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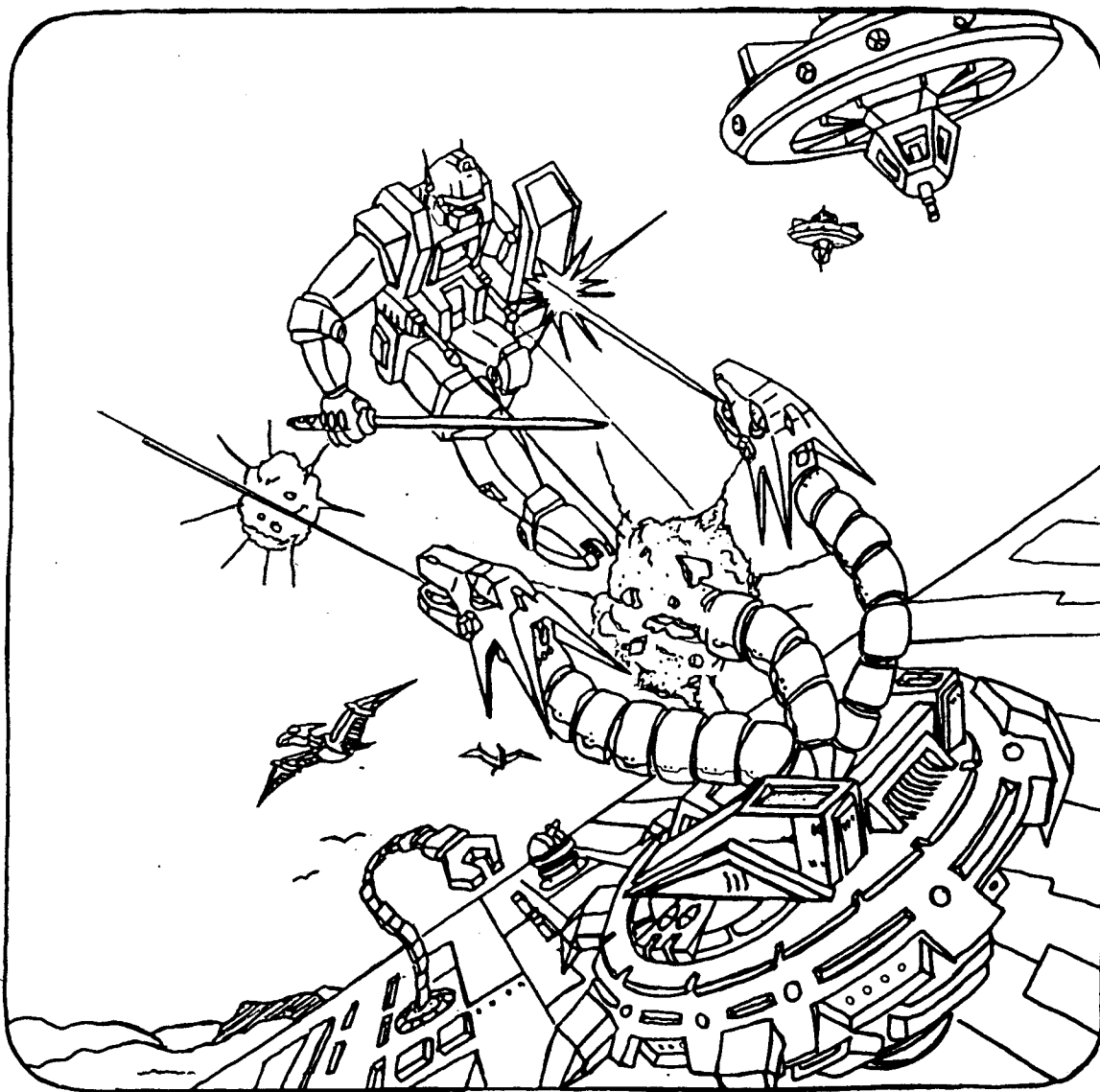
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FLIPPERSPILL.COM

MAGMAX™

SERVICE INSTRUCTION



Nichibutsu

GAME OVERVIEW

Sometime in the not so distant future, EARTH suffers a tragic twist of fate ! An all powerful and mighty EMPIRE seizes control of our land. Human existance is threaten by these mysterious metallic monsters ! Is there no hope for mankind ? Has man seen his last reign on EARTH come to an end ?

