

PROFESSOR PAC-MAN

GAME OPERATION

PROFESSOR PAC-MAN is a one or a two player game with a color T.V. monitor. The game gives a display which has all the parts shown in Figure 1-1

The game has five possible modes of operation: ATTRACT, READY-TO-PLAY, PLAY, HIGH SCORE/INITIAL, and SELF-TEST.

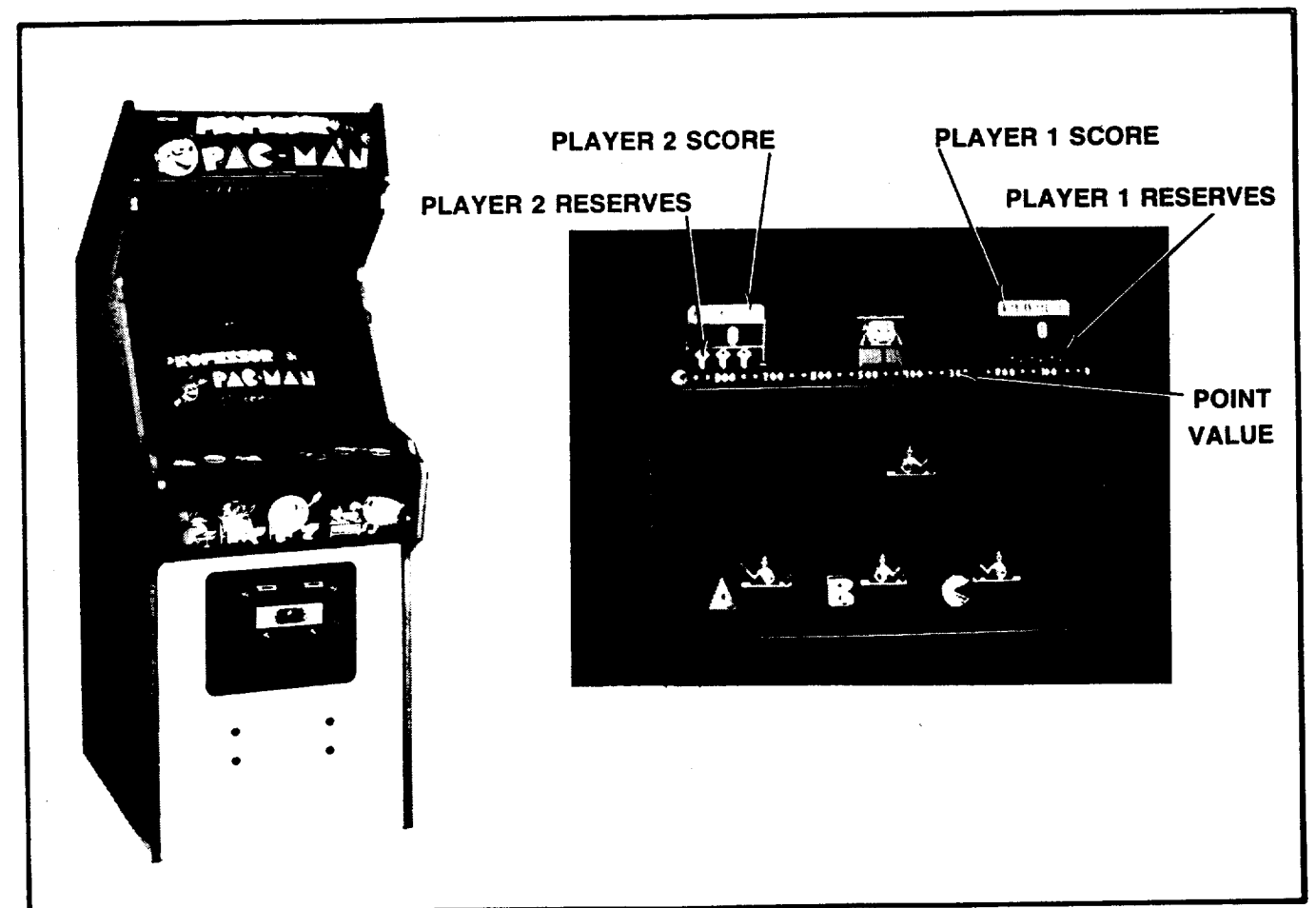


Figure 1-1 On Screen Graphics During Play

PROF Pacman

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WARNING THIS GAME MUST BE GROUNDED. FAILURE TO DO SO MAY RESULT IN DESTRUCTION TO ELECTRONIC COMPONENTS.

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

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Bally MIDWAY

Invites You To Use

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SELF-TEST MODE

The Self-Test mode is a special mode for checking the game switches and computer functions. It is the easiest and best way to check for proper operation of the entire game.

When in the Self-Test mode you will see a CURSOR (arrow pointing to the right) at the left edge of the monitor screen. To position the CURSOR, use the right hand (1 PLAYER) "A" — "B" — "C" Control Buttons. The "B" Button is used to select/exit a function indicated by the CURSOR. The "A" Button is used to move the CURSOR up the left hand side of the monitor screen while the "C" Button is used to move the CURSOR down the left hand side of the monitor screen.

To exit the Self-Test mode, turn the Self-Test Switch to the "OFF" position, move the CURSOR to any of the following words: "REPEAT", "RETURN", or "EXIT" (the exact wording depends on the test level you are in), and press the "B" Button.

Displays of test results will generally take one of two forms: 1) a display of colored rectangles, or 2) the words "GOOD", "BAD" or "OK". In the colored rectangle displays, generally GREEN means GOOD and RED means BAD. Failures of any of the CIRCUITRY TESTS will probably require P.C. Board swapping in the field to determine the defective Board which can then be repaired later.

SPECIAL NOTE

In the ROM TESTS-SUPER GAME CARD, empty EPROM Sockets X10 through X17 (displayed as "K" through "S" in the test) may be indicated to be "EMPTY" or "BAD". Either indication is correct because there is nothing (no electronic parts) in these positions.

The Self-Test mode is fairly self-explanatory. You may begin a Self-Test at any time after the power to the game is on by sliding the Self-Test switch to the "ON" position. Now that the game is in the Self-Test mode, the functions it will perform can best be seen if given in outline form. They will then each be explained individually.

NOTE: Putting the game into Self-Test WILL NOT cause it to erase any CREDITS it has on it from its memory.

I. CIRCUITRY TESTS

- A. 16-COLOR BOARD TESTS
 - 1. WRITE MODES
 - 2. INTERCEPT
- B. RAM TESTS
 - 1. SCREEN RAM
 - 2. SCRATCH PAD
 - 3. WRITE-PROTECT
- C. ROM TESTS
 - 1. SUPER GAME CARD
 - 2. 16K CARD
- D. CONTINUOUS TEST
 - 1. START NEW TEST
 - 2. CONTINUE PREVIOUS TEST

II. VIDEO TEST/ADJUST

- A. CROSS HATCH
- B. COLOR BARS
- C. GREY LEVELS
- D. PURITY

III. AUDIO/MECHANICAL

- A. SOUNDS
- B. SWITCHES
- C. DEVICES
 - 1. COINCTR1
 - 2. COINCRT2
 - 3. LED1
 - 4. LED2
 - 5. LEFT LAMP A
 - 6. LEFT LAMP B
 - 7. LEFT LAMP C
 - 8. RIGHT LAMP A
 - 9. RIGHT LAMP B
 - 10. RIGHT LAMP C

IV. STATISTICS

- A. TIME INDEX 1 PLYR
- B. TIME INDEX 2 PLYR
- C. SCORE INDEX
- D. CLEAR STATISTICS

V. GAME SETTINGS

- A. SHILL SOUNDS
- B. FREE PLAY
- C. DOOR1—CO/CR
- D. DOOR2—C0/CR
- E. #FRUITS
- F. BONUS EVERY
- G. STARTING DIF
- H. INCREMENTAL DIF
- I. DEFAULTS

EXPLANATION OF SELF-TEST FUNCTIONS

I. CIRCUITRY TESTS

THE 16 COLOR BOARD TESTS check the majority of the circuitry on the SCREEN RAM and CPU boards.

