUSE INFORMATION

This game features an on/off switch mounted on the Power Supply assembly. Be certain that the switch is in the OFF position before attempting to remove or repair any components in this game. There are also two fuses located next to the switch. They are labeled with their respective current ratings. These should only be replaced with FAST BLOW fuses of the same current rating.

\* The 3 Amp fuse is on the 115 VAC line. In the event that it should blow, this will remove all power to the game. Check all wiring for proper connections and look for obvious damage to the Monitor, Power Supply, and Logic PCBs before replacing the fuse.

\* The 1 Amp fuse is for the +12 VDC used for the coin door lamps. In the event that it should blow, the coin door lamps will not be illuminated. Check for damaged wires in the coin door before replacing the fuse.

## 2. ADJUSTMENTS & SELECTABLE OPTIONS

A. AUDIO VOLUME. The audio volume is adjustable via a trimpot (VR1) on the Logic PCB. See illustration below for volume control location.

B. POWER SUPPLY. The +5 volts DC supplied by the Regulator on the Power Supply is adjustable to allow for various load conditions. When attempting to adjust the + 5 volts DC, measure the voltage at the Logic PCB, not at the Power Supply. This measurement should be no less than 4.95 vdc, and no greater than 5.05 vdc. Carefully adjust RV01 on the Regulator PCB until the desired voltage is obtained.

C. OPERATOR SELECTABLE OPTIONS. The Operator Selectable Options can be altered by changing the settings of the Dip Switches found on the Logic PCB. Table 1 and Table 2 outline the available options.

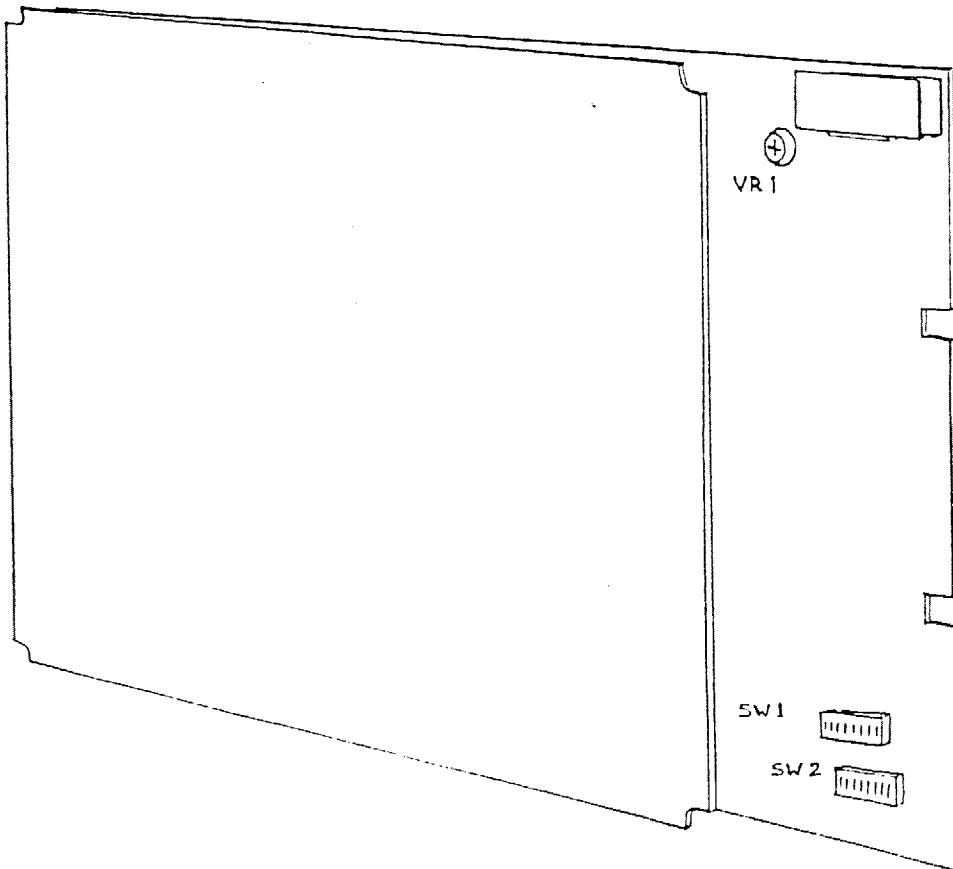


TABLE 1

Dip Switch 1		1	2	3	4	5	6	7	8
REPLAY	NONE							OFF	OFF
	70,000							ON	OFF
	100,000							OFF	ON
	150,000							ON	ON
ATTRACT MODE	SOUND							OFF	
	NO SOUND							ON	
DIFFICULTY LEVEL 2 PLAYER	EASY				OFF	OFF			
	NORMAL				OFF	ON			
	DIFFICULT				ON	OFF			
	VERY HARD				ON	ON			
CABINET STYLE	TABLE			OFF					
	UPRIGHT			ON					
MODE	GAME MODE	OFF							
	DIAGNOSTIC MODE	ON							

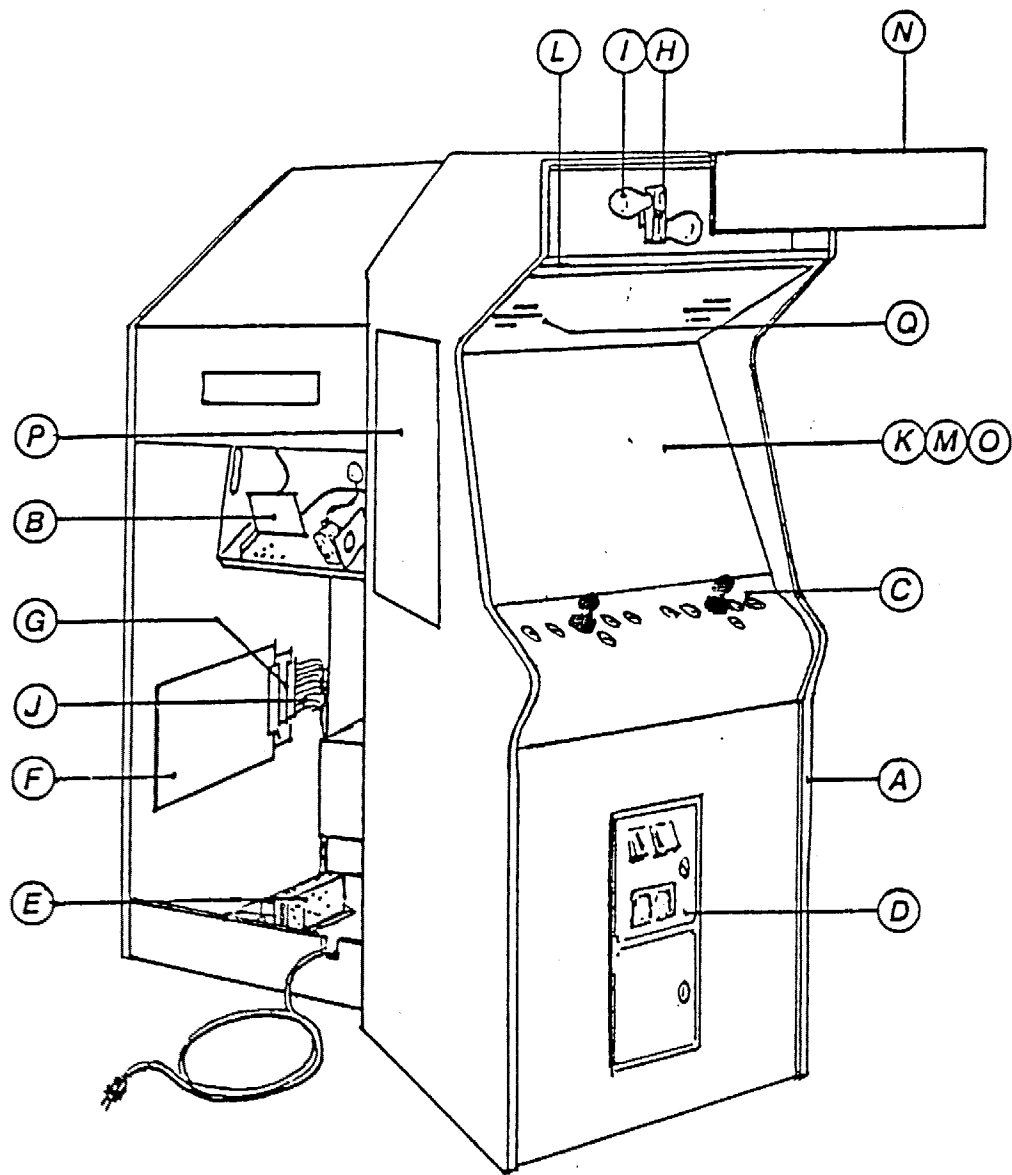
TABLE 2

Dip Switch 2		1	2	3	4	5	6	7	8
1 COIN	1 CREDIT							OFF	OFF
1 COIN	2 CREDIT							OFF	ON
1 COIN	3 CREDIT							ON	OFF
2 COIN	1 CREDIT							ON	ON
1 COIN	1 CREDIT					OFF	OFF		
1 COIN	2 CREDIT					OFF	ON		
1 COIN	3 CREDIT					ON	OFF		
2 COIN	1 CREDIT					ON	ON		
DIFFICULTY LEVEL 1 PLAYER	EASY			OFF	OFF				
	NORMAL			ON	OFF				
	DIFFICULT			OFF	ON				
	VERY HARD			ON	ON				
BOXING MATCH	2 WIN, END		OFF						
	1 WIN, END		ON						
MODE	GAME MODE	OFF							
	FREEZE MODE	ON							

4. PARTS BREAKDOWN

A. FINAL ASSEMBLY, SHOOTOUT

A	CABINET ASSY, EMPTY.....	365-0001-00
B	MONITOR ASSY, HORIZONTAL.....	510-0005-00
C	CONTROL PANEL ASSY, RING KING.....	510-0043-00
D	COIN DOOR ASSY.....	510-0004-00
E	POWER SUPPLY ASSY.....	510-0002-00
F	PCB ASSY, RING KING.....	510-0059-00
G	PCB ASSY, EMI FILTER DE-0209.....	520-0016-00
H	DUAL LAMPHOLDER ASSY.....	170-0002-00
I	LAMP, INCANDESCENT 40W.....	165-0004-00
J	HARNESS ASSY, MAIN.....	036-0035-00
K	MONITOR BEZEL.....	380-0002-00
L	PLEX RETAINER.....	535-0009-00
M	PLEX, DISPLAY, CLEAR.....	660-0001-00
N	PLEX, MARQUEE, RING KING.....	830-0015-00
O	UNDERLAY CARD, DISPLAY, RING KING.....	810-0009-00
P	SIDE DECAL, RING KING.....	820-0014-00
Q	SPEAKER, 6 X 9 INCH OVAL.....	031-0001-00



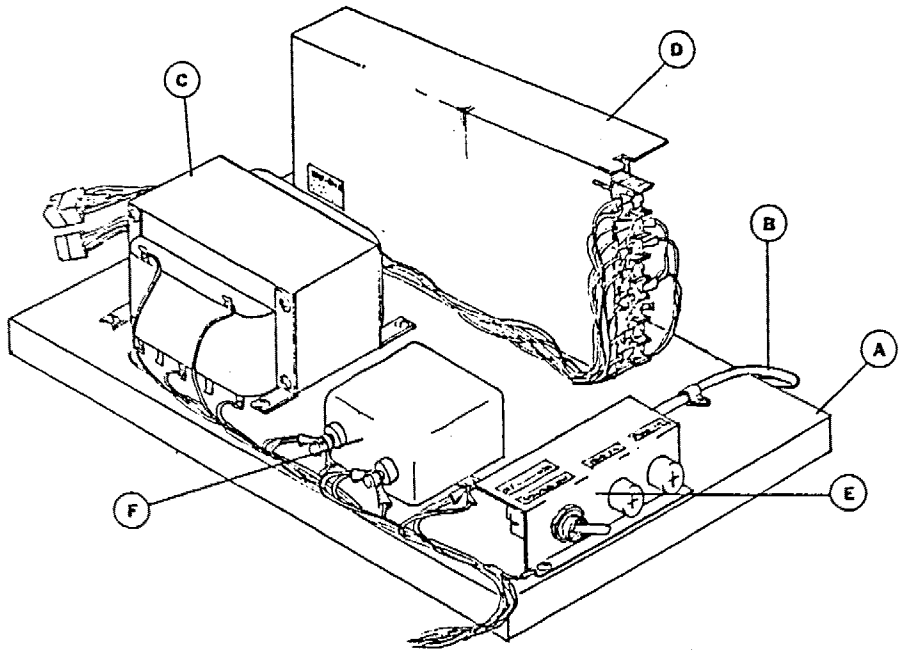
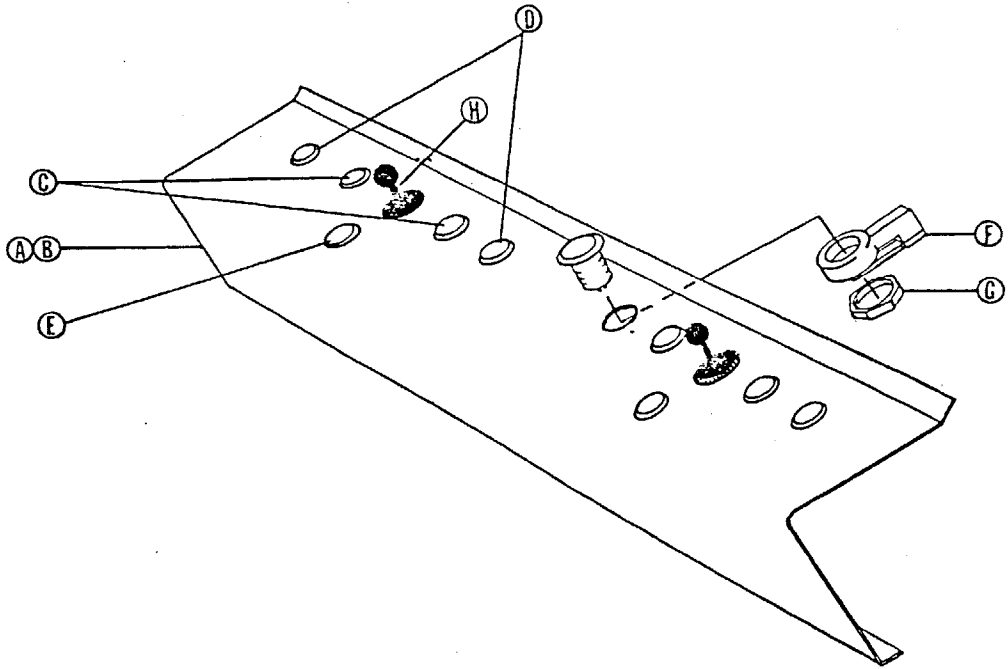
B. CONTROL PANEL ASSEMBLY