Unknown to the destructive forces that now rule over the land and sea, is a secret mechanism developed as man's last hope ! All of man's energies, resources and knowledge have been poured into this new defense weapon. If man is to succeed in regaining his home from these evil forces, this machine is his final breath ! The terrible three headed DRAGONIA scorns the land consuming our people with it's voracious hunger ! Can it be stopped ???

A single, brave and gallant soldier must be chosen to fight this final battle ! All mankind awaits the outcome of this lopesided match ! Can EARTH be saved ?? The craft launches now from the underground rebel base and races to the jetta point !

Who will win the final battle between DRAGONIA and MAGMAX ? ? ...

KIT CONTENTS :

1. NICHIBUTSU PRINTED CIRCUIT BOARD	1	pc
2. FCC STICKER	1	
3. MARQUEE	1	
4. SIDE DECALS	2	
5. WIRING HARNESS	1	
6. 8-WAY JOYSTICK	1	
7. BUTTON / SWITCH ASSEMBLY	2	
8. CONTROL PANEL OVERLAY	1	
9. INSTRUCTION MANUAL	1	

USER INFORMATION

F.C.C. REGULATION COMPLIANCE

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications.

It has been tested and found to comply with the limits for a CLASS "A" computing device pursuant to subpart J of part 15 of F.C.C. rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

F.C.C. requires the STICKER comes within the KIT have to be on the back of your machine or elsewhere visible when inspected.

SERVICE INFORMATION

NICHIBUTSU will repair and exchange parts or replace P.C.Board in the event of manufacturing defect for ninety day after original purchase.

Mail-in service can be obtained during the warranty period by sending the product postage prepaid, to the nearest distributor or NICHIBUTSU USA CORP. (California).

A purchase receipt or other proof of of date of original purchase will be required before warranty performance is rendered.

It is important that the enclosed registration card be filled out entirely and send-in for your protection in case of product failure.

HOW TO PLAY

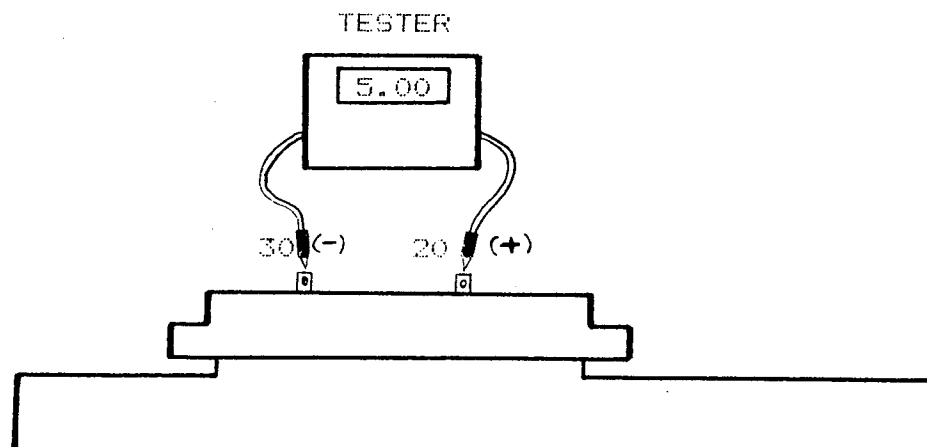
- * Control MAGMAX using 8 way joystick.
- * Destroy enemies and alien formations using ENERGYBEAM !
- * Warp between ground level and underground using TRANSPORTER .
- * Form a powerful MAGMAX robot by joining with head and leg units. FIREPOWER is increased with each unit added .
- * With HEAD joined to MAXcraft, pick up RED PLASMA WEAPON. This enables MAGMAX to destroyed enemies in succession !
- * BONUS point for destroying enemies formed in one line flashing RED : 1000 - 1000 - 1000 - - - ->
- * Shoot down STALACLITES to destroy enemies !
- * Beware of underground volcanoes !
- * When DRAGONIA appears, shoot each head seven times to defeat it !