THE RAM TESTS check the SCREEN RAM on the SCREEN RAM BOARD and the STATIC RAMS on the SUPER GAME MEMORY BOARD.

THE ROM TEST display will vary depending on the position of Setting Switch #5 on the GAME I/O BOARD. Initially, the game is manufactured using EPROM's and the required memory is split between the SUPER GAME MEMORY BOARD and the 640K EPROM BOARD. Later production will have ROM's. The position of the Setting Switch **WILL NOT** affect the operation of the game, only the manner in which the ROM TESTS are displayed. To properly display the ROM TEST for the BOARDS that you have in your games card rack, make sure Setting Switch #5 is set properly. (See DIP SWITCH SETTINGS under "SWITCHES" heading.)

THE CONTINUOUS TEST is generally used to test a game over night for heat related problems. Two options are available: 1) START NEW TEST resets the pass counter, error counter and reset counter, and 2) CONTINUE PREVIOUS TEST causes previous test to be continued without resetting the above mentioned counters. After each complete cycle of the CONTINUOUS TEST, the results are displayed. Also, by depressing and holding down the SELECT ONE PLAYER GAME BUTTON during a CONTINUOUS TEST, an almost immediate display can be obtained (the individual test that is running **MUST** be complete). Releasing the Button causes the CONTINUOUS TEST to proceed.

II. VIDEO TEST/ADJUST

These displays are used for adjusting the monitor in the game. Use the CROSS HATCH to adjust horizontal and vertical linearity, horizontal and vertical size, and convergence. Use COLOR BARS to verify that all three color guns are functioning. Use the GREY LEVELS to adjust overall brightness. Block 0 should be BLACK and block 15 should be WHITE. Each block from 0 to 15 should be progressively brighter.

III. AUDIO/MECHANICAL

These tests are designed to check all cabinet input and output devices for proper operation.

SOUNDS: Three tones are generated in each Audio Channel at the SAME time. Both channels should be at the SAME volume if the Volume Control Pots are set the same.

SWITCHES: This test is to verify that all Switches are functioning. Each rectangle represents a different Switch. The color of the rectangle should change from RED (for OFF) to GREEN (for ON) as each switch is actuated. Each Switch in the game is identified above its respective rectangle. The designation table follows.

- c1 - Coin Switch #1 (Left)
- c2 - Coin Switch #2 (Right)
- ts - Test Switch
- sl - Slam Switch (Tilt)
- 1p - Select 1 Player Game
- 2p - Select 2 Player Game
- la - Left Player A Button
- lb - Left Player B Button
- lc - Left Player C Button
- ra - Right Player A Button
- rb - Right Player B Button
- rc - Right Player C Button

DIP SWITCH SETTINGS: The designation table for the 8 position DIP SWITCH PACK located on the game I/O BOARD in the CARD RACK follows.

- ct - Cocktail Table
 - Switch Position #1 to "ON" = Cocktail Table Game
 - Switch Position #1 to "OFF" = Upright Game
- rs - Reset
 - Switch Position #2 to "ON" = Clears ALL Data (Score Index, Time Index, High Scores and Programmable Options whenever Game is turned "OFF" and then back "ON" again
 - Switch Position #2 to "OFF" = Does NOT reset data whenever Game is turned "OFF" and then back "ON" again
- lk - Lockup
 - Switch Position #3 to "ON" = Halt on error during CONTINUOUS TEST
 - Switch Position #3 to "OFF" = Does NOT halt on error, CONTINUOUS TEST goes on
- bp - Beep
 - Switch Position #4 to "ON" = Game gives audio response to test results—a HIGH pitched beep means good or OK and a LOW pitched beep means bad or error
 - Switch Position #4 to "OFF" = No audio response to test results
- rm - ROM
 - Switch Position #5 to "ON" = game uses 32K ROM's and displays test results accordingly
 - Switch Position #5 to "OFF" = game uses 8K and 16K ROM's and displays test results accordingly
- s6 - Switch Position #6 NOT USED
- s7 - Switch Position #7 NOT USED
- s8 - Switch Position #8 NOT USED

DEVICES: These tests check all Output Devices. When a particular test is chosen by positioning the cursor in front of the desired DEVICE to be tested and the Right Hand Player's "B" Button is pressed, the cursor disappears and the chosen DEVICE pulse "ON" and "OFF" at a rate of about once per second. Depressing the above mentioned "B" Button again causes the cursor to re-appear and the selected DEVICE should be in the "OFF" state. Games are shipped with only one Coin Counter. However, driver circuitry is provided for an OPTIONAL second Coin Counter. Therefore, on standard games, this test provides NO visual or audible output unless the Operator has installed the second Coin Counter.

IV. STATISTICS

These displays provide the Operator with information concerning playing times and scoring levels. This should prove useful in determining optimum Difficulty and Bonus Level Settings. The game keeps track of time and score for each game played and at the end of each game it updates the information used to create each of these displays.

TIME INDEX—1 PLR: In 90 second increments, displays the number of one player games played that fall into each category as well as the total number of one player games played.

TIME INDEX—2 PLR: In 180 second increments, displays the number of two player games played that fall into each category as well as the total number of two player games played.

SCORE INDEX: In 5000 point increments, displays the number of players that have achieved a final score that falls into each category. For example: if a two player game is played and one player finished with a score of 3456 and the second player finishes with a score of 2345, the number in the range of "0—5K" will increase by two. However, if player two had finished with a score of 6789, then the number in the range of "0—5K" will only increase by one and the number in the range of "5K—10K" will also increase by one.

CLEAR STATISTICS: This allows the Operator to clear the Time and Score Indexes individually. All-time high scores and initials CAN NOT be cleared using this routine.

V. GAME SETTINGS

SHILL SOUNDS: When the game is not being played and this feature is "ON", at the beginning of the attract sequence a musical tune is played to attract attention to the game. If this feature is not desired in quiet locations, it may be turned "OFF".

The "B" Button is used to select/exit this function and the "C" Button may be used to turn it "OFF" (The "A" Button is used to turn it "ON".)

FREE PLAY: When this feature is "ON", no coins are required to play the game and the monitor screen displays this message "FREE PLAY, SO HIT THE BUTTON". The "B" Button is used to select/exit this function and the "C" Button may be used to turn it "OFF". (The "A" Button is used to turn it "ON".)

DOOR1—CO/CR // DOOR2—CO/CR: This allows the Operator to set the numbers of coins required for a given number of credits. It is totally adjustable for any combination from 1 coin for 1 credit to 1 coin for 9 credits. The reverse is also true. The game can be set up to require as many as 9 coins to give 1 credit or 2 credits, etc. Any combination of numbers is possible with a little experimentation. For example: if the game were set for 3/3 it would be the same as 1/1. Also, if the game were set for 2/3, one credit would be issued for the first coin and two credits would be issued for the second coin. **HOWEVER**, if a game were played and completed **BETWEEN** when the first and second coins were inserted, the second coin would only give one credit and a third coin would be required to get the next additional two credits. The game keeps track of fractions of a coin but clears the fraction at the end of the game.