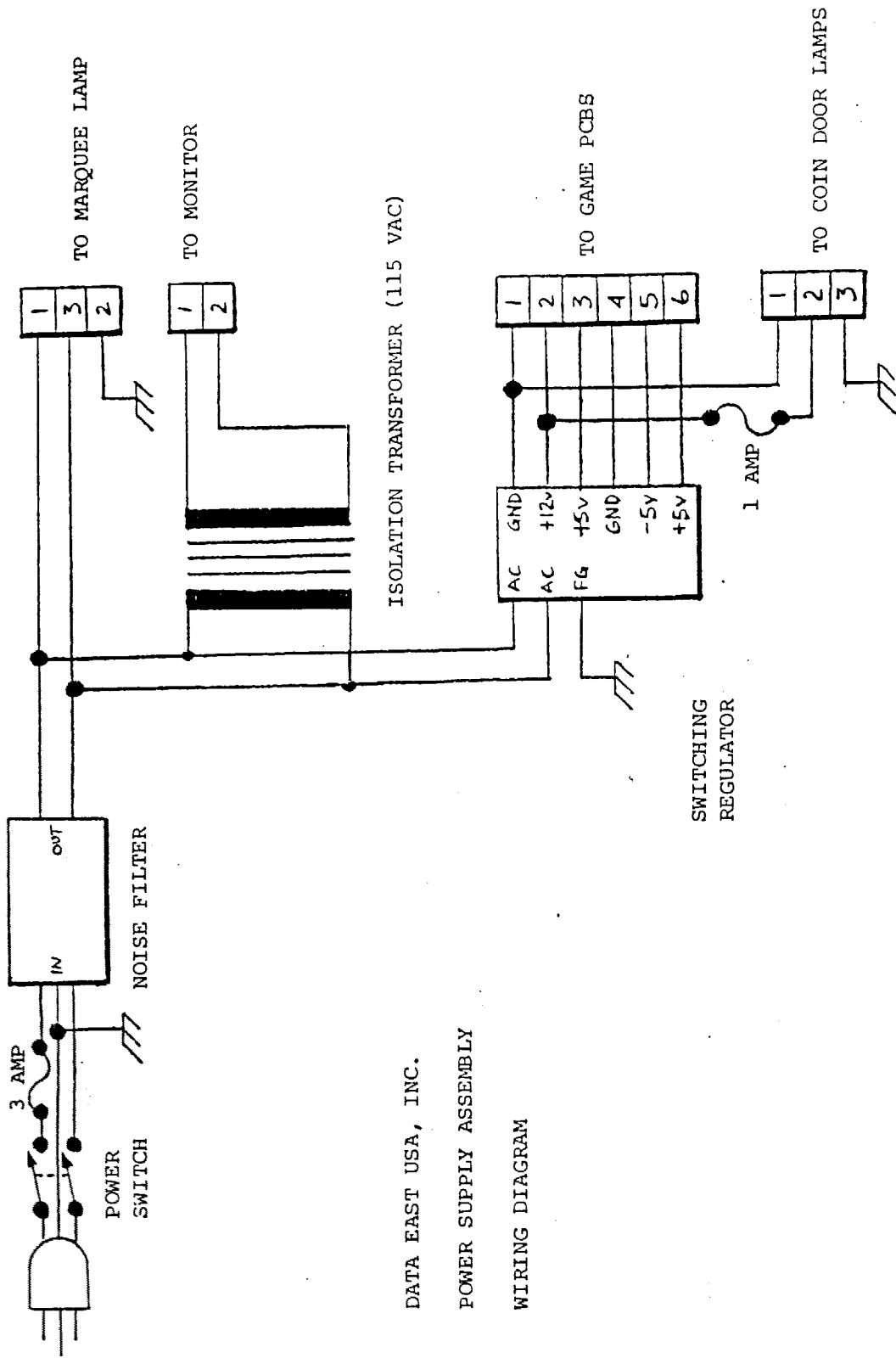
A	CONTROL PANEL, BARE.....	535-0026-00
B	CONTROL PANEL OVERLAY, RING KING.....	800-0015-00
C	PUSHBUTTON, SHORT, SOLID, RED.....	350-0001-02
D	PUSHBUTTON, SHORT, SOLID, BLU.....	350-0001-06
E	PUSHBUTTON, SHORT, SOLID, WHT.....	350-0001-09
F	PUSHBUTTON HOLDER W/LEAF SWITCH.....	185-0001-00
G	PAL NUT.....	240-0001-00
H	JOYSTICK ASSY, 4 WAY.....	450-0002-00

C. POWER SUPPLY ASSEMBLY

A	POWER SUPPLY CHASSIS, WOOD.....	515-0003-00
B	POWER CORD ASSY.....	515-0002-00
C	TRANSFORMER, ISOLATION.....	010-0001-00
D	SWITCHING REGULATOR, KAGA.....	510-0007-00
E	SWITCH BRACKET ASSY.....	515-0004-00
F	NOISE FILTER.....	150-0001-00



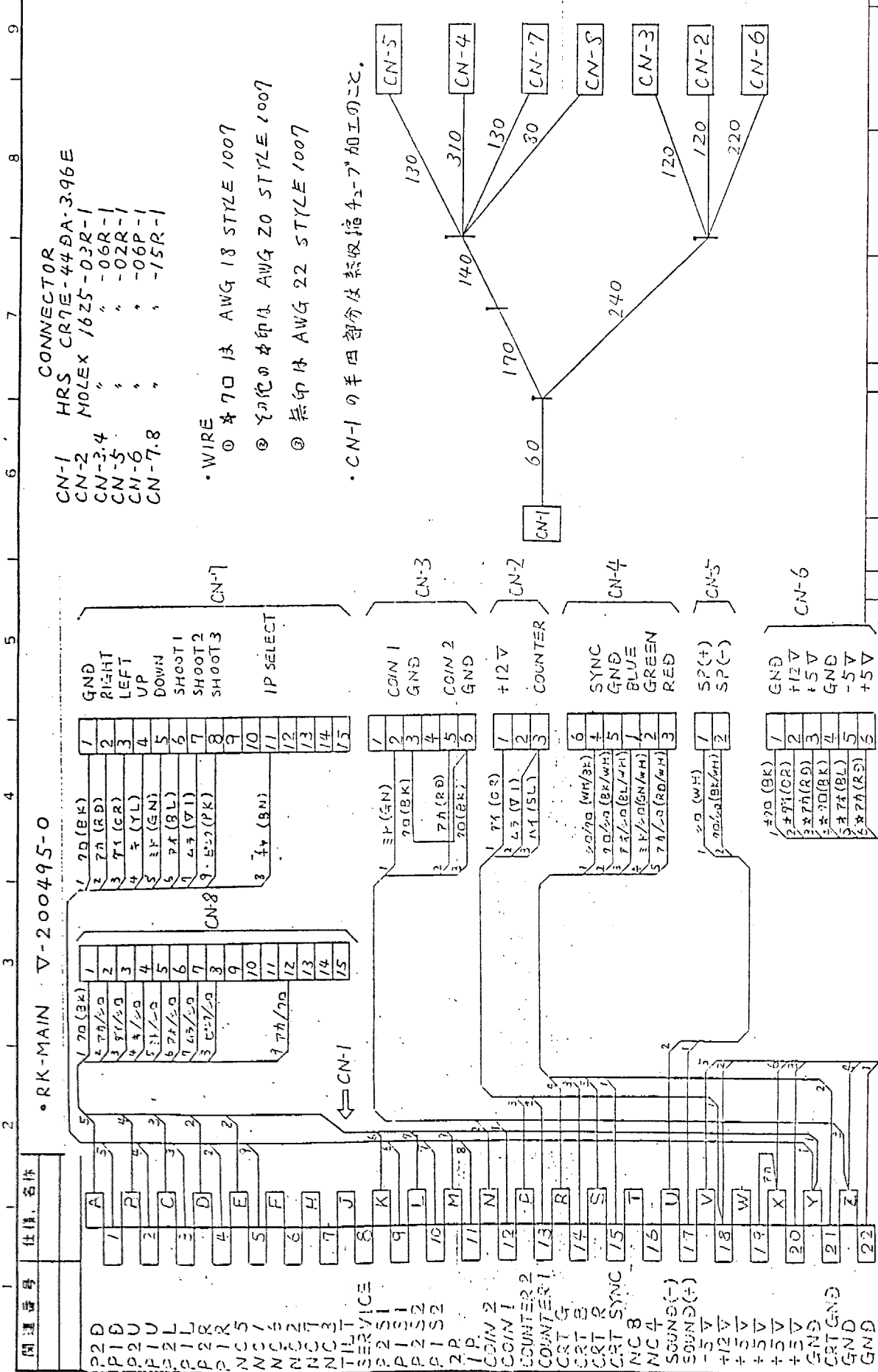




DATA EAST USA, INC.

POWER SUPPLY ASSEMBLY

WIRING DIAGRAM



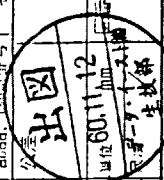
• RK-MAIN V-200495-0

CONNECTOR  
 CN-1 HRS CR7E-44DA-3.96E  
 CN-2 MOLEX 1625-03R-1  
 CN-3-4 " " -06R-1  
 CN-5 " " -02R-1  
 CN-6 " " -06P-1  
 CN-7.8 " " -15R-1

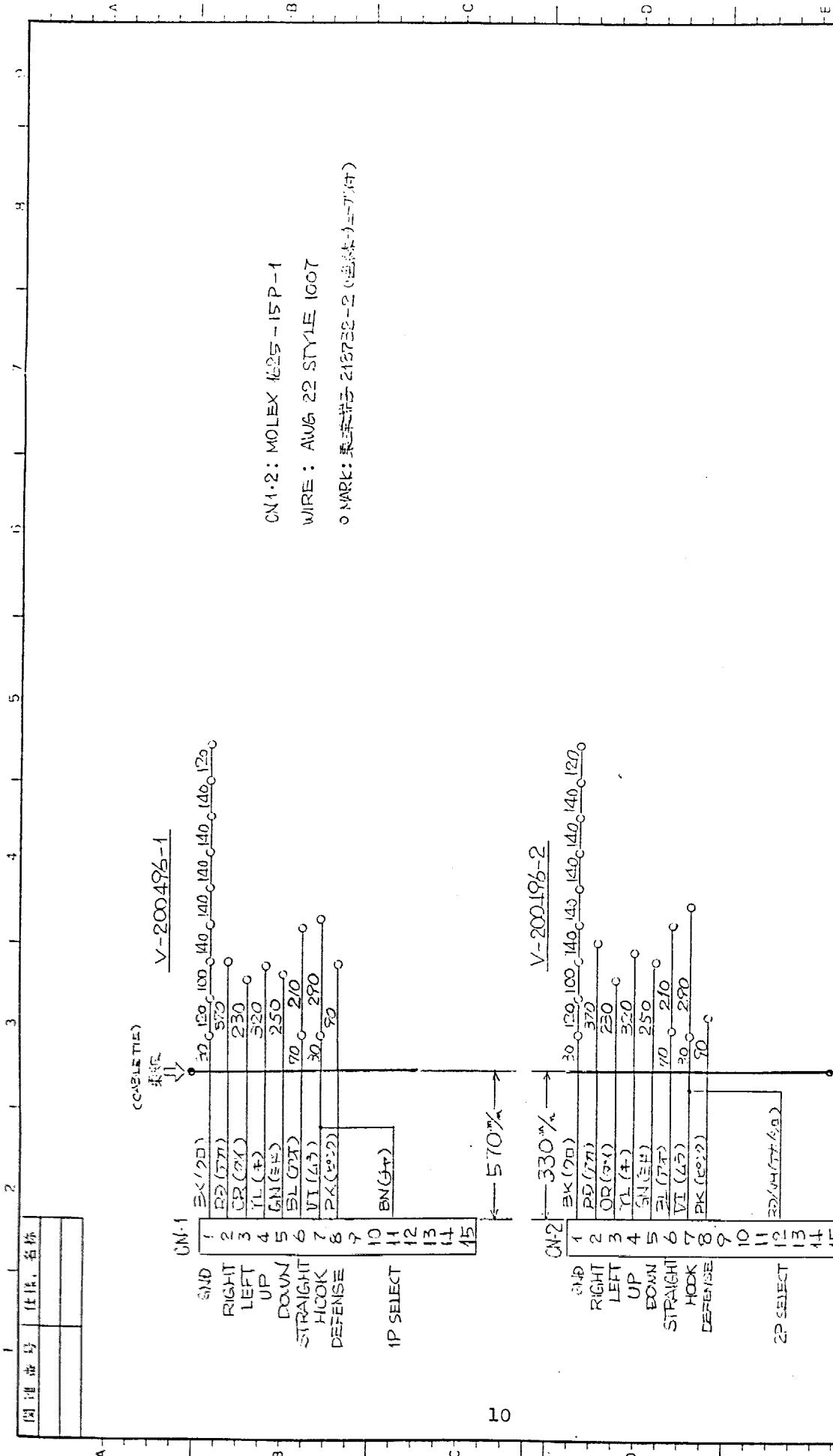
• WIRE

- ★70は AWG 18 STYLE 1007
- ★印の★印は AWG 20 STYLE 1007
- ★印は AWG 22 STYLE 1007
- CN-1の平田部分は熱収縮チューブ加工のこと。

図番	100	100	100	100	100	100	100	100
記号	100	100	100	100	100	100	100	100
材料	100	100	100	100	100	100	100	100
改訂	100	100	100	100	100	100	100	100
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所	100	100	100	100	100	100	100	100
部番	100	100	100	100	100	100	100	100
部品名	100	100	100	100	100	100	100	100
仕様	100	100	100	100	100	100	100	100
材料	100	100	100	100	100	100	100	100
備考	100	100	100	100	100	100	100	100



RING KING PLYR vs PUR  
 MAIN HARNESS  
 K-30249-0



CN1-2: MOLEX 425-15P-1  
 WIRE : AUG 22 STYLE 1007  
 MARK: 束ね番号 213732-2 (束ね-番号付)

管理番号	仕様, 名称

10

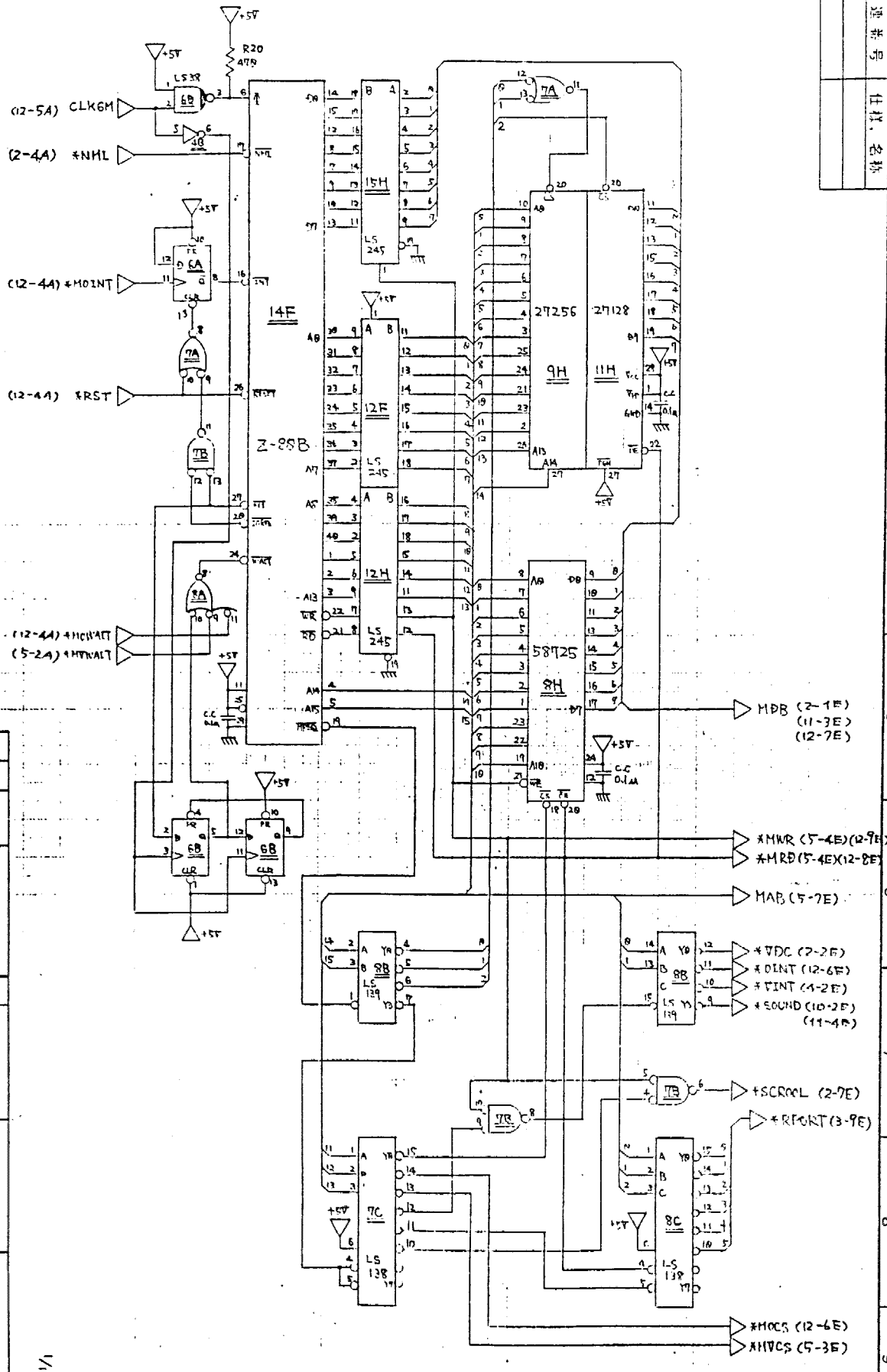
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								K-30249-0