POWER REQUIREMENT

This P.C.Board requires a power supply of

- * + 5 V 5 A ($\pm 2\%$) for game logics
- * +12 V 1 A ($\pm 10\%$) for audio IC only

It is very important that exactly + 5 V must be adjusted and checked at the edge connector pin # 20 (plus) and pin # 30 (minus) as shown below . Otherwise malfunction may occur in some cases.



WIRING CONNECTOR

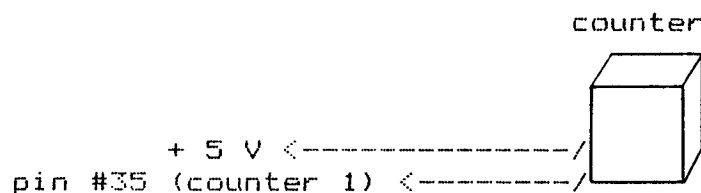
SOLDER SIDE

1	p1-UP	w/brown
3	p1 - LEFT	w/orange
5	p1- SHOOT	w/green
7	p2 - UP	
9	p2 - LEFT	
11	p2 - SHOOT	
13	COIN 1	w/purple
15	GND	
17	GND	black
19	+ 5 V	red
21	+ 12 V	yellow
23		
25	+ 5 V	red
27	GND	black
29	GND	black
31	1 player	brown
33	TEST	orange
35	COUNTER 1	w/gray
37	SP (+)	purple
39		
41	GREEN	
43	GND	black

PARTS SIDE

2	p1 - DOWN	w/red
4	p1 - RIGHT	w/yel
6		
8	p2 - DOWN	
10	p2 - RIGHT	
12		
14	COIN 2	
16	GND	black
18	GND	
20	+ 5 V	red
22		
24	+ 12 V	
26	+ 5 V	
28	GND	
30	GND	
32	2 players	w/blue
34	SERVICE	w/blk
36	COUNTER 2	
38	SP (-)	gray
40	RED	
42	BLUE	
44	SYNC	white

COUNTER CONNECTION



Only work with 5 V or 6 V type counter. Please don't use 12 V or 24 V type counter, It may damage the logic board.

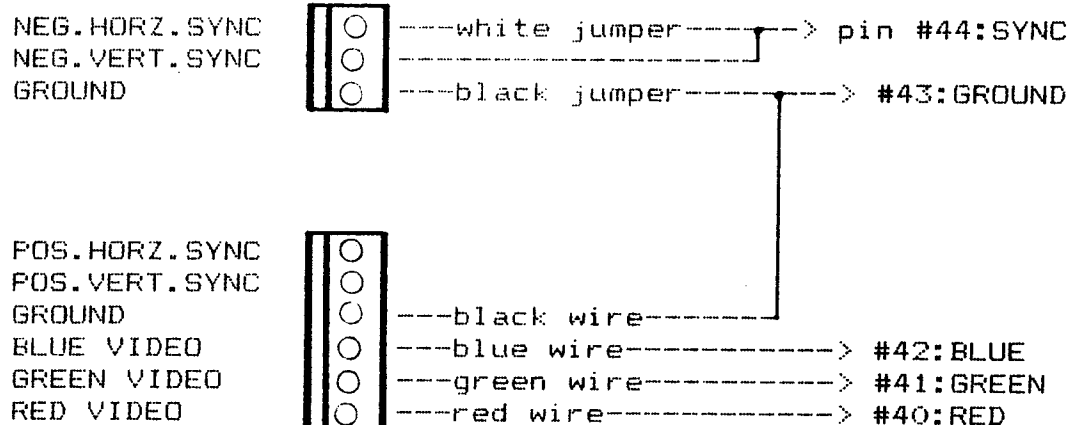
MONITOR SYNCHRONIZATION

The P.C.Board in this kit uses COMPOSITE NEGATIVE SYNCHRONIZATION.