The "B" Button is used to select/exit this function. The 2 PLAYER Button selects the COINS half of the option (the number to the left of the "/") and the 1 PLAYER Button selects the CREDITS half of the option (the number to the right of the "/"). The "A" Button may be used to make the number go higher in value while the "C" Button may be used to make the number go lower in value.

FRUITS: The number of FRUITS is the number of wrong answers a player is allowed at the start of a game. The "B" Button is used to select/exit this function. The "A" Button may be used to make the number go higher in value while the "C" Button may be used to make the number go lower in value.

BONUS EVERY: A BONUS question is given to a player every so often for answering a certain number of questions without a wrong answer (and without being interrupted by a correct answer provided by the other player in a TWO PLAYER game). It should also be noted that to increase the difficulty level of the game automatically, after the number of questions asked and answered is 30, the game adds two to the programmed number of questions that must be answered correctly without a wrong answer before the player will get another BONUS question.

For example, the default value is three. **AFTER** answering 3 questions in a row correctly, the player gets a BONUS question. After the 30th question is asked, the player **WILL NOT** get any BONUS questions until he answers 5 questions in a row correctly. **AFTER** the next 30 questions are asked he would have to answer 7 questions in a row correctly to get a BONUS question—and so on.

A player **DOES NOT** loose a FRUIT if he answers a BONUS question incorrectly. If he answers it correctly, he is awarded double the score of the question and is given an additional FRUIT.

The "B" Button is used to select/exit this function. The "A" Button may be used to make the number go higher in value while the "C" Button may be used to make the number go lower in value. For this option, **ONLY** the values 2, 3, 4, 5, and 6 are allowed as initial settings.

STARTING DIFF: The difficulty level of the game is controlled in several ways. Certain questions are inherently more difficult than others i.e. sequences of six objects are more difficult than sequences of four objects. Also, as the degree of difficulty increases, the Pac-Man that eats the score value dots across the top of the screen increases his speed so that there is less time to answer.

On a scale of 1 to 9, 1 is the **EASIEST** and 9 is the **MOST DIFFICULT** level of play. The setting of this option only sets the degree of difficulty the game **STARTS** at. The "B" Button is used to select/exit this function. The "A" Button may be used to make the number go higher in value while the "C" Button may be used to make the number go lower in value.

INCREMENTAL DIFF: How quickly the game gets more difficult is controlled by this setting. A setting of 1 would cause the game to take a **longer** time to get to the next level of difficulty while a setting of 9 would cause the game to take a **shorter** time to get to the next level of difficulty. The "B" Button is used to select/exit this function. The "A" Button may be used to make the number go higher in value while the "C" Button may be used to make the number go lower in value.

DEFAULT: The games **DEFAULT** settings are the factory recommended settings and are as follows:

SHILL SOUNDS are OFF
FREE PLAY is OFF
DOOR1—CO/CR is 1/1
DOOR2—CO/CR is 1/1
FRUITS is 3
BONUS EVERY 3 QUESTIONS
STARTING DIFF is 3
INCREMENTAL DIFF is 3

Depressing the "B" Button while "DEFAULTS" is selected will change the display to the above settings. The word "SET" will also be displayed to the right of the word "DEFAULTS" for about *two seconds* to alert the operator that the settings have been changed.

When finished with the Self-Test mode, slide the Self-Test switch back to the "OFF" position. To exit the Self-Test mode after the Self-Test Switch is in the "OFF" position, move the CURSOR to any of the following words: "REPEAT", "RETURN", or "EXIT" (the exact wording depends on the test level you are in), and press the "B" Button.

Normal game functions will now return to the monitor screen.

ATTRACT MODE

1. The Attract mode starts:

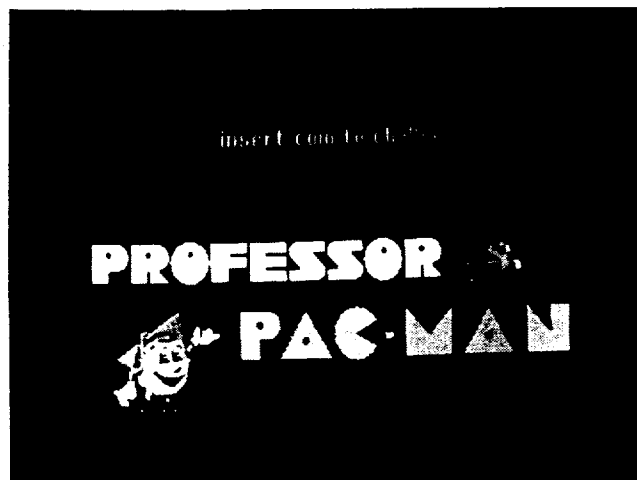
Just after power has been turned on to the game. (Self-Test switch is in the "OFF" position.)

After a Self-Test has been completed. (Performing a Self-Test **DOES NOT** set the credits in the games memory to zero "0".)

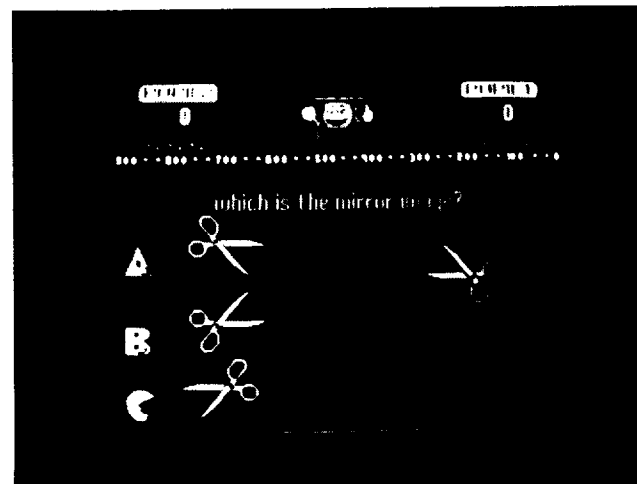
After a play has been finished, the score was not high enough to put the game into the High Score/Initial mode, and there are no more credits left in the games memory.

After the High Score/Initial mode when there are no more credits left in its memory.

In the Attract mode, the game will give the following displays *centered* on the monitor screen:

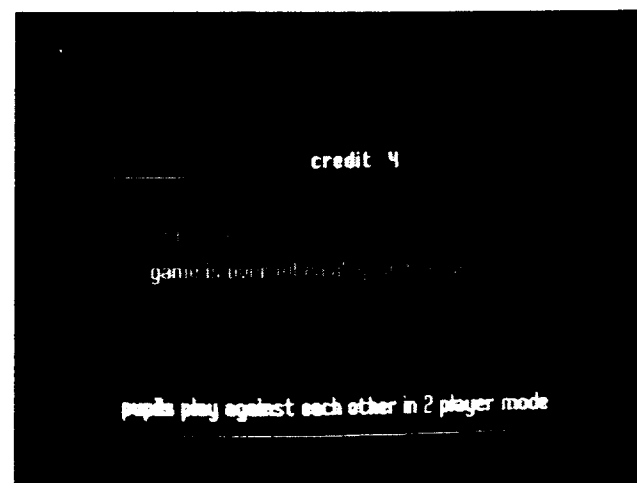


Attract Mode Display 1



Attract Mode Display 2

No matter where the game is in the Attract mode sequence, it will immediately go to the following display as soon as a game has been paid for.



Ready to Play Mode Display

READY-TO-PLAY MODE

1. The Ready-To-Play mode starts when enough coins have been accepted for a 1 or a 2 player game.
2. The Ready-To-Play mode ends when either the "1 PLAYER" or the "2 PLAYER" push button is pressed.
3. In the Ready-To-Play mode, the game will give the above displays *centered* on the monitor screen.
4. If no START button is pressed, the displays will remain indefinitely as shown above.