第3角法

記号

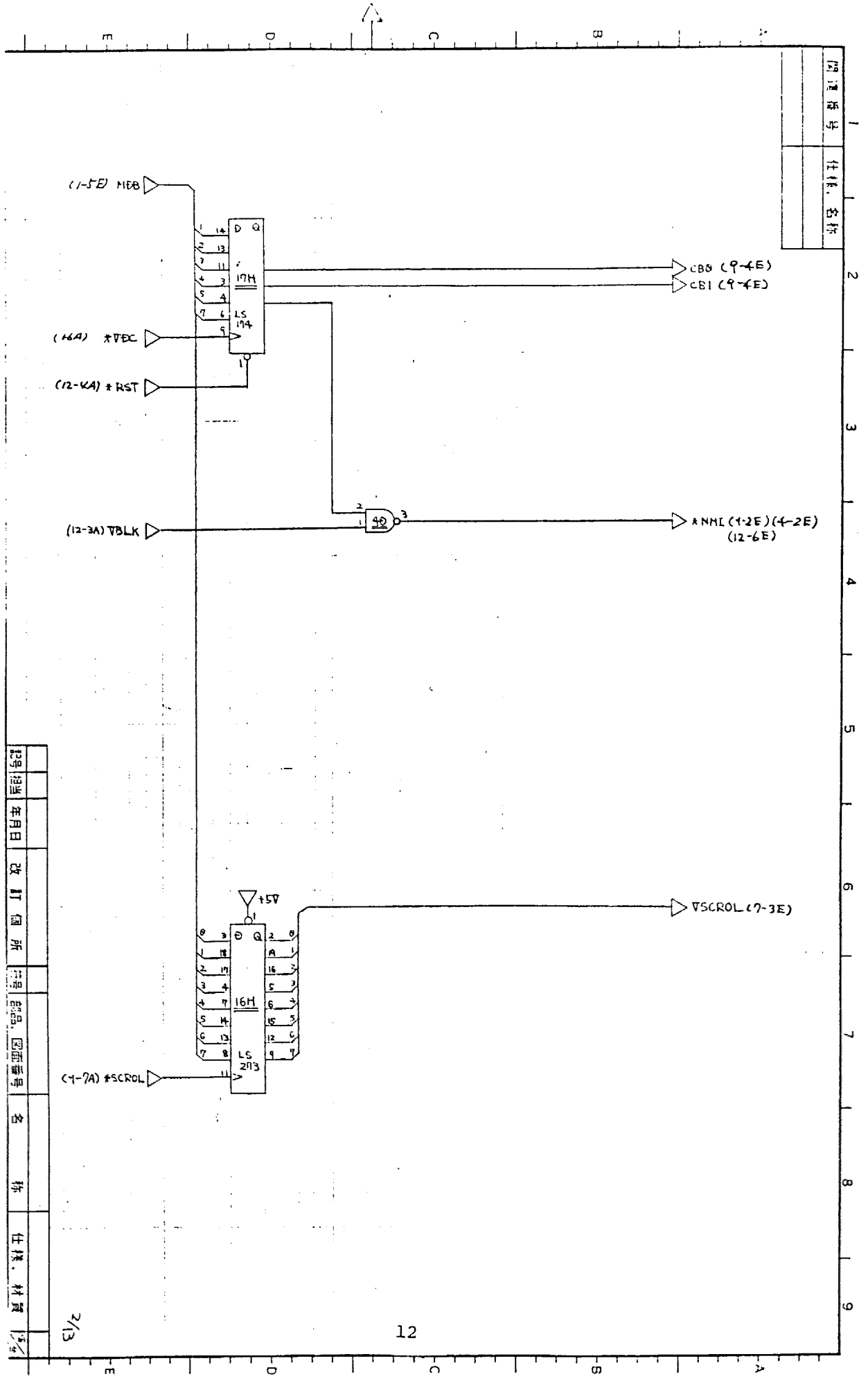
データイト株式会社

1	門連番号	仕様, 名称
2		
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設計	年月日	改訂	場所	行	部	品	図面番	名	務	仕様	材質

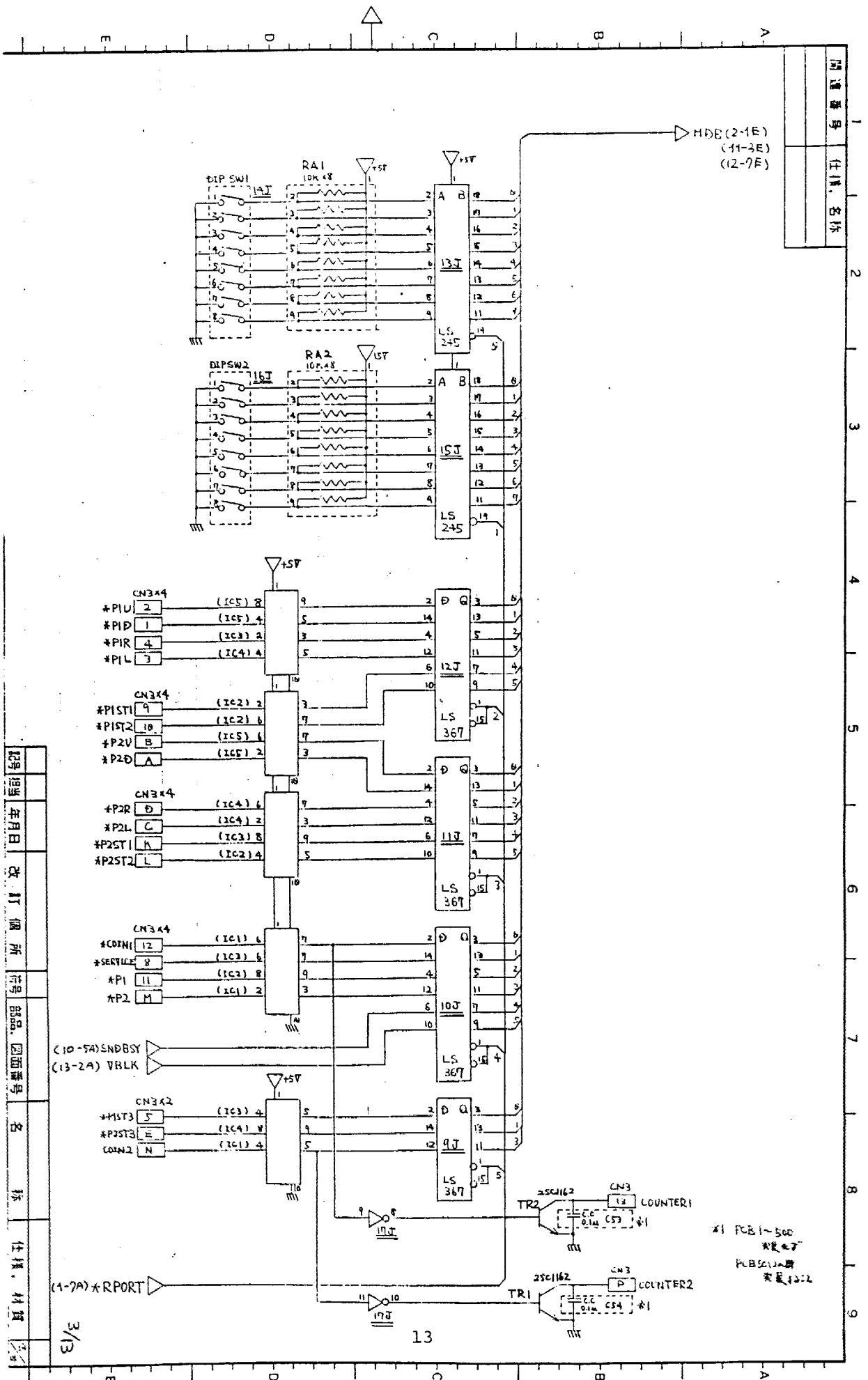
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開運番号	任務名称

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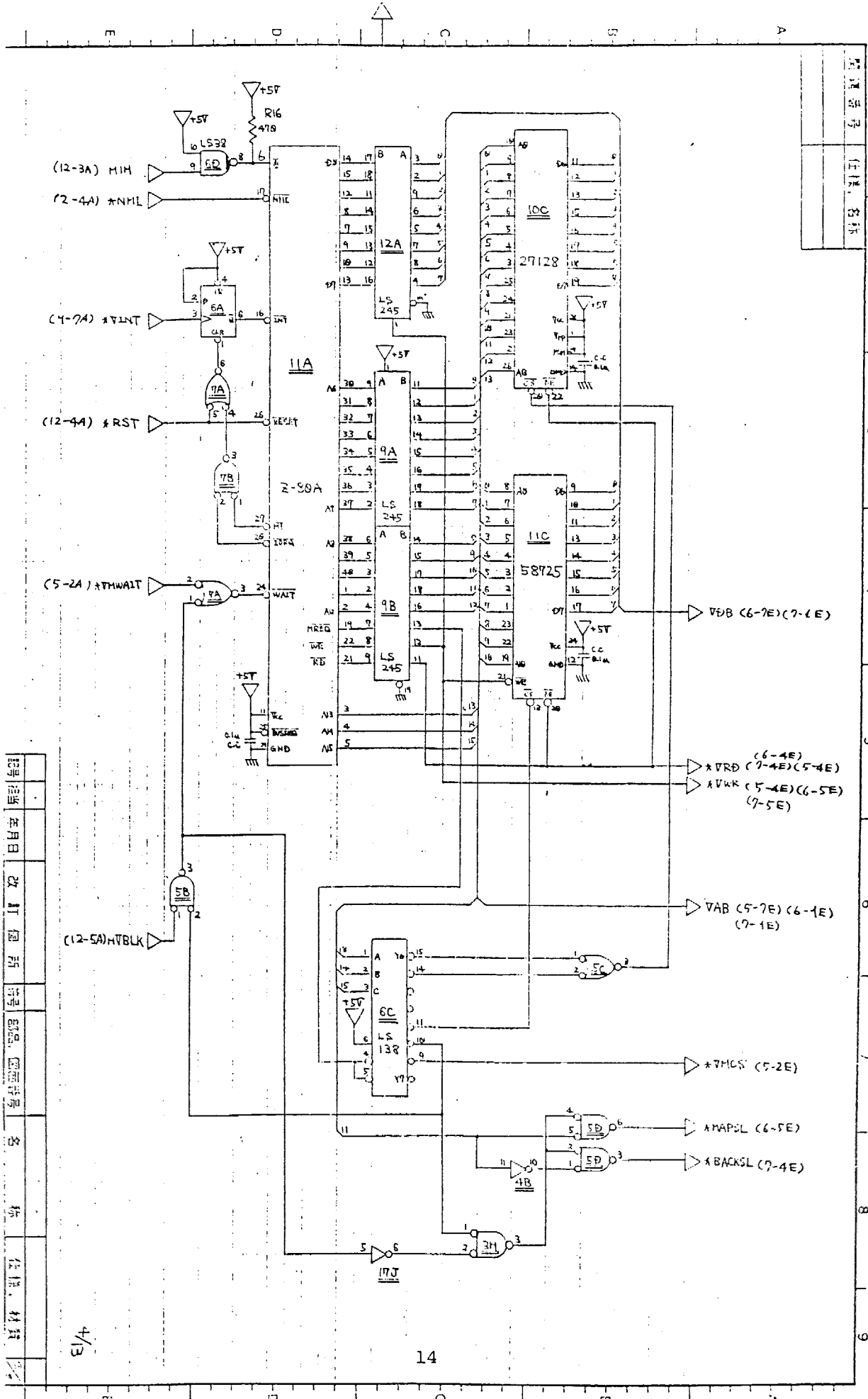
2/3



记录日期	年月日	设计	审核	符号	部品	版面	图号	名称	位置	材料
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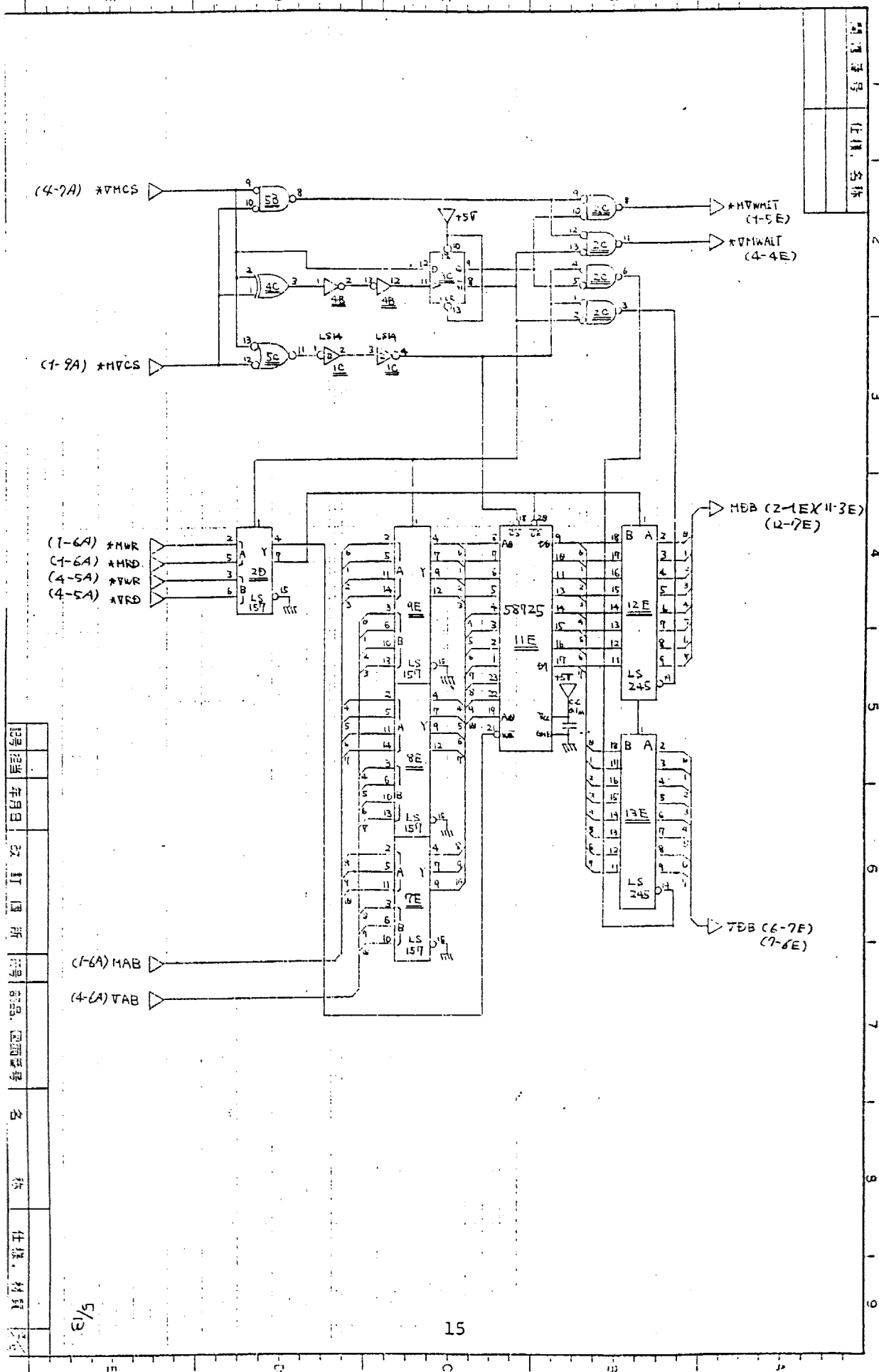
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\*原图  
PCB501A  
\*原图  
\*原图