The wires of the new harness to the monitor are color coded to indicate the RED , BLUE , GREEN video signals to the monitor . The BLACK is used for GROUND (0 V) and the WHITE is for SYNC (synchronization).

Attach the wires from the P.C.Board to the monitor's main circuit board as shown below .

*for WELLS-GARDNER MONITOR
 &
 *for ELECTROHOME MONITOR



Nichibutsu

* MAGMAX *

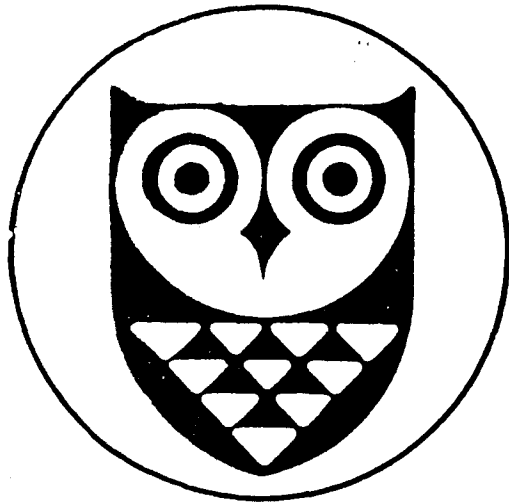
DIP SWITCH ADJUSTMENTS

SWITCH 1

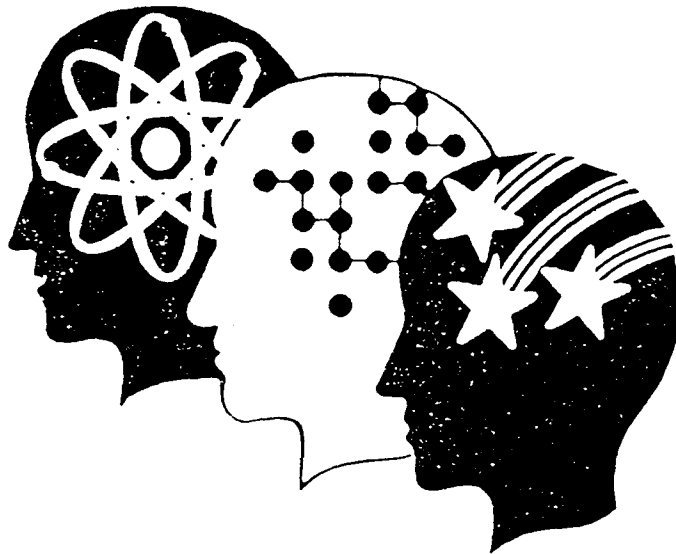
		1	2	3	4	5	6	7	8
Number of player	3 4 5 6	OFF ON OFF ON	OFF OFF ON ON						
Bonus Player	30000& 50000 50000& 70000 70000& 90000 90000&110000			OFF ON OFF ON	OFF OFF ON ON				
Demo Sound	WITH WITHOUT					OFF ON			
Type	TABLE UPRIGHT						OFF ON		

SWITCH 2

		1	2	3	4	5	6	7	8
COIN	: 1 Coin 1 Credit : 1 " 2 " 1 : 2 " 1 " : FREE PLAY	OFF ON OFF ON	OFF OFF ON ON						
Coin	: 1 Coin 3 Credit : 1 " 6 " 2 : 2 " 3 " : 3 " 1 "			OFF ON OFF ON	OFF OFF ON ON				
Difficulty	EASY HARD					OFF ON			