PLAY MODE

PROFESSOR PAC-MAN is a game of observation skill designed for either 1 or 2 players. After a question is displayed the player must answer correctly to receive a score. A player's score is shown within the blackboard assigned to him. Player 1's blackboard is in the upper right hand corner of the monitor screen and player 2's blackboard is in the upper left hand corner of the monitor screen. A FRUIT symbol and a number are displayed next to each player's blackboard. The number indicates the quantity of incorrect answers a player has left **BEFORE** the game is over for that particular player. The FRUIT symbol indicates the level of difficulty that that particular player has achieved at any point in the game.

Professor Pac-Man is seated at the desk in the top center of the monitor screen and he displays the number of questions that have been asked so far this game (including BONUS QUESTIONS). Below Professor Pac-Man is a row of dots representing the score for the current question and indirectly the time remaining to answer the current question.

After the current question is asked, a Pac-Man starts eating the dots from left to right. When the question is answered, the Pac-Man stops eating the dots and his position is relative to the score that is awarded if the question is answered correctly. If the question was answered incorrectly, Pac-Man will continue eating dots until the question is answered correctly (you are allowed 2 tries) or until he eats the last dot—which is equal to zero points and is the "time up point".

The maximum number of points that can be awarded is "900" and the minimum is "0". As the game progresses in difficulty, the amount of time it takes Pac-Man to eat all the scoring dots gets shorter and shorter until, at the most difficult level of play, he eats them all in about 3 seconds.



Bonus questions are awarded if a player answers a given number of questions in a row correctly—no mistakes. The given number of questions that the player must answer before he gets a bonus question is Operator selectable during the Self-Test mode. A correct answer to a bonus question is rewarded by giving the player two times the score value attained plus a BONUS FRUIT. A player is allowed **ONLY 1 CHANCE** to answer a bonus question correctly. However, an incorrect answer to a bonus question **DOES NOT** penalize the player by subtracting a Fruit.

Certain factors differ between 1 and 2 player games so each will be covered by itself later in this text.

ONE PLAYER GAME

In the **ONE PLAYER GAME**, the player is challenging himself to answer correctly and quickly to achieve a high score. As each question is asked, the player is permitted **two** chances to answer correctly. If the player fails to respond to a question, a Fruit is subtracted from the player. The *first time* within a question that a player answers incorrectly, a Fruit is subtracted. If time still remains, the player can try to answer again. However, if he **DOES NOT** try to answer again and time runs out, another Fruit **WILL NOT** be subtracted from him. **BUT--** if the player does have enough time—and tries to answer the question the *second time*—but is still incorrect, **ANOTHER** Fruit **WILL** be subtracted from him.

It is to the players advantage NOT to try to answer **ANY** question the *second time* if he is not 100% sure of the answer because he will not be penalized again if he doesn't try. But he will be penalized for another wrong attempt which turns out to be wrong.

TWO PLAYER GAME

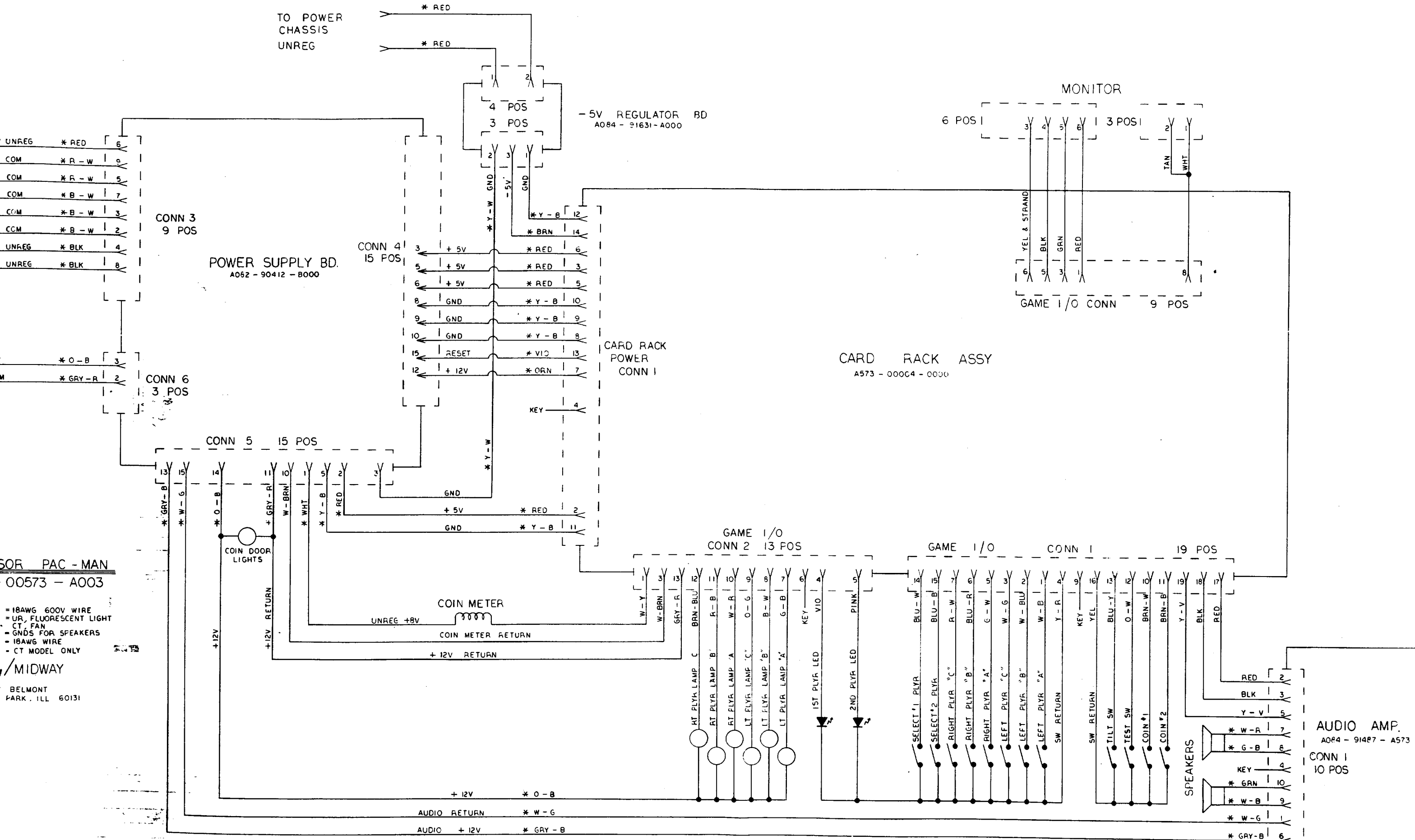
In the **TWO PLAYER GAME**, the players are challenging each other to see who can answer correctly *first*. The player that answers correctly *first* receives the score and that player is indicated by the marquee-like pattern moving on the players blackboard.

If a player answers incorrectly, he loses a Fruit and the other player **MUST** try to answer the question correctly in the time remaining. If the other player *fails* to answer or *answers incorrectly*, a Fruit is subtracted from him also.

The game ends for the first player to run out of Fruit. The remaining player then continues to play from that point on just as though it were a single player game (that is—the remaining player is permitted two chances to answer each question).

HIGH SCORE/INITIAL MODE:

Follow the *on-screen instructions* to enter your initials.