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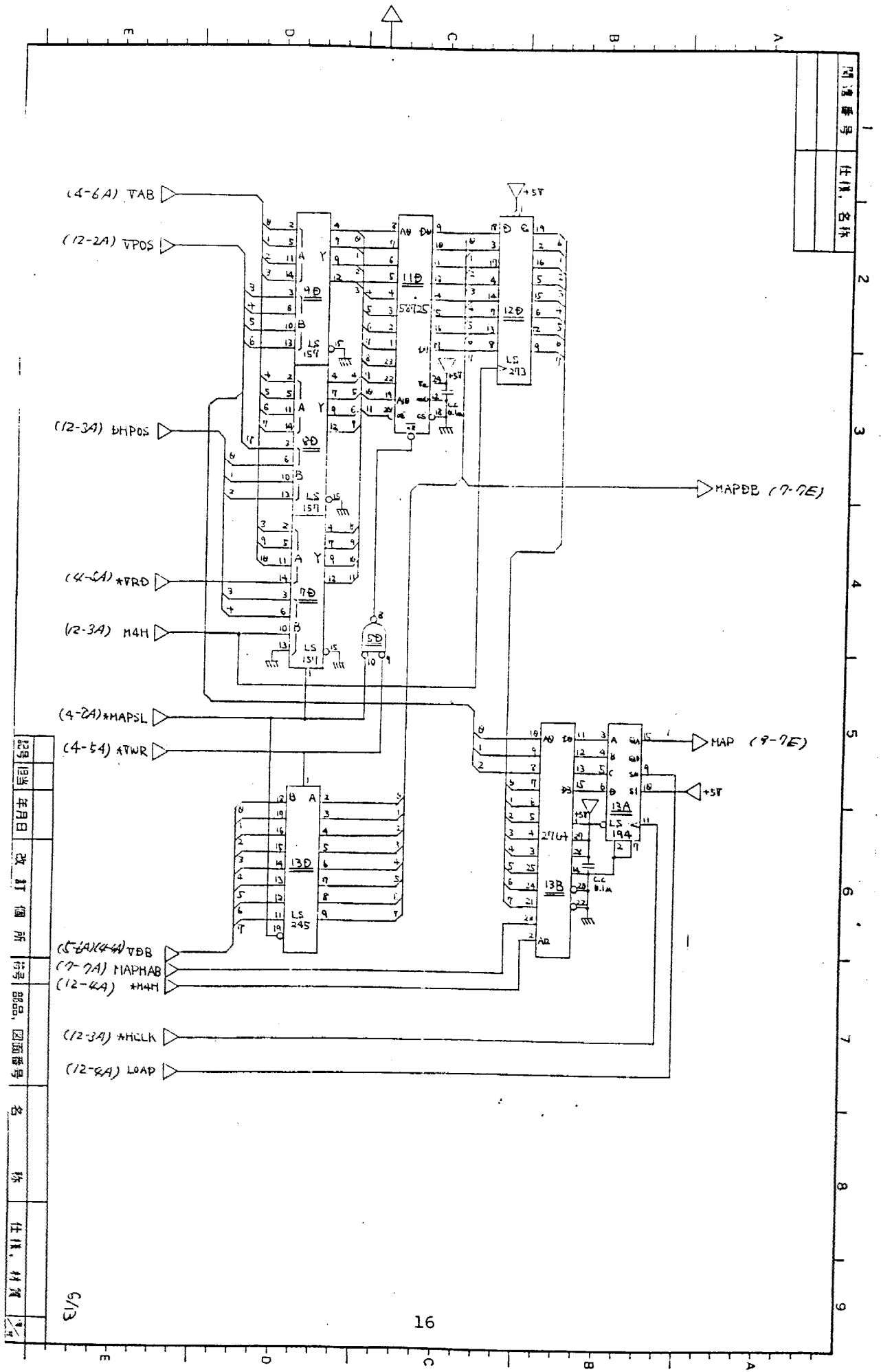




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图号	15
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日期	
设计	
审核	
数量	
规格	
材料	

E/S



图号	日期	设计	审核	修改	数量	零件	图号	名称	规格	数量

(4-6A) VAB

(12-2A) VPOS

(12-3A) bHPOS

(4-5A) \*VRD

(12-3A) M4H

(4-2A) \*MAPSL

(4-5A) \*TWR

(5-6A)(4-4) VDB

(7-7A) MAPHAB

(12-4A) \*M4H

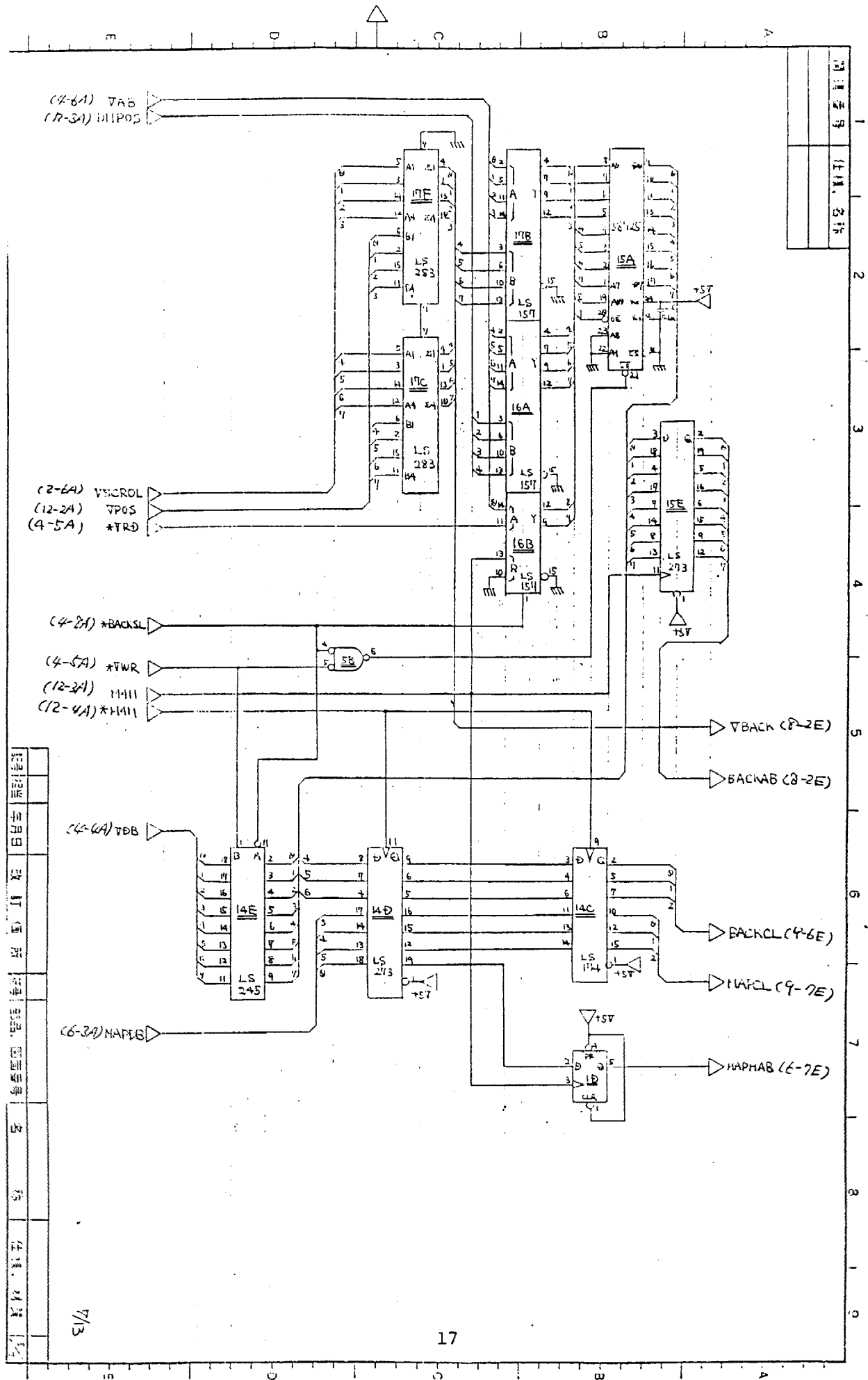
(12-3A) \*HCLK

(12-6A) LOAD

MAPDB (7-7E)

MAP (9-7E)

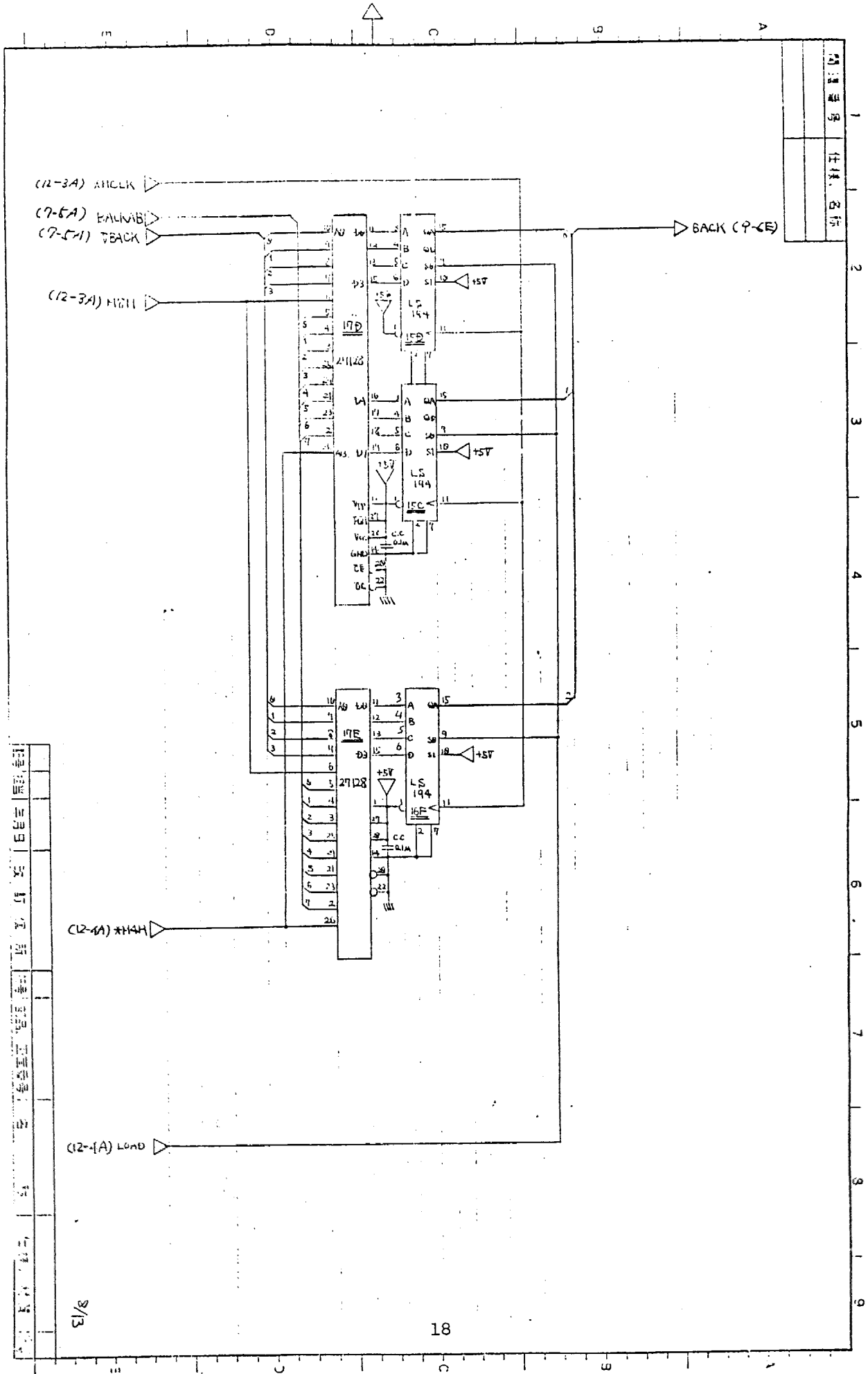
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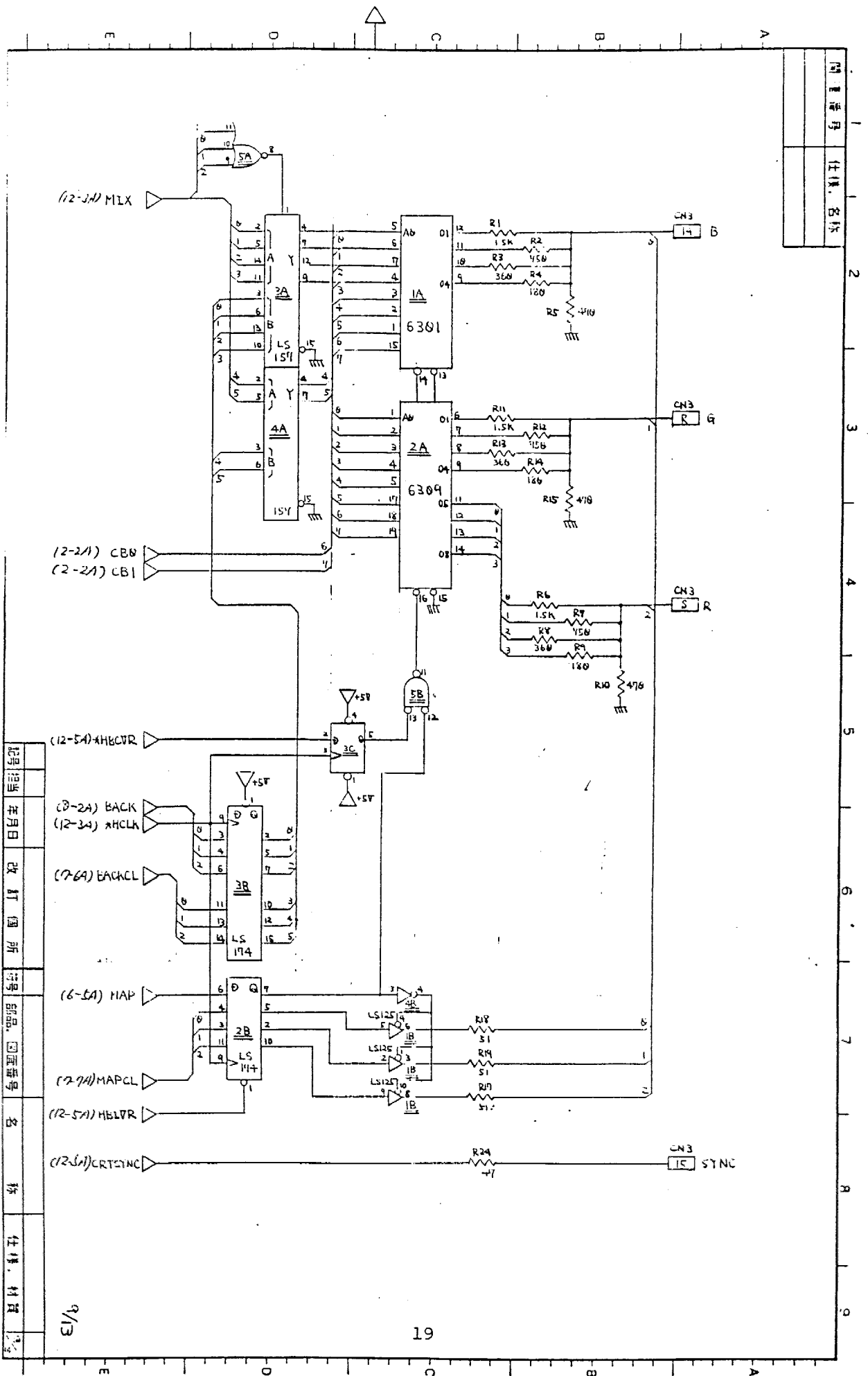
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□	删除
□	增加
□	保留
□	作废
□	其他