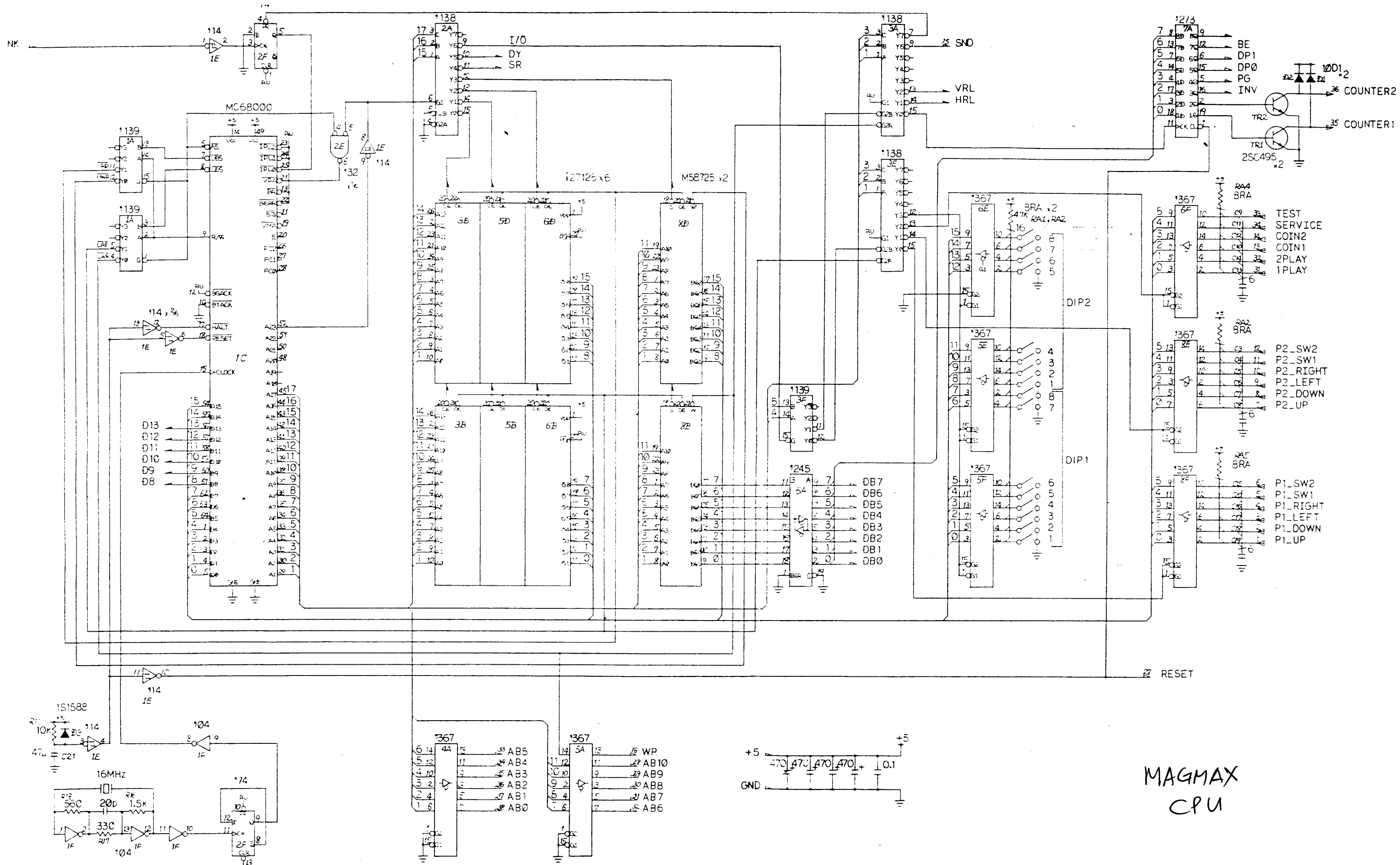
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