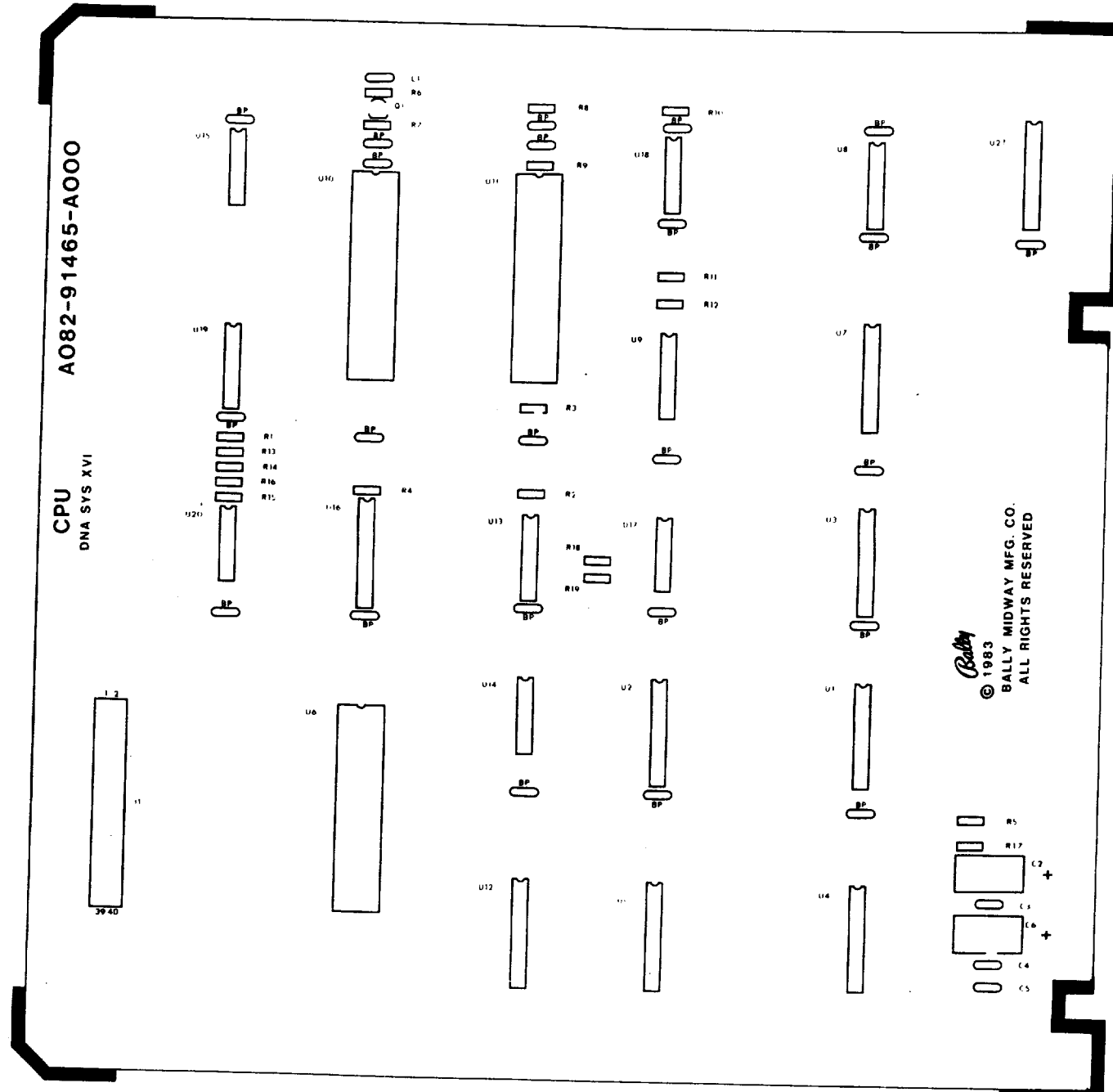
SOR PAC-MAN
00573 - A003

- 18AWG 600V WIRE
- UR, FLUORESCENT LIGHT
- CT, FAN
- GNDS FOR SPEAKERS
- 18AWG WIRE
- CT MODEL ONLY

MIDWAY
BELMONT
PARK, ILL 60131

AUDIO AMP.
A064 - 91487 - A573
CONN 1
10 POS

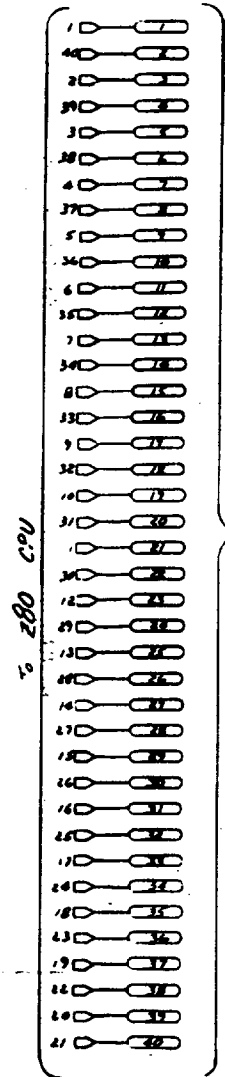
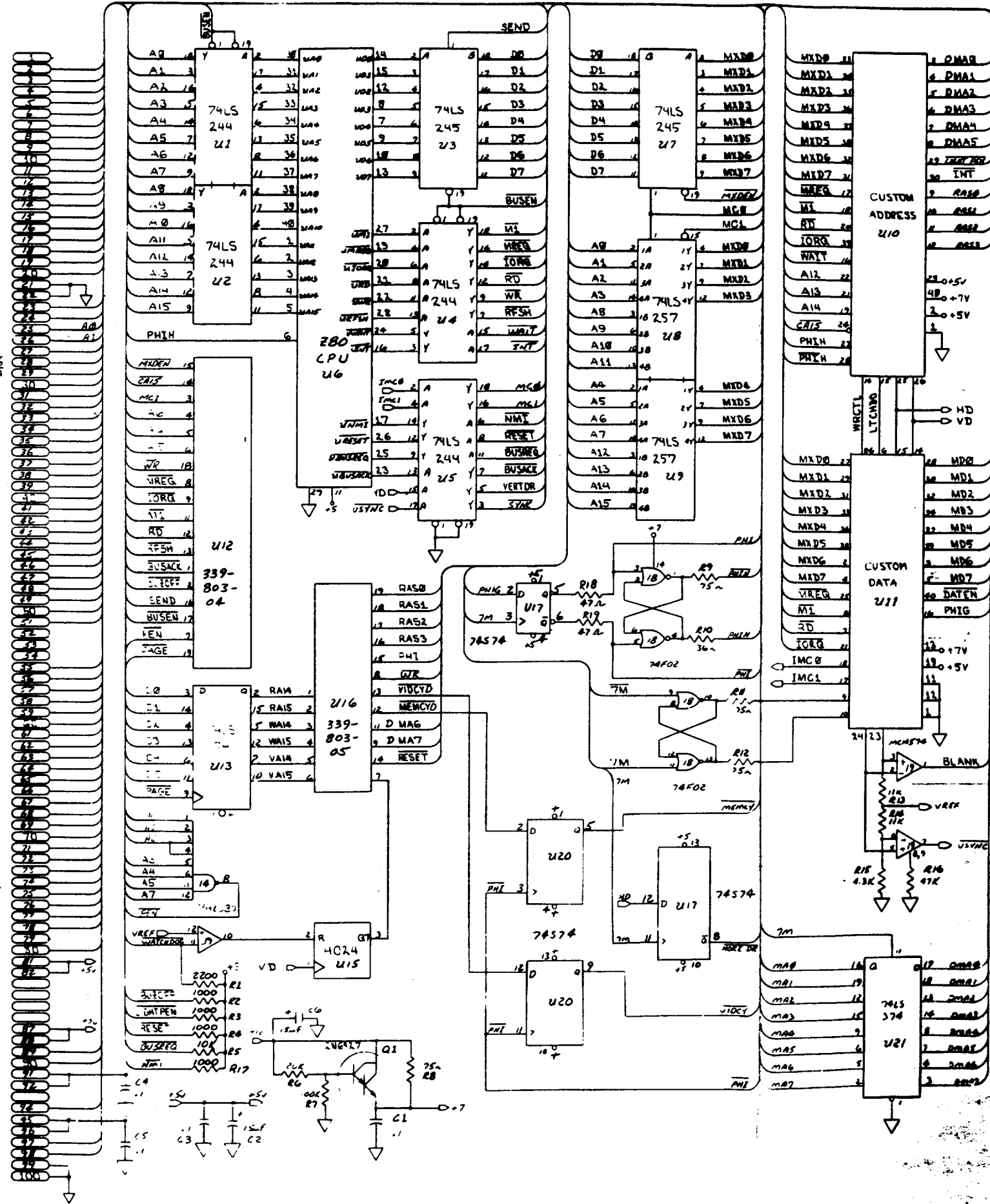
| DESIGNATION NO. | DESCRIPTION |
|-----------------|--------------------------|
| BP | 0.1 MFD +80-20X AX. CER. |
| C1 | 0.1 MFD +80-20X AX. CER. |
| C2 | 15 MFD 20% TANT. |
| C3-C5 | 0.1 MFD +80-20X AX. CER. |
| C6 | 15 MFD 20% TANT. |
| R1 | 2200 OHM 1/4W 5X |
| R2-R4 | 1000 OHM 1/4W 5X |
| R5 | 10K OHM 1/4W 5X |
| R6 | 20K OHM 1/4W 5X |
| R7 | 100K OHM 1/4W 5X |
| R8-R9 | 75 OHM 1/4W 5X |
| R10 | 36 OHM 1/4W 5X |
| R11-R12 | 75 OHM 1/4W 5X |
| R13-R14 | 11K OHM 1/4W 5X |
| R15 | 4300 OHM 1/4W 5X |
| R16 | 47K OHM 1/4W 5X |
| R17 | 1000 OHM 1/4W 5X |
| R18-R19 | 47 OHM 1/4W 5X |
| Q1 | 2N6427 |
| U1-U2 | 74LS244 |
| U3 | 74LS245 |
| U4-U5 | 74LS244 |
| U6 | Z-80 |
| U7 | 74LS245 |
| U8-U9 | 74LS257 |
| U10 | CUSTOM ADDRESS |
| U11 | CUSTOM DATA |
| U12 | CUSTOM DATA |
| U13 | CUSTOM U12 |
| U14 | 74LS174 |
| U15 | 74LS30 |
| U16 | MC14024BCP |
| U17 | CUSTOM U16 |
| U18 | 74S74 |
| U19 | 74F02 |
| U20 | MC14574 |
| U21 | 74S74 |
| U22 | 74LS374 |
| | NON-REFERENCED |
| | 20-PIN IC SOCKET |
| | 40-PIN IC SOCKET |
| | CARD EJECTORS |
| | PC BOARD |