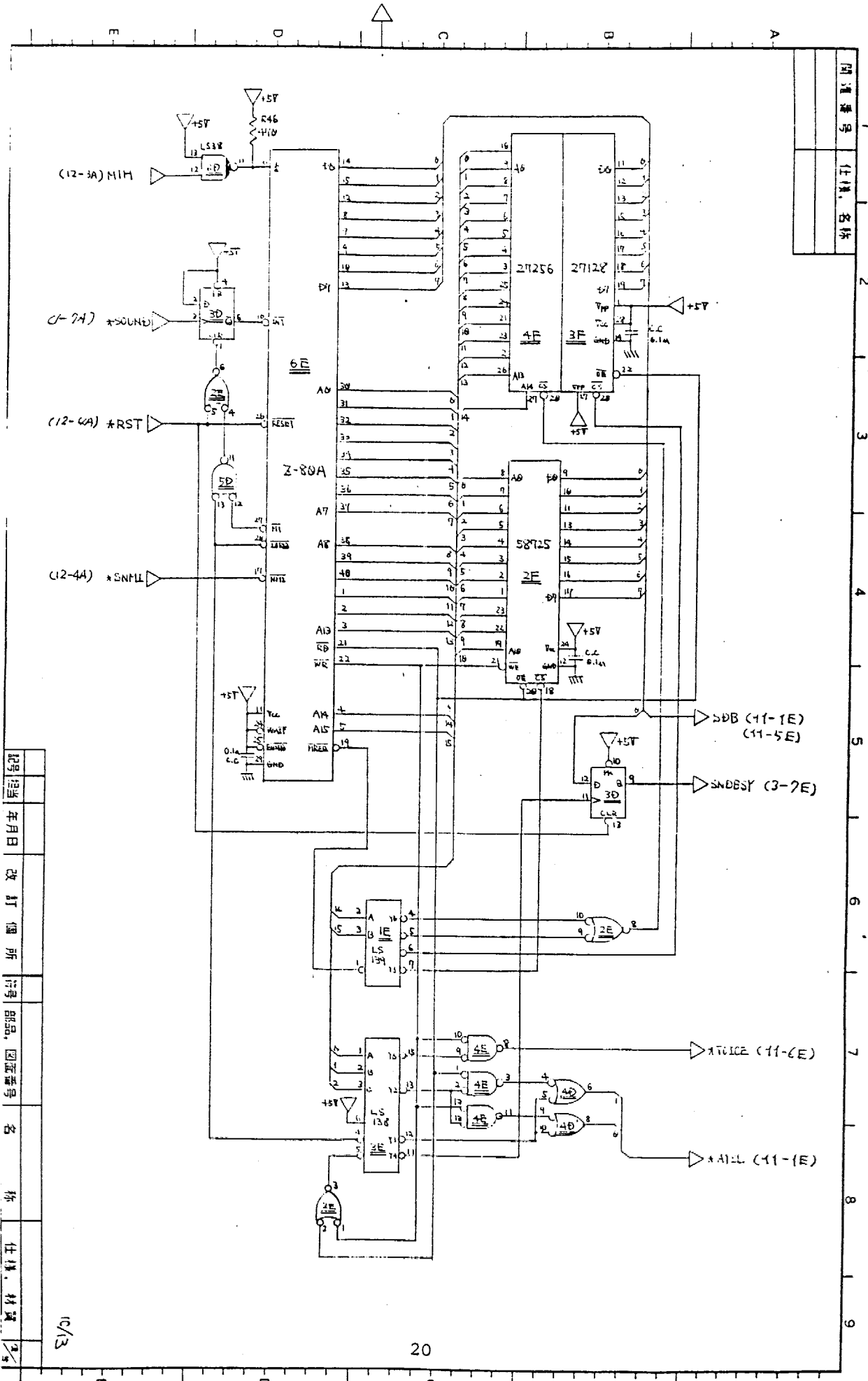
7/13

回路番号 仕様、名称



回路番号 仕様、名称



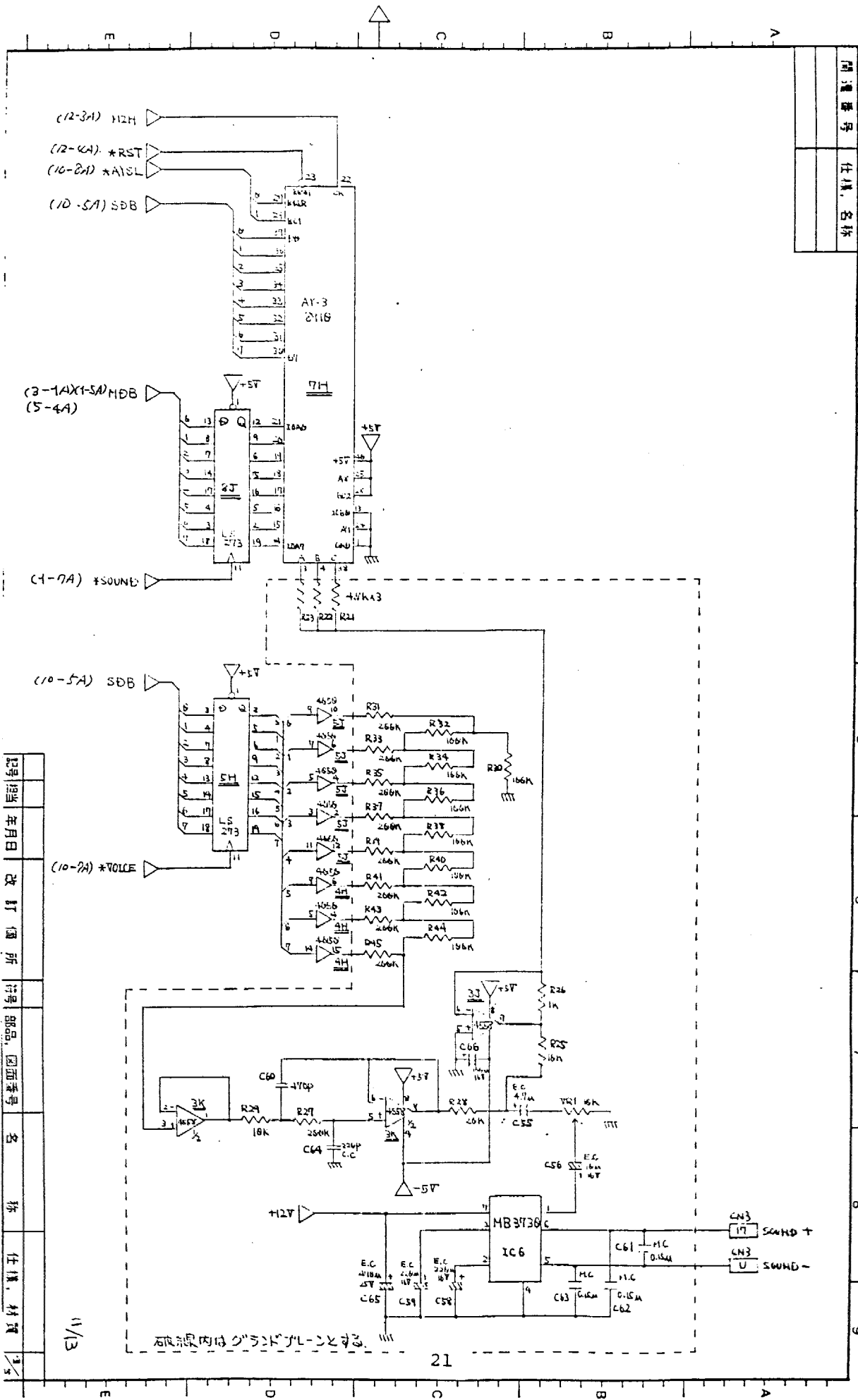


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任務	任務名稱

日期	年月日	改訂	所	部	品	圖	號	名	稱	任	務	材	料

IC/13

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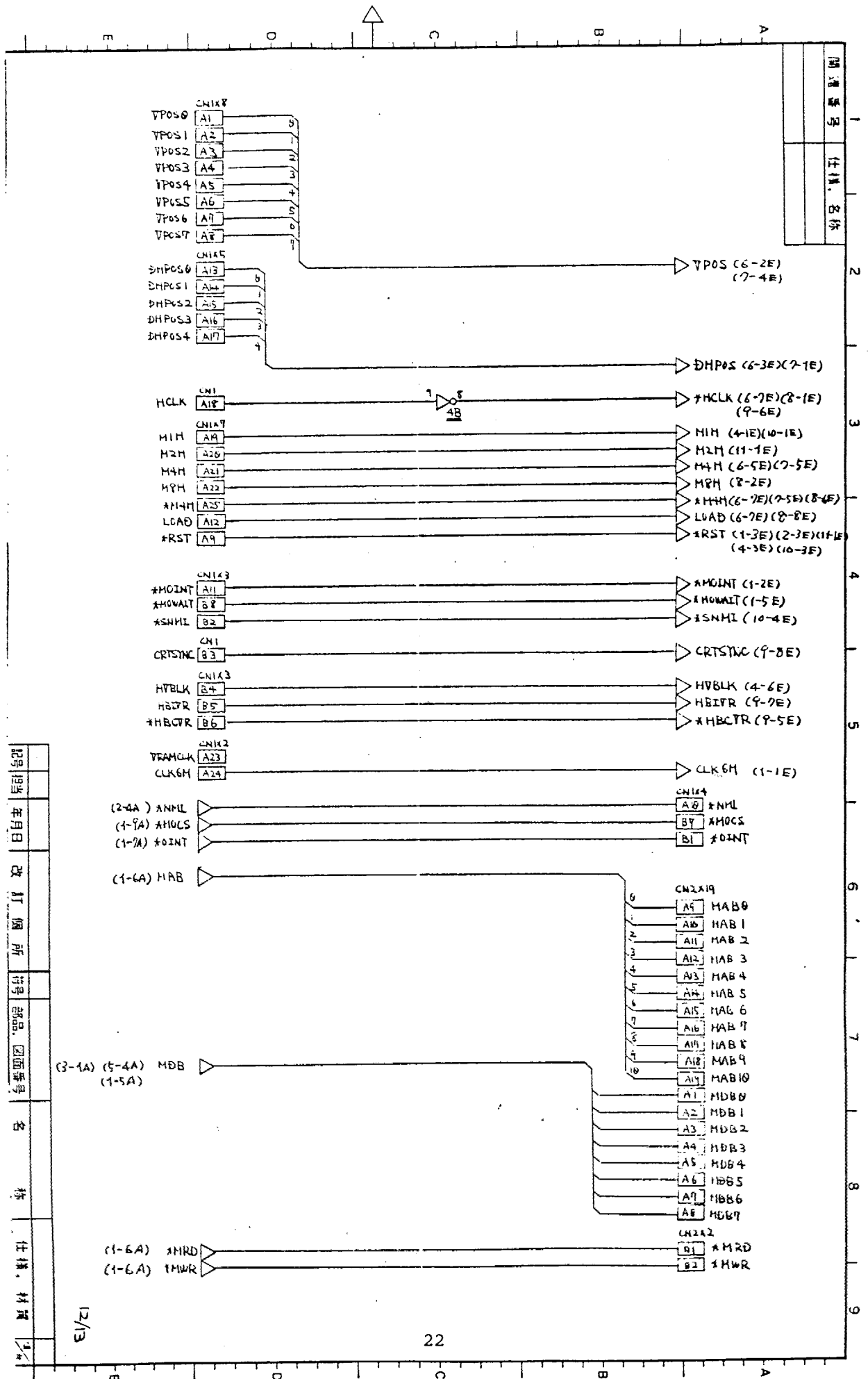


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年月日	3
改訂箇所	4
符号	5
部品	6
図面番号	7
名	8
称	9
仕様	10
材質	11
1/3	12

11/3

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21

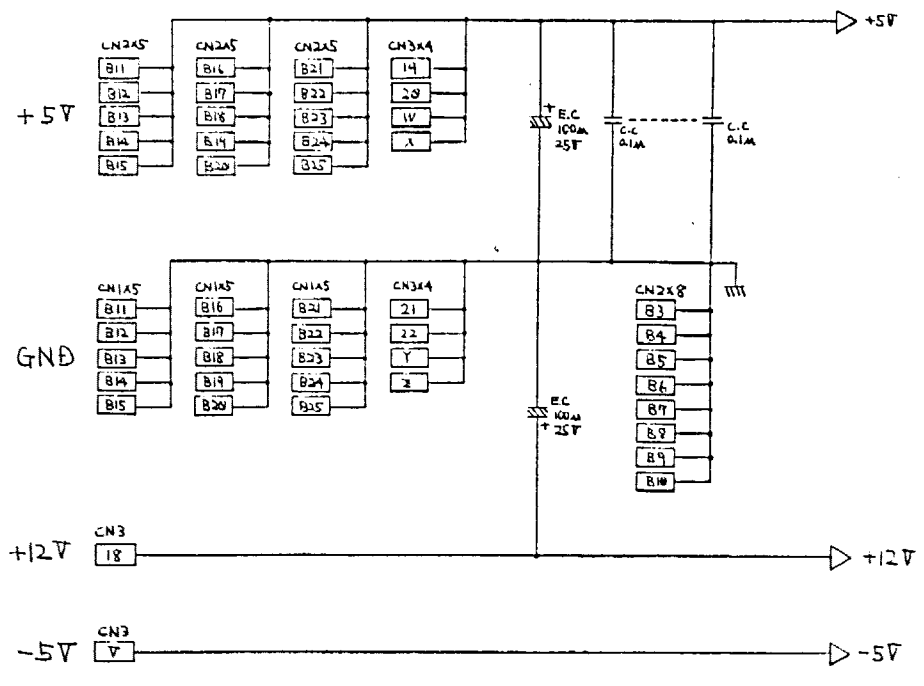
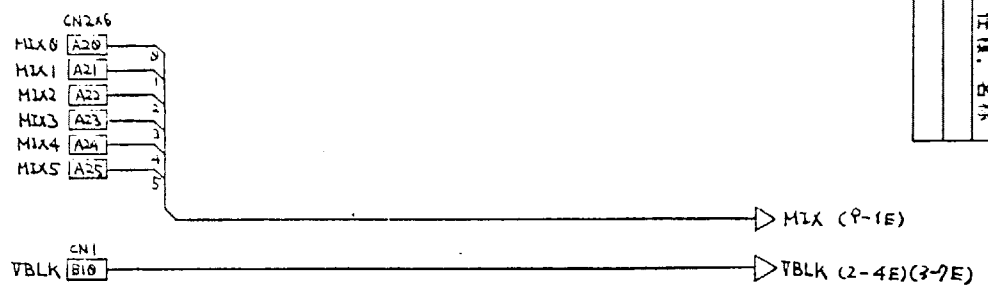