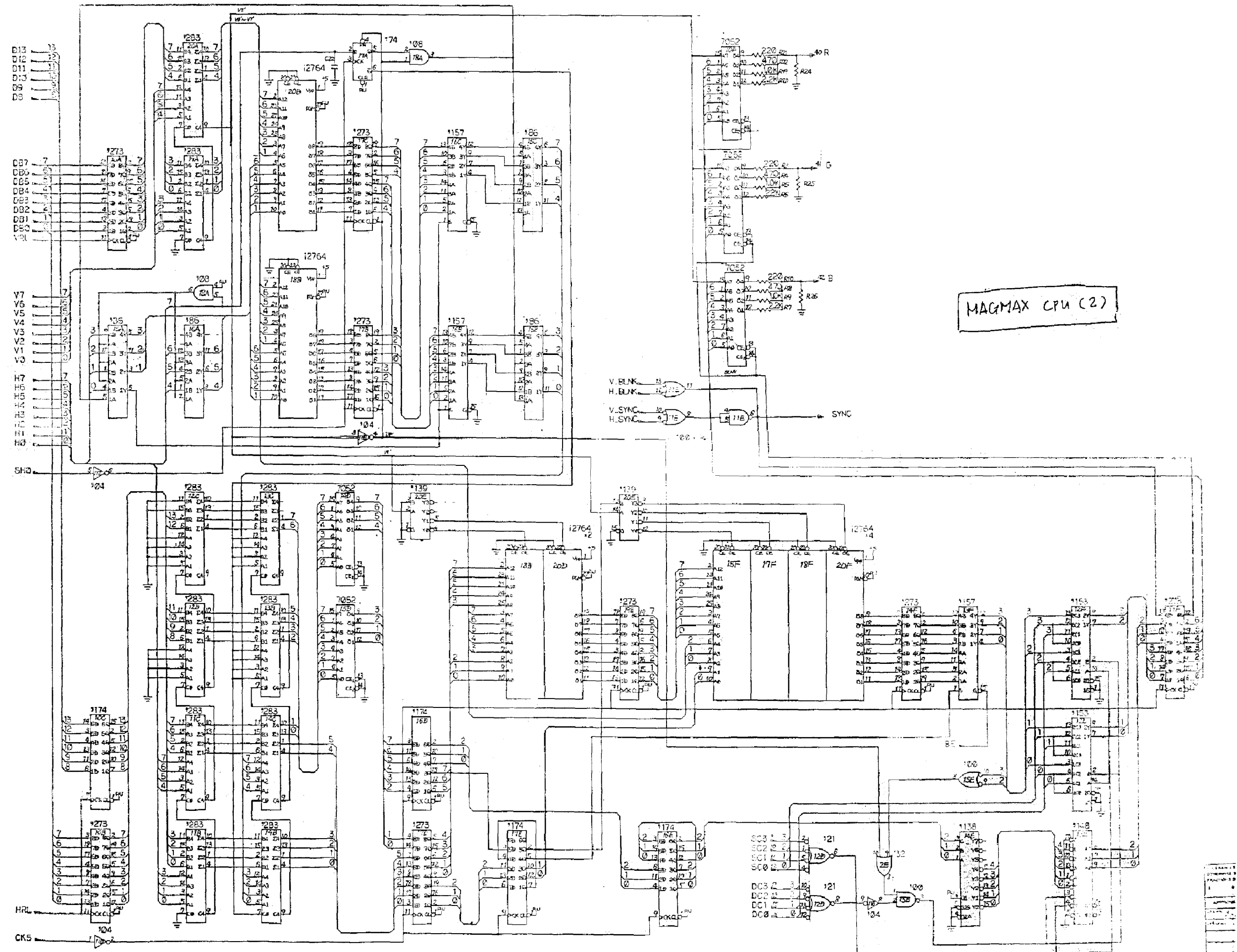
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