| DESCRIPTION | QTY | DESIGNATION NO. | CPU BOARD ASSY PART NOS. |
|------------------|-----|------------------|--------------------------|
| 0.1 MFD | 27 | | 0339-00800-0001 |
| 15 MFD | 2 | C2, C6 | 0339-00800-0002 |
| 36 OHM | 1 | R10 | 0062-07783-1XXX |
| 47 OHM | 2 | R18, R19 | 0062-08683-1XXX |
| 75 OHM | 4 | R8, R9, R11, R12 | 0062-10183-1XXX |
| 1000 OHM | 4 | R2-R4 | 0062-17983-1XXX |
| 2200 OHM | 1 | R1 | 0062-19583-1XXX |
| 4300 OHM | 1 | R15 | 0062-20983-1XXX |
| 10K OHM | 1 | R5 | 0062-22783-1XXX |
| 11K OHM | 2 | R13, R14 | 0062-22983-1XXX |
| 20K OHM | 1 | R6 | 0062-24183-1XXX |
| 47K OHM | 1 | R16 | 0062-25983-1XXX |
| 100K OHM | 1 | R7 | 0062-27583-1XXX |
| 2N6427 | 1 | Q1 | 0339-00802-0001 |
| 74LS30 | 1 | U14 | 0339-00803-0006 |
| 74S74 | 2 | U17, U20 | 0339-00803-0026 |
| 74LS174 | 1 | U13 | 0339-00803-0007 |
| 74LS244 | 4 | U1, U2, U4, U5 | 0339-00803-0008 |
| 74LS245 | 2 | U3, U7 | 0339-00803-0009 |
| 74LS257 | 2 | U8, U9 | 0339-00803-0010 |
| 74F02 | 1 | U18 | 0339-00803-0011 |
| 74LS374 | 1 | U21 | 0339-00803-0012 |
| MC14024B | 1 | U15 | 0339-00803-0013 |
| MC14574 | 1 | U19 | 0339-00803-0014 |
| Z-80 | 1 | U6 | 0339-00803-0014 |
| CUSTOM ADDRESS | 1 | U10 | 0339-00803-0001 |
| CUSTOM DATA | 1 | U11 | 0339-00803-0002 |
| CUSTOM U12 | 1 | U12 | 0339-00803-0003 |
| CUSTOM U16 | 1 | U16 | 0339-00803-0004 |
| | | U16 | 0339-00803-0005 |
| 20-PIN IC SOCKET | 9 | | 0339-00804-0005 |
| 40-PIN IC SOCKET | 3 | | 0339-00804-0009 |
| CARD EJECTORS | 2 | | 0339-00804-0010 |
| 0.025 GOLD PINS | 40 | | 0017-00033-0493 |
| P.C BOARD, BLANK | 1 | | A080-91465-A000 |

| | | | | |
|---|--|----------------------|----------------|-----------------------------|
| PROJECT ENG. DAVE OTTO | | USED ON PROF. PACMAN | | REVISIONS |
| DO NOT SCALE DWG | | HEAT TREAT | SCALE FULL | NO REQ'D I PER |
| DIM TOLERANCES UNLESS SPECIFIED | | DATE 7/5/83 | ASSY. DWG. CPU | |
| DATE 7/5/83 | | A082-91465-A000 | | PART NO MO51 - 00339 - A001 |
| Bally / MIDWAY MFG. CO. FRANKLIN KY ILL | | | | |