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12/13



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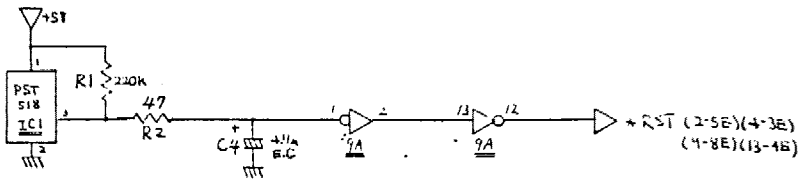
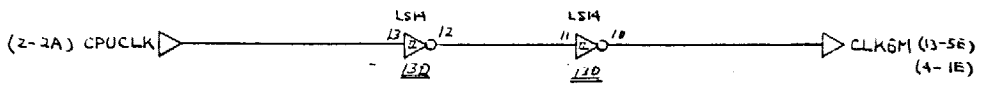
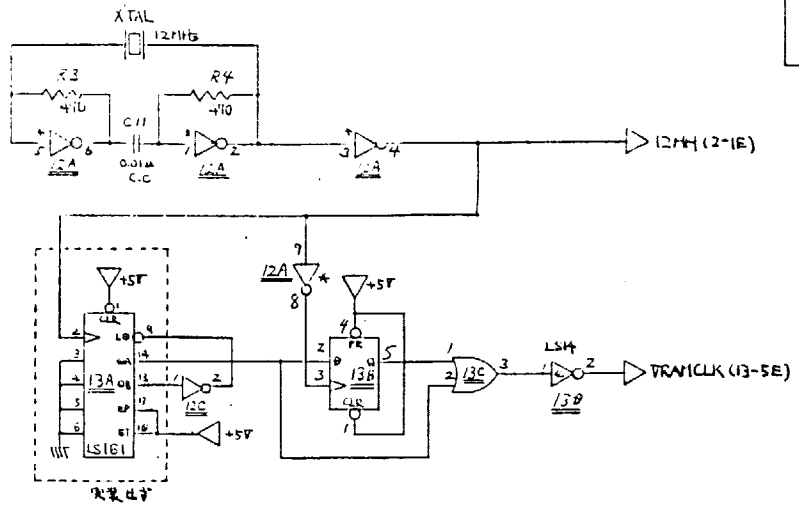


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13/13

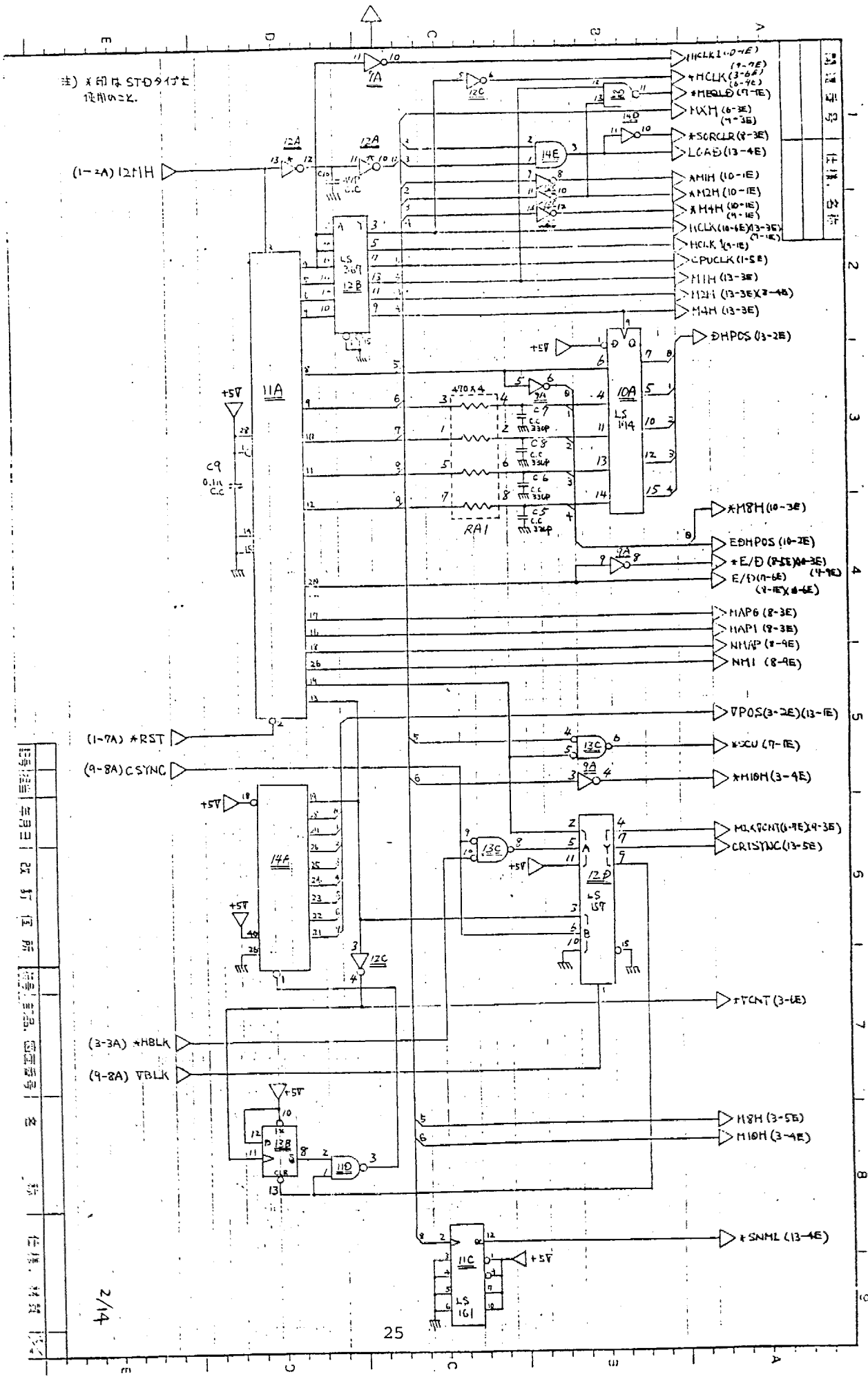
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图号	
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1/14

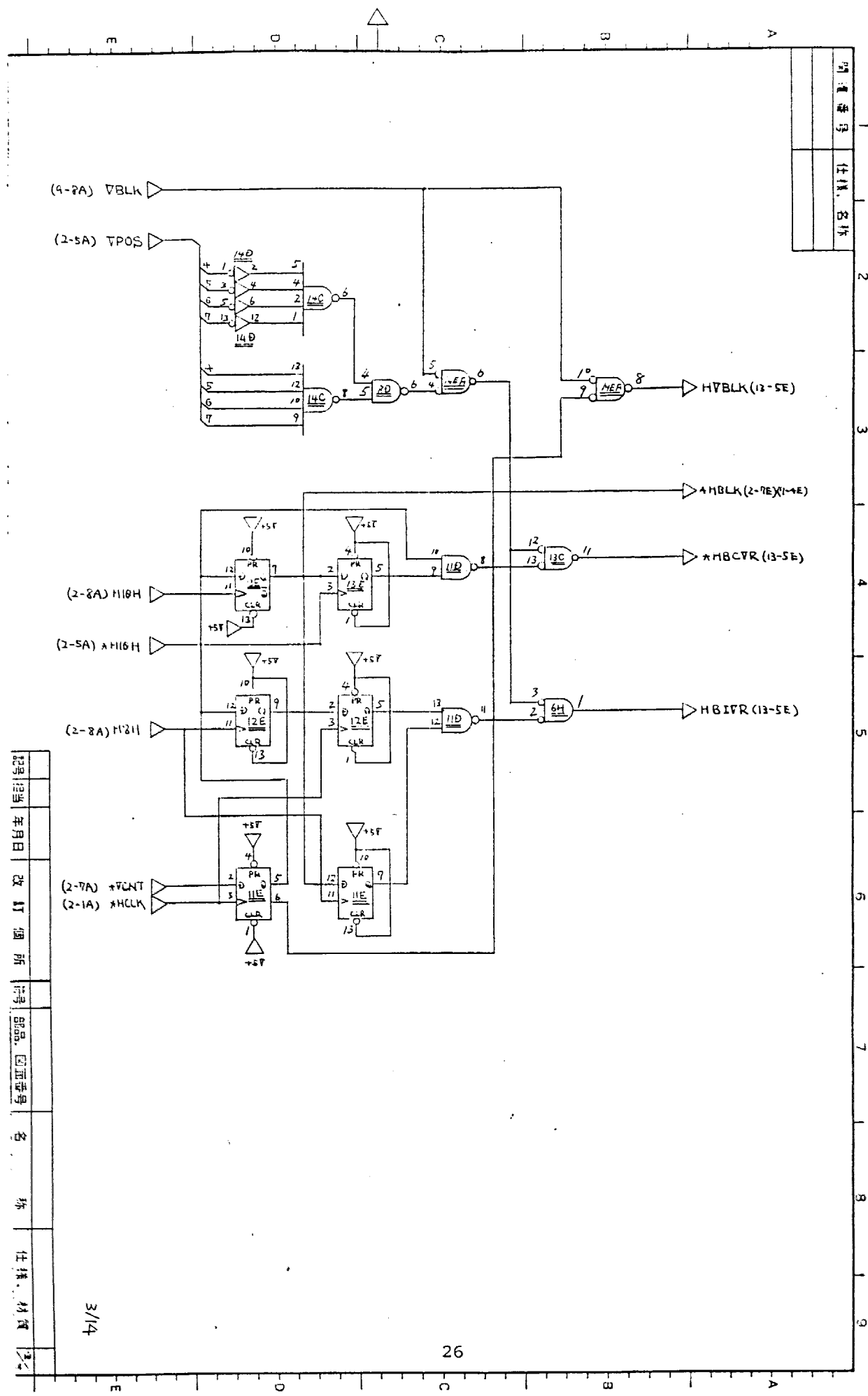


注) \*印はSTDタイプに  
使用のもの。

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 仕様: 標準  
 備考:

2/14

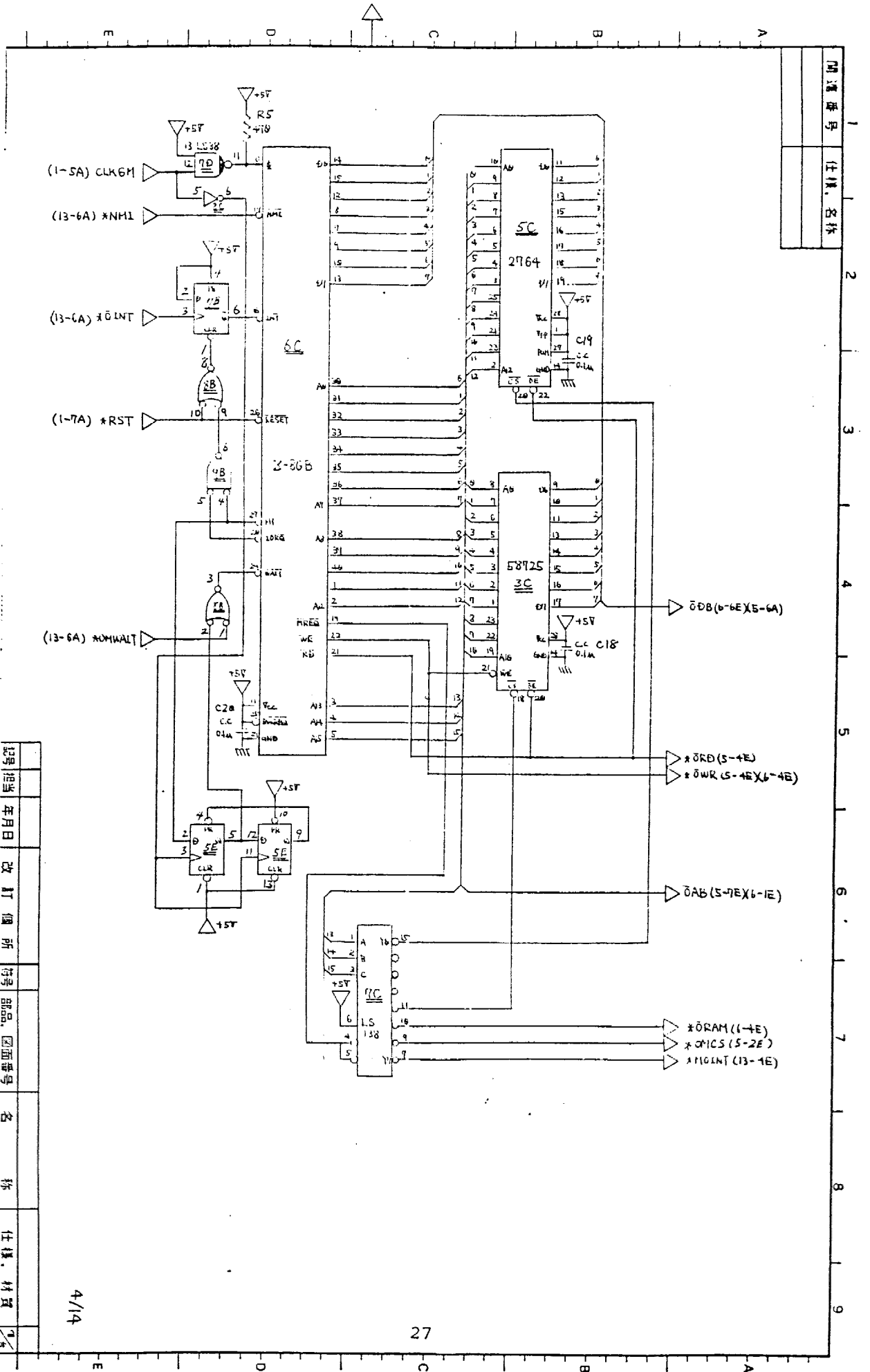
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3/4