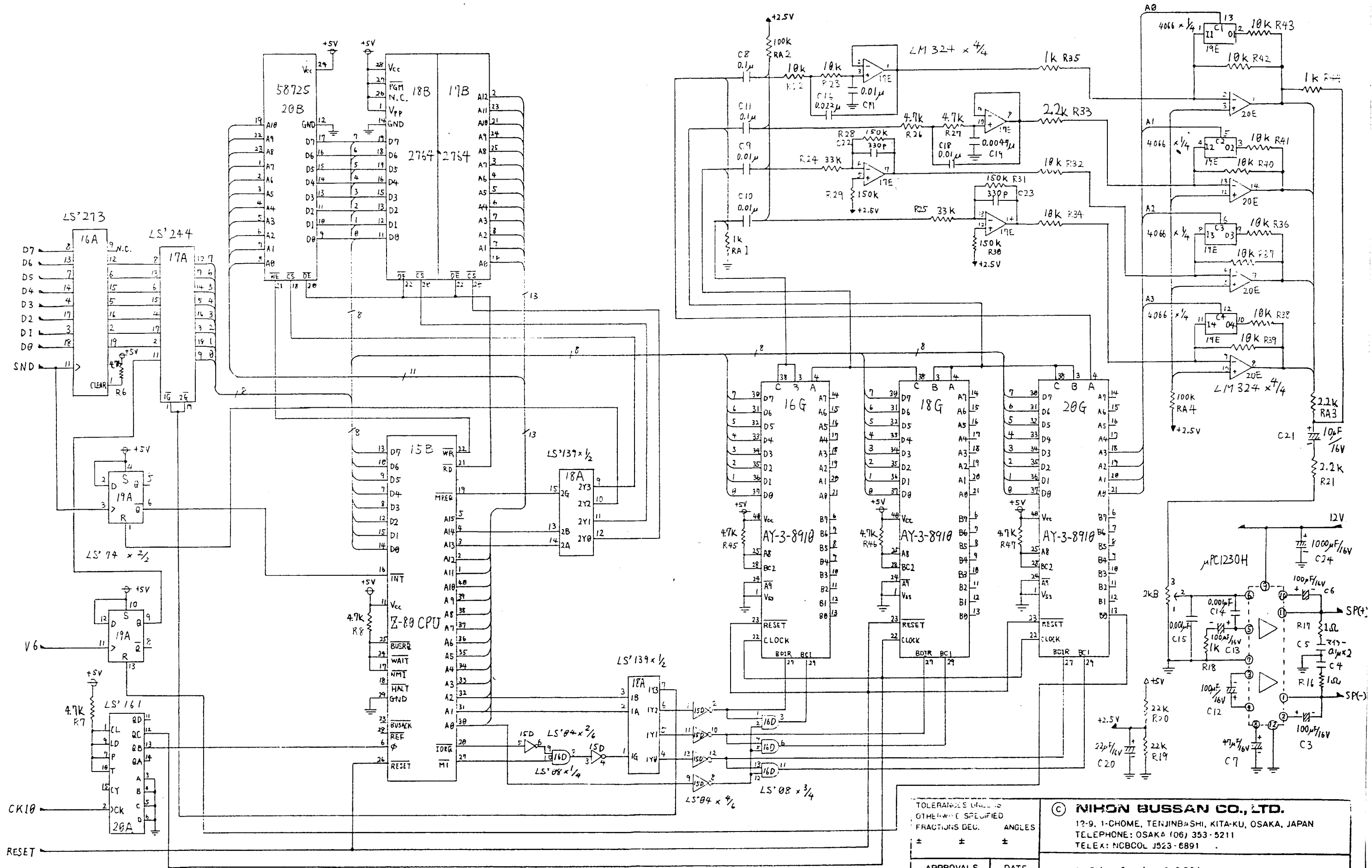
Sales: (213) 408-0515
Service: (213) 408-0518