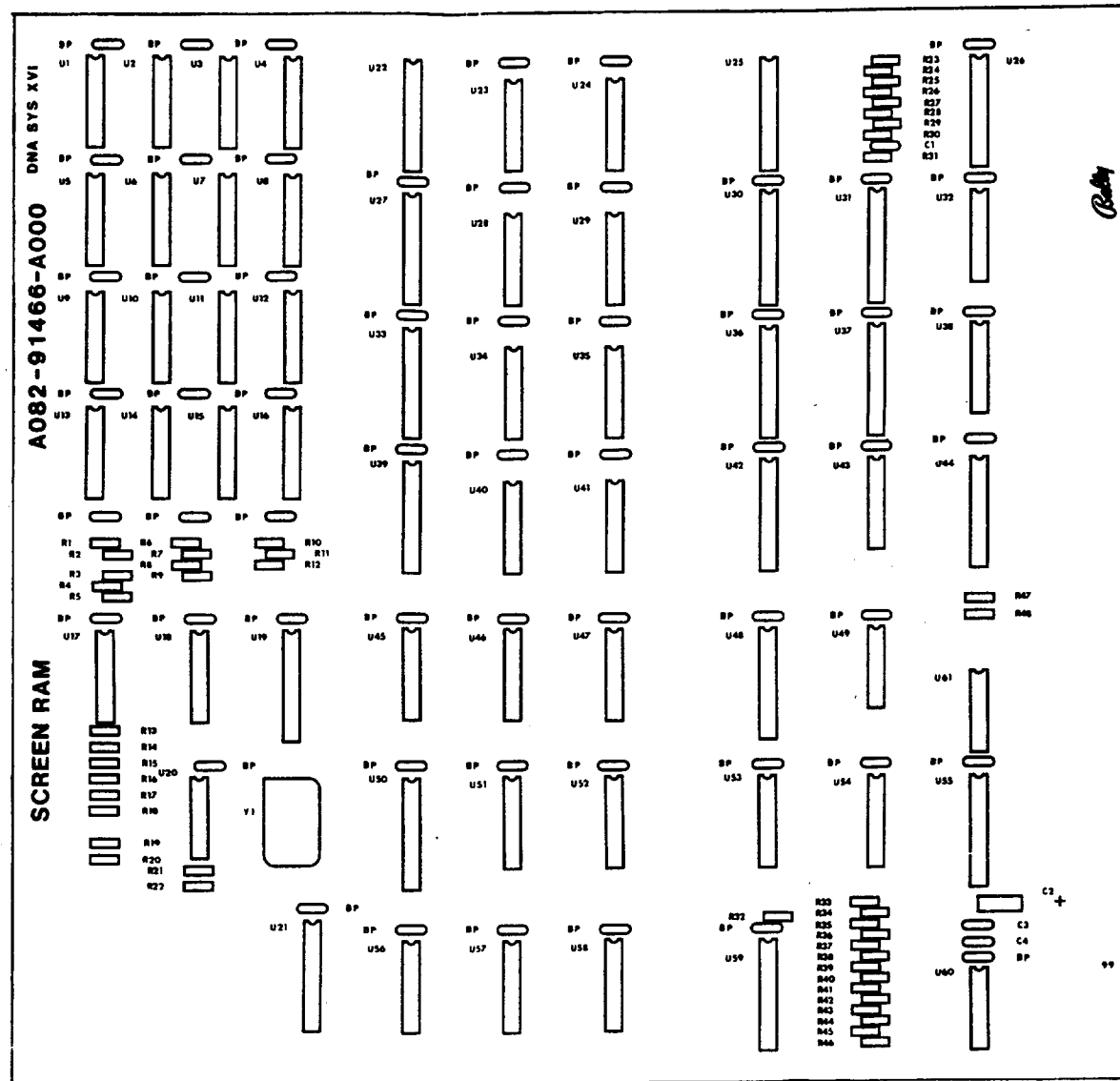
FRAME
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|---------------------------------|---------------|-----------------|------------|------|
| PROJECT ENG | DESIGNED BY | DATE | REVISED BY | DATE |
| | | | | |
| REVISIONS | | | | |
| USED ON SYS & VI | NO RECD 1 PER | MIDWAY MFG. CO. | | |
| 16 COLOR CPU CARD SCHEMATIC DWG | | | | |
| A082-91465-A.000 | | | | |
| M 051-00339-A.002 | | | | |
| 7/15/83 | | | | |

| DESIGNATION NO. | DESCRIPTION | DESIGNATION NO. | DESCRIPTION |
|-----------------|--------------------------|-----------------|---------------|
| BP | 0.1 MFD +80-20X AX. CER. | U1-U16 | MID2600 |
| C1 | 100 PFD 5X AX. CER. | U17 | 74S175 |
| C2 | 15 MFD 20X TANT. | U18 | 74S161 |
| C3 | 0.1 MFD +80-20X AX. CER. | U19 | CUSTOM U19 |
| C4 | 0.1 MFD +80-20X AX. CER. | U20 | 74S86 |
| R1 | 75 OHM 1/4W 5X | U21 | 74S374 |
| R2 | 75 OHM 1/4W 5X | U22 | CUSTOM U22 |
| R3 | 100 OHM 1/4W 5X | U23 | 74LS670 |
| R4 | 100 OHM 1/4W 5X | U24 | 74LS166 |
| R5 | 100 OHM 1/4W 5X | U25 | 74LS374 |
| R6 | 75 OHM 1/4W 5X | U26 | 74S374 |
| R7 | 51 OHM 1/4W 5X | U27 | CUSTOM U27 |
| R8 | 51 OHM 1/4W 5X | U28 | 74LS670 |
| R9 | 51 OHM 1/4W 5X | U29 | 74LS166 |
| R10 | 75 OHM 1/4W 5X | U30 | 74LS374 |
| R11 | 51 OHM 1/4W 5X | U31 | 74LS374 |
| R12 | 100 OHM 1/4W 5X | U32 | 74LS157 |
| R13 | 51 OHM 1/4W 5X | U33 | CUSTOM U33 |
| R14 | 51 OHM 1/4W 5X | U34 | 74LS670 |
| R15 | 75 OHM 1/4W 5X | U35 | 74LS166 |
| R16 | 51 OHM 1/4W 5X | U36 | 74LS374 |
| R17 | 75 OHM 1/4W 5X | U37 | 74LS374 |
| R18-R30 | 51 OHM 1/4W 5X | U38 | 74LS157 |
| R31 | 100 OHM 1/4W 5X | U39 | CUSTOM U39 |
| R32 | 6200 OHM 1/4W 5X | U40 | 74LS670 |
| R33 | 750 OHM 1/4W 1X | U41 | 74LS166 |
| R34 | 1500 OHM 1/4W 2X | U42 | 74LS374 |
| R35 | 1500 OHM 1/4W 2X | U43 | 74S157 |
| R36 | 1500 OHM 1/4W 2X | U44 | 74LS244 |
| R37 | 6200 OHM 1/4W 5X | U45 | 74F112 |
| R38 | 750 OHM 1/4W 1X | U46 | 74LS174 |
| R39 | 750 OHM 1/4W 1X | U47 | 74LS157 |
| R40 | 3000 OHM 1/4W 5X | U48 | 74LS244 |
| R41 | 1500 OHM 1/4W 2X | U49 | 74LS125 |
| R42 | 1500 OHM 1/4W 2X | U50 | 74S374 |
| R43 | 3000 OHM 1/4W 5X | U51 | 74S158 |
| R44 | 3000 OHM 1/4W 5X | U52 | 74LS174 |
| R45 | 6200 OHM 1/4W 5X | U53 | 74LS157 |
| R46 | 1500 OHM 1/4W 2X | U54 | 74LS109 |
| R47 | 510 OHM 1/4W 5X | U55 | CUSTOM U55 |
| R48 | 510 OHM 1/4W 5X | U61 | 74LS189 |
| | | Y1 | 28.636360 MHZ |