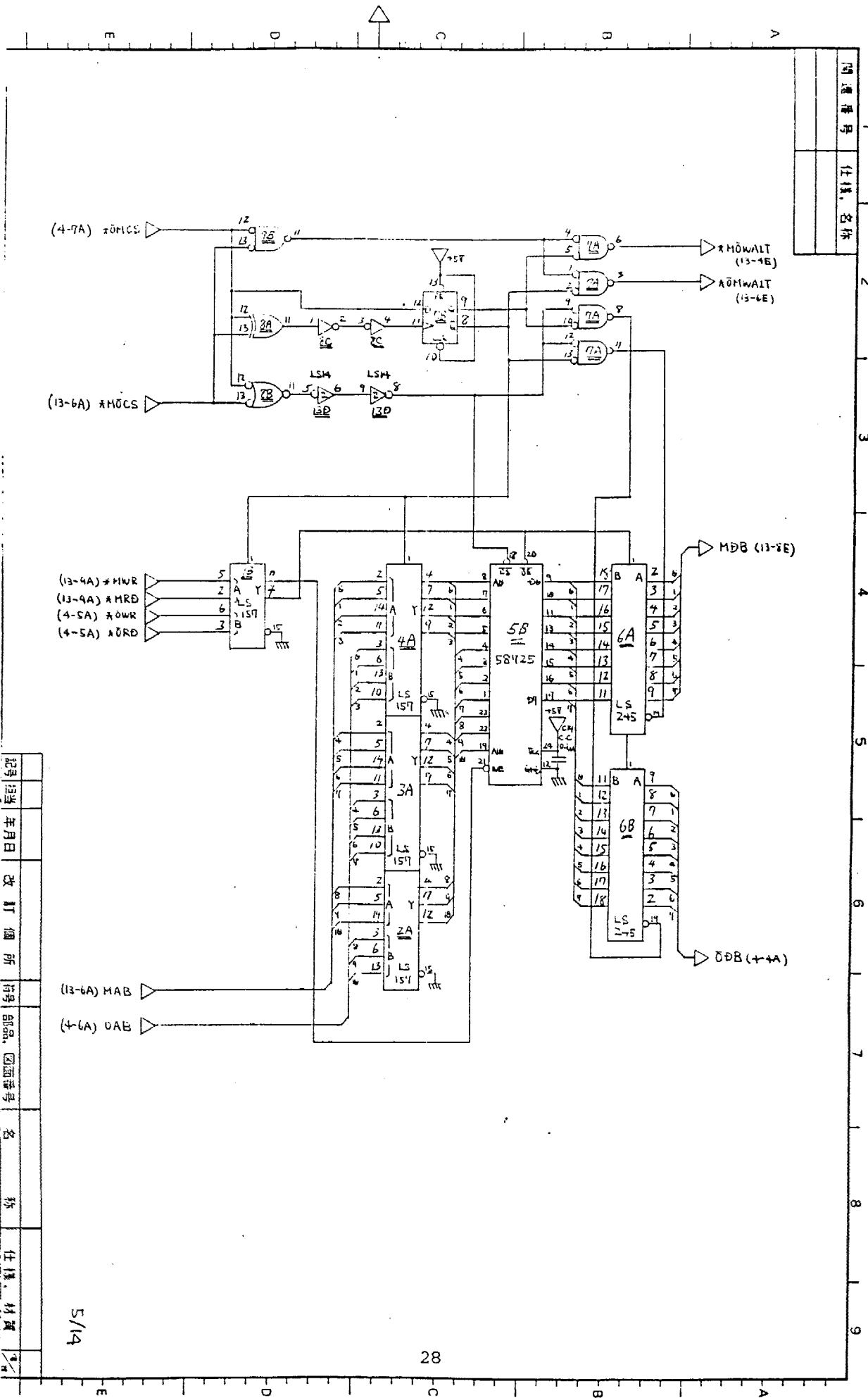


1	間連番号
2	仕様、名称

1	図号相違
2	年月日
3	改訂箇所
4	符号
5	部品
6	図面番号
7	名
8	称
9	仕様、材質

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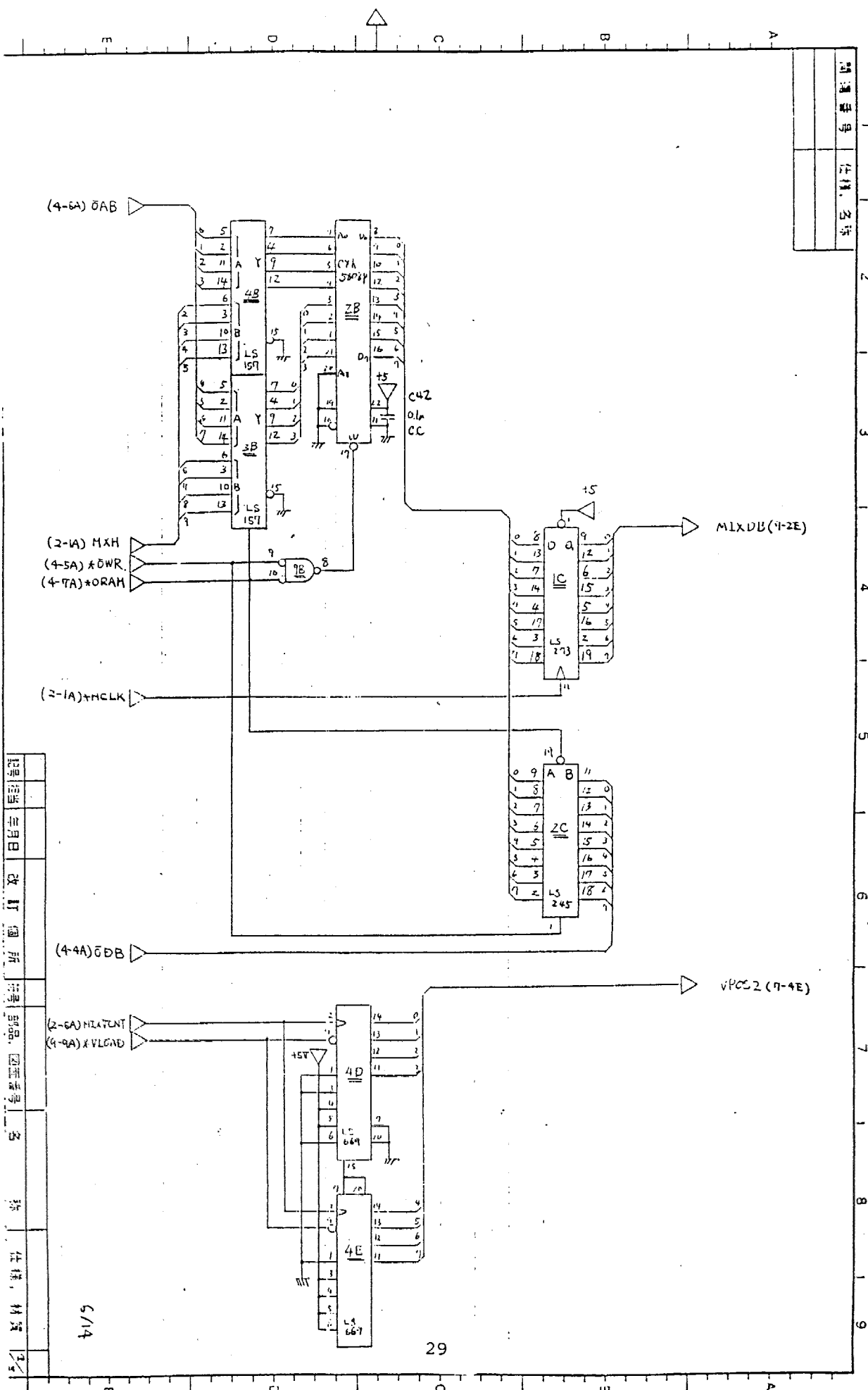
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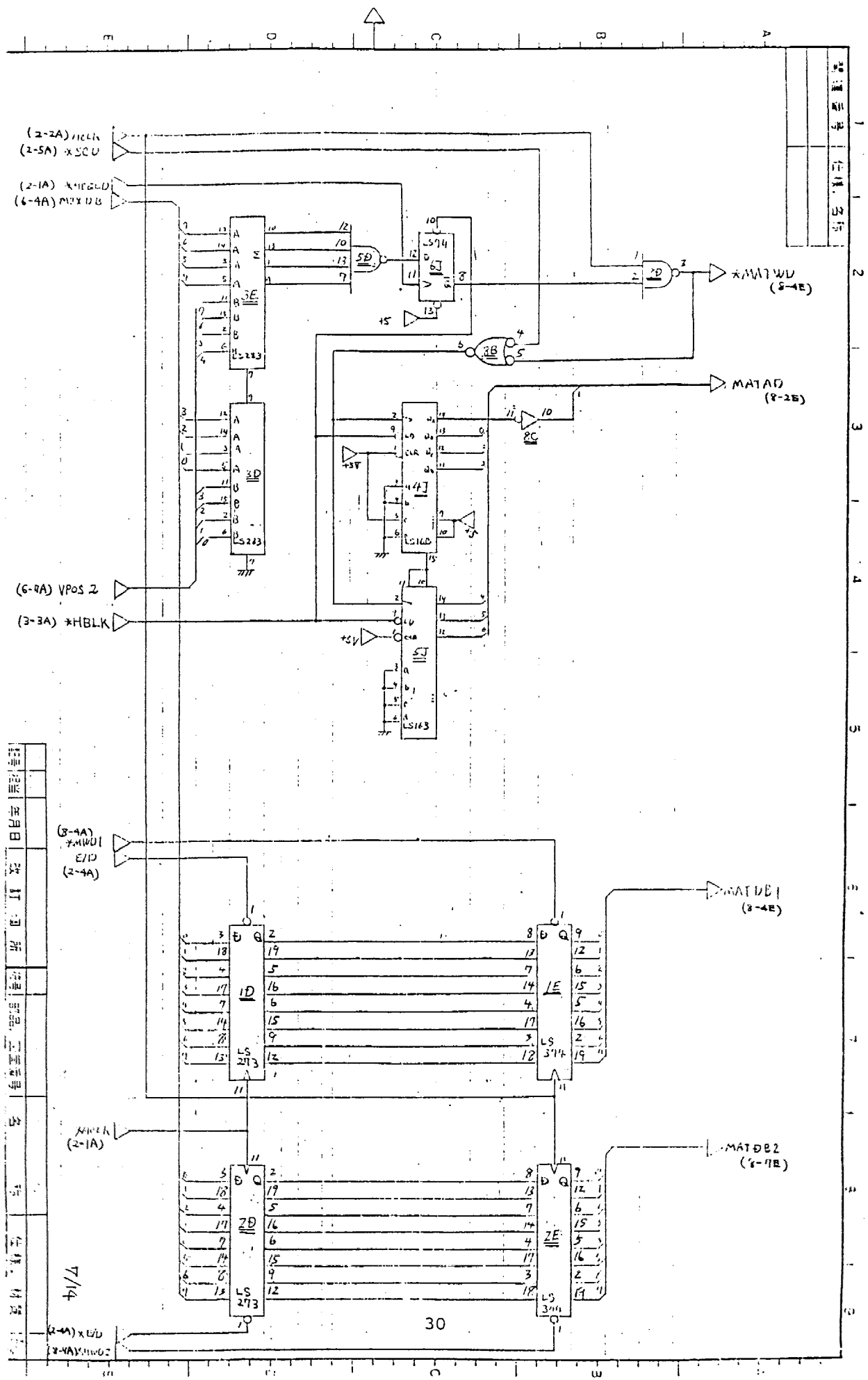
5/14

图号	名称



日期	姓名	职位	备注
5/14			

5/14



设计日期: \_\_\_\_\_  
 设计单位: \_\_\_\_\_  
 设计人员: \_\_\_\_\_  
 审核人员: \_\_\_\_\_  
 日期: 7/14

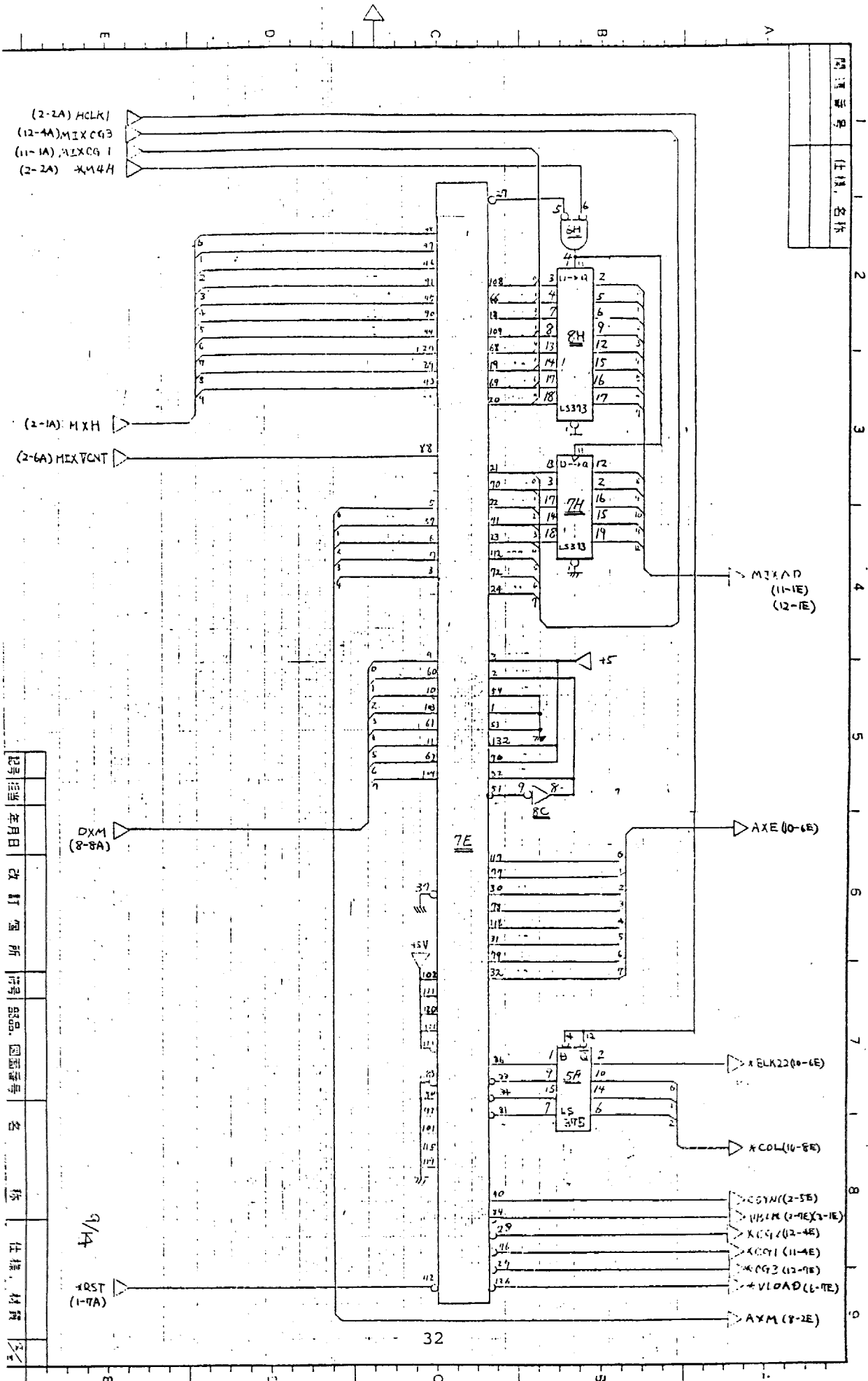
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日期	

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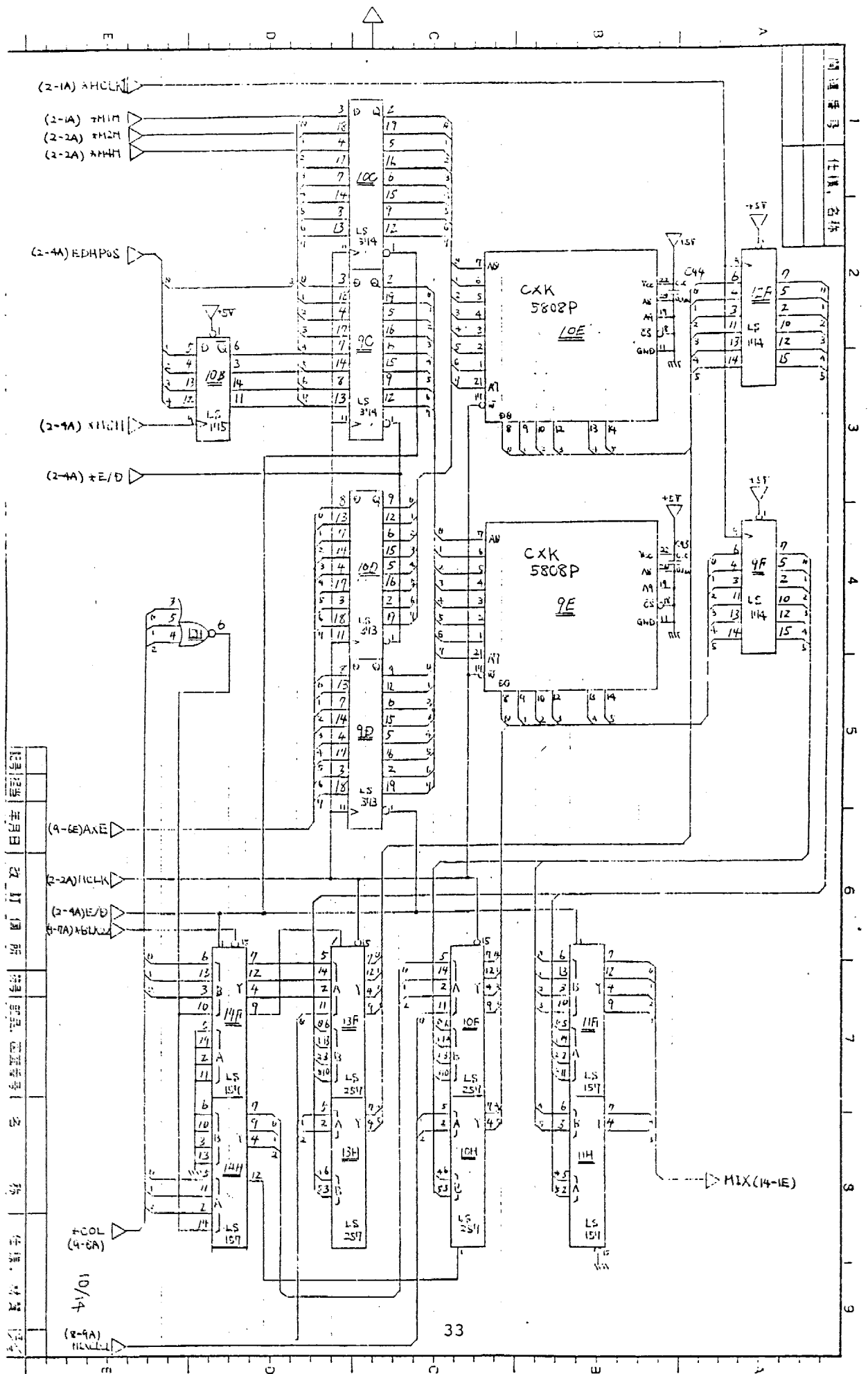