MAGMAX
CPU



MAGMAX CPU (2)



注: 167-I.C. 後部には 放熱板取付スペースとして 10mm x 40mm のスペースを空け 前部に 放熱板を 1mm の隙 隙に 取付

注: 167-I.C. は CMOS タイプ

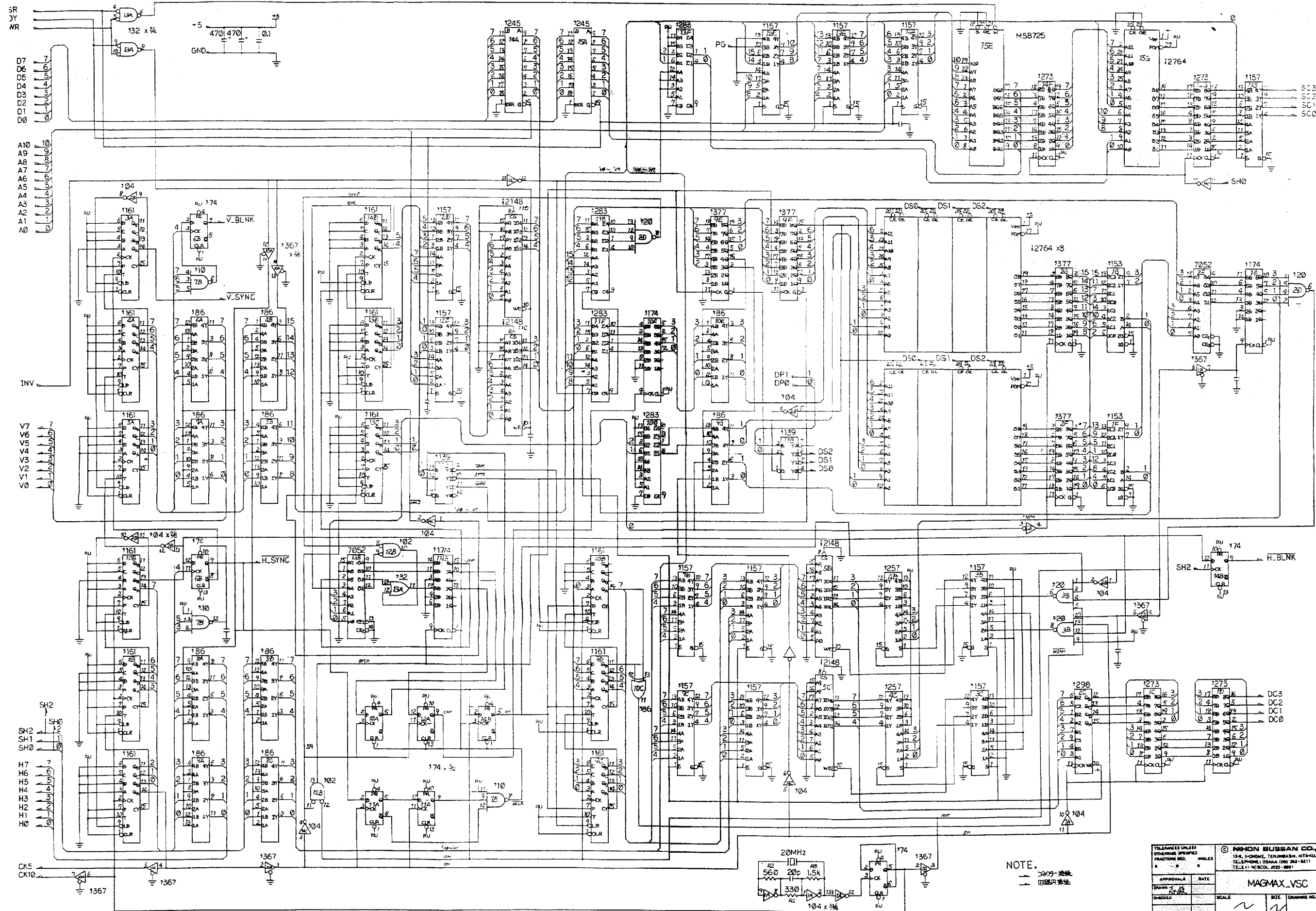
注: 抵抗値 0.1% 以下に RAZ

注: OP Amp は 全て LM324

TOLERANCES UNLESS OTHERWISE SPECIFIED		FRACTIONS DEC.		ANGLES	
±	±	±	±	±	±
APPROVALS		DATE			
DRAWN R. YAMADA		85.1.7.			
CHECKED					
		SCALE		SIZE	
				DRAWING NO.	
				A3	

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12-9, 1-CHOME, TENJINBASHI, KITA-KU, OSAKA, JAPAN
TELEPHONE: OSAKA (06) 353-5211
TELEX: NCBOL J523-6891

MAGMAX SOUND



NOTE.
— 100% 検出
— 100% 検出

TOLERANCES UNLESS OTHERWISE SPECIFIED		© NIKON BUSSAN CO., LTD	
RESISTORS	ANGLES	1245, 1248, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400	1245, 1248, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400
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