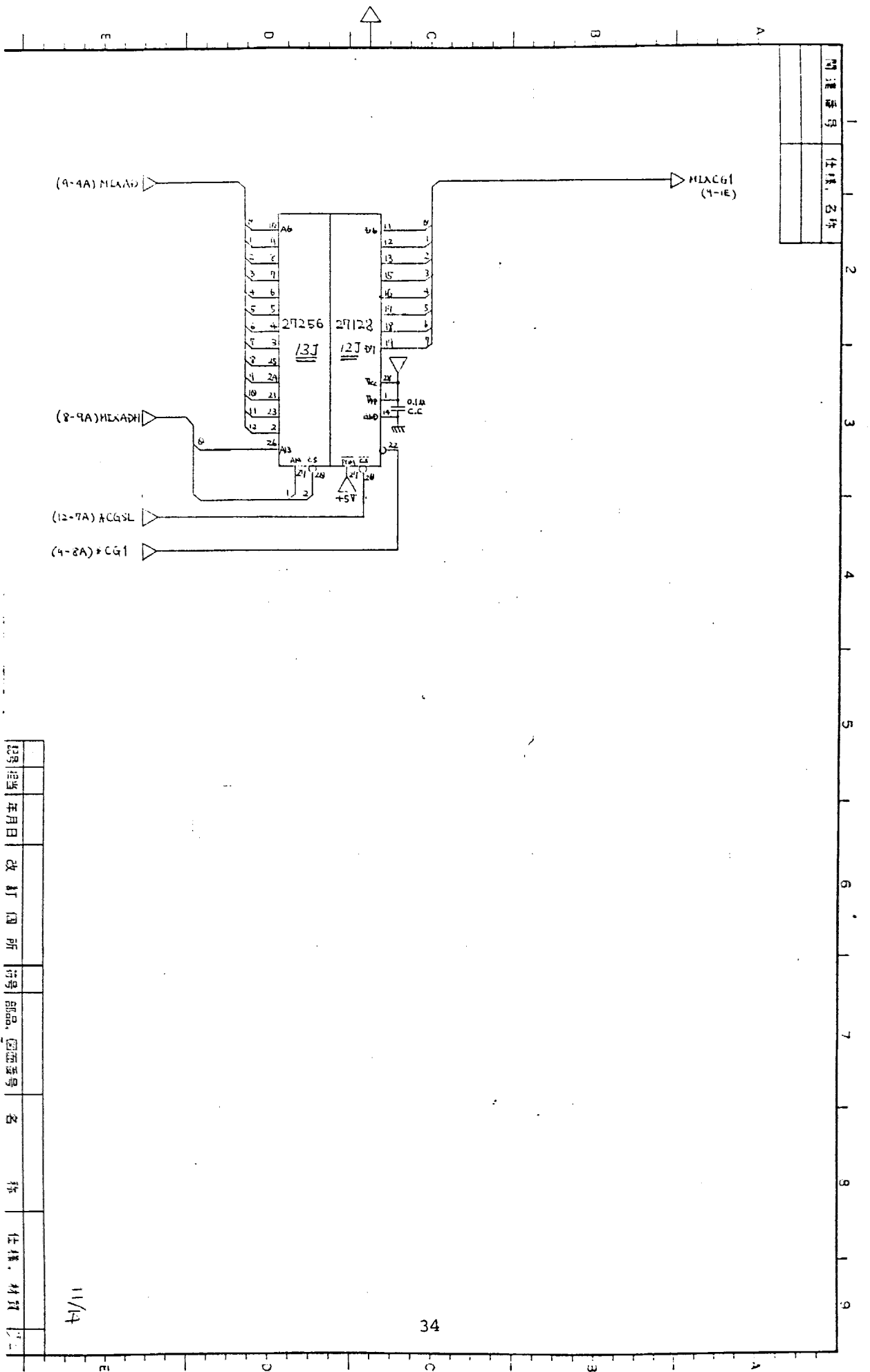


图号	任务名称

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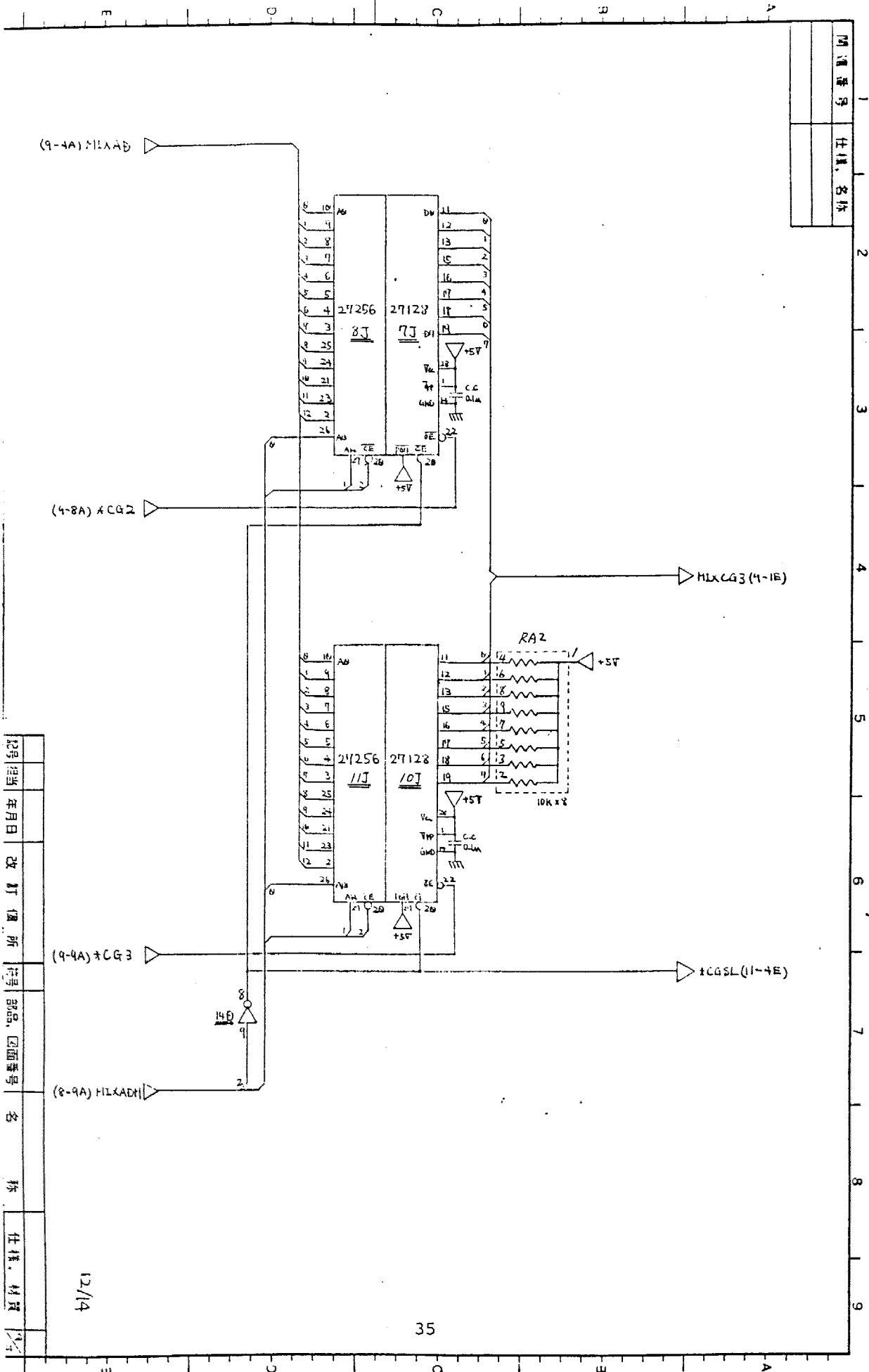
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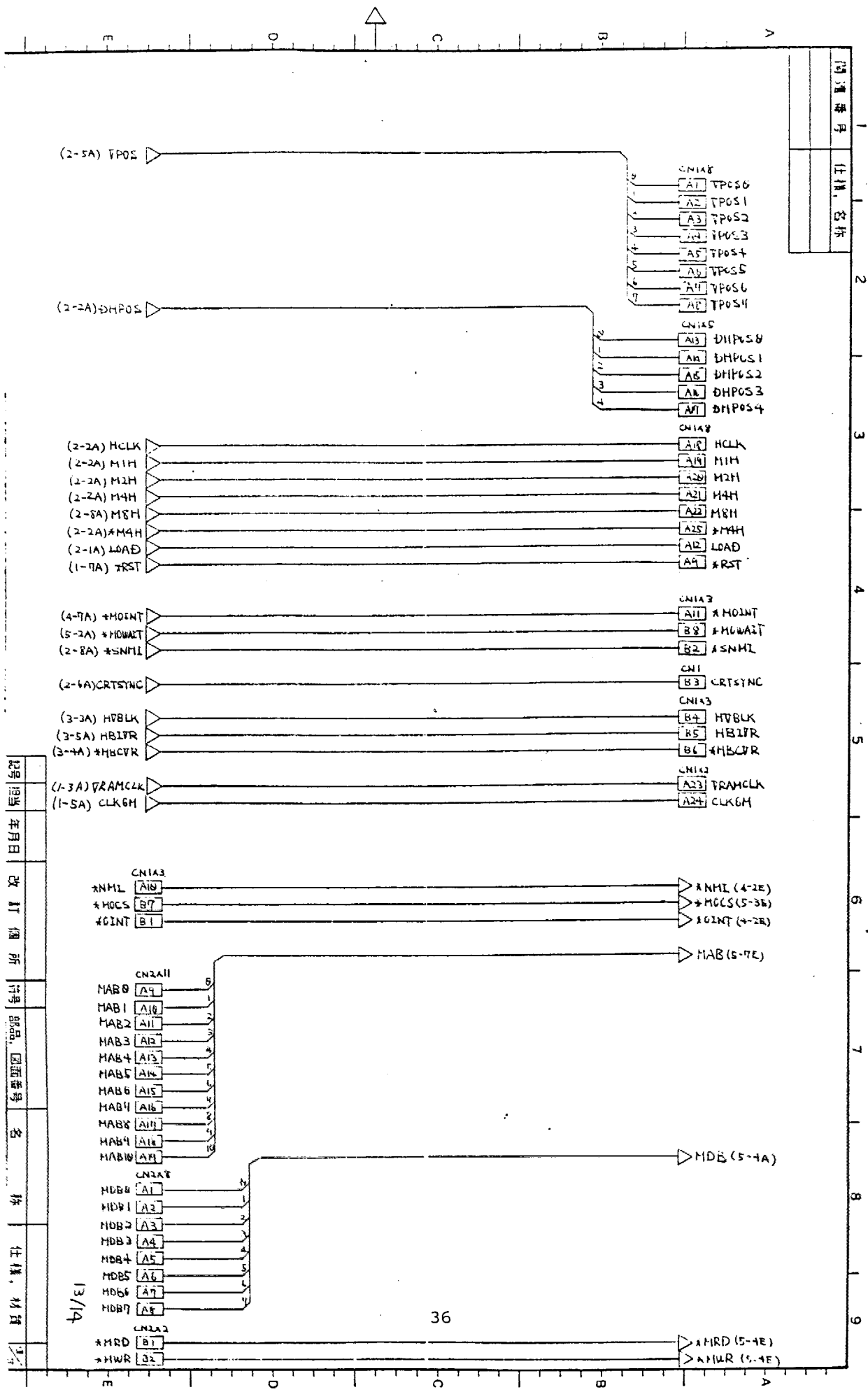
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11/14



記号	担当	年月日	改訂	價所	符号	部品	図面番号	各	称	仕様	材質	1/4
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12/4

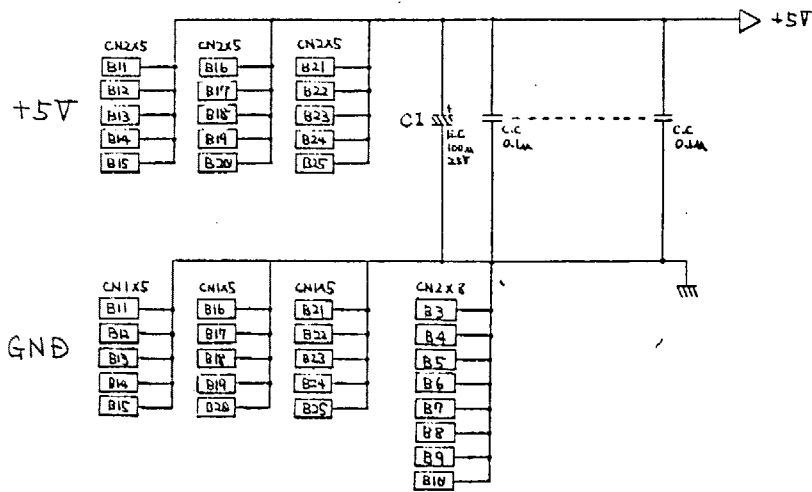
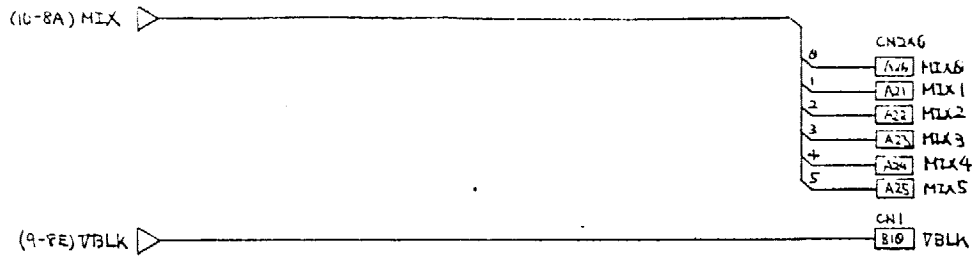


品名	年月日	改訂箇所	符号	部品	図面番号	名称	仕様	材質

13/14

36

图号	1
任务	名称



记录	日期	修改	所	号	部	号	名	任	材

14/14