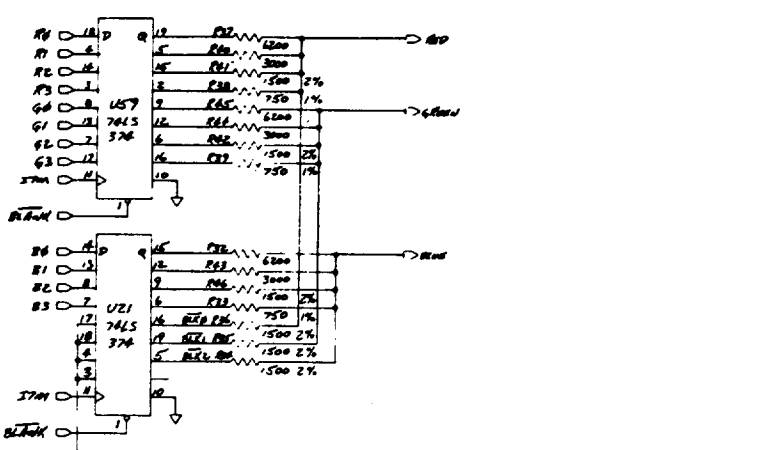
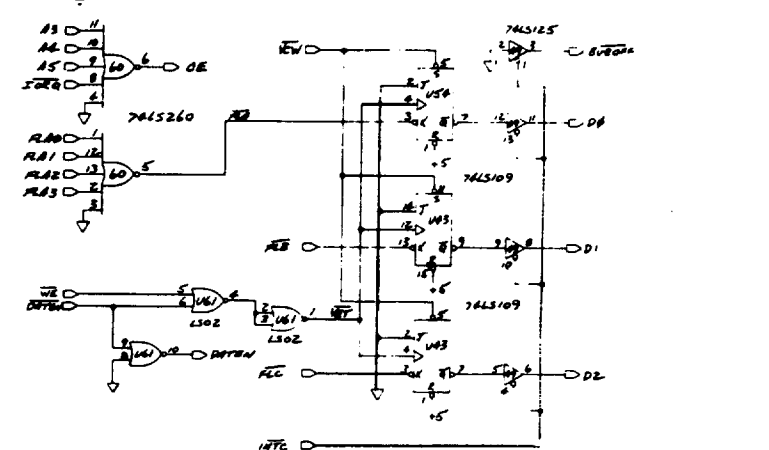
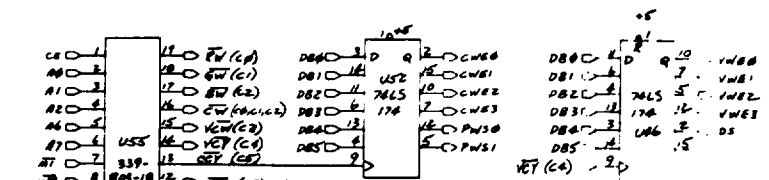
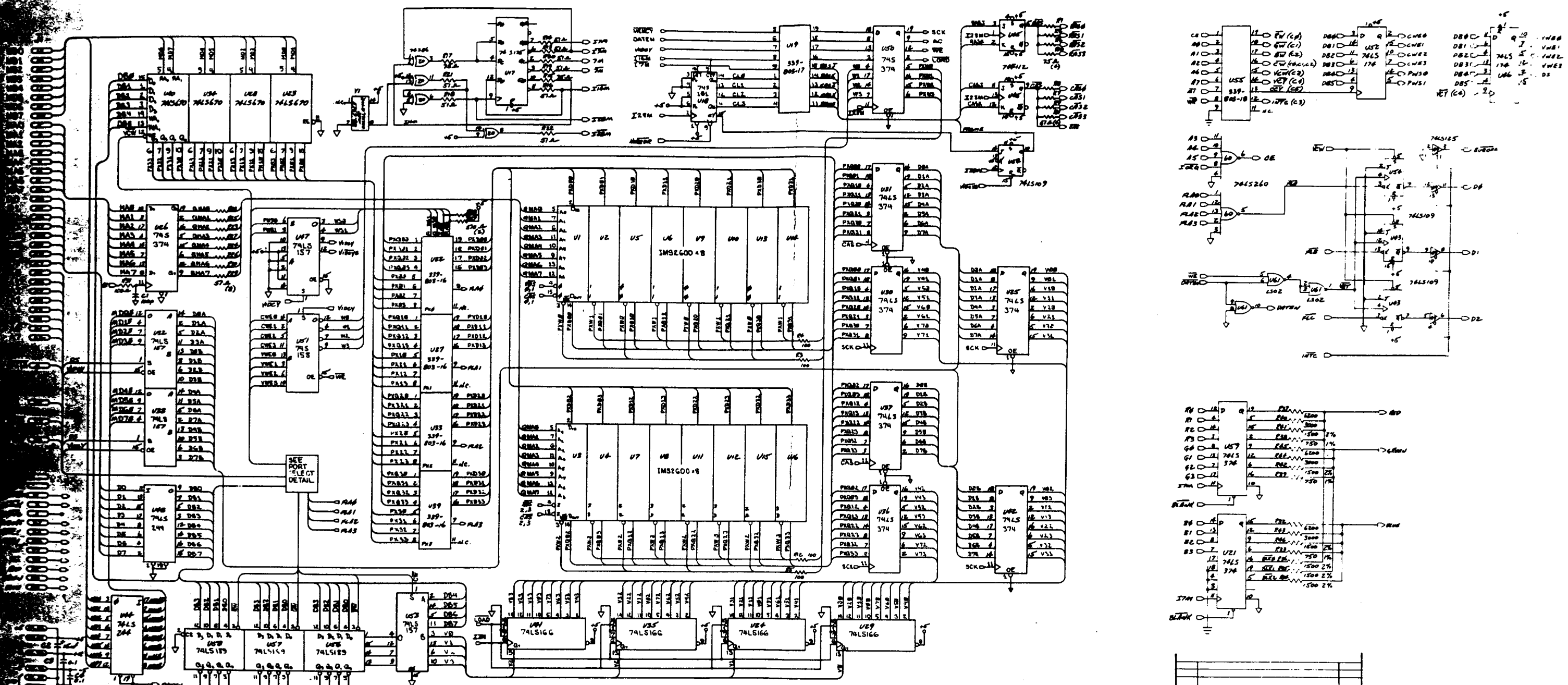
NON-REFERENCED
16-PIN IC SOCKET
20-PIN IC SOCKET
CARD EJECTORS
PC BOARD



| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|---------------------|-----|------------------------------------|-----------------|
| 100 PFD | 1 | C1 | 0339-00800-0004 |
| 0.1 MFD | 59 | | 0339-00800-0001 |
| 15 MFD | 1 | C2 | 0339-00800-0002 |
| 51 OHM | 20 | R7-R9, R11, R13, R14, R16, R18-R30 | 0062-089B3-1XXX |
| 75 OHM | 6 | R1, R2, R6, R10, R15, R17 | 0062-101B3-1XXX |
| 100 OHM | 5 | R3-R5, R12, R31 | 0062-110B3-1XXX |
| 510 OHM | 2 | R47, R48 | 0062-159B3-1XXX |
| 750 OHM | 3 | R33, R38, R39 | 0062-171B1-3XXX |
| 1500 OHM | 6 | R34-R36, R41, R42, R46 | 0062-187B2-1XXX |
| 3000 OHM | 3 | R40, R43, R44 | 0062-201B3-1XXX |
| 6200 OHM | 3 | R32, R37, R45 | 0062-217B3-1XXX |
| 74LS02 | 1 | U61 | 0339-00803-0090 |
| 74LS109 | 2 | U43, U54 | 0339-00803-0019 |
| 74LS125 | 1 | U49 | 0339-00803-0020 |
| 74LS157 | 4 | U32, U38, U47, U53 | 0339-00803-0021 |
| 74LS166 | 4 | U24, U29, U35, U41 | 0339-00803-0022 |
| 74LS174 | 2 | U46, U52 | 0339-00803-0023 |
| 74LS189 | 3 | U56, U58 | 0339-00803-0024 |
| 74LS244 | 2 | U44, U48 | 0339-00803-0025 |
| 74LS260 | 1 | U60 | 0339-00803-0027 |
| 74LS374 | 6 | U25, U30, U31, U36, U37, U42 | 0339-00803-0028 |
| 74LS670 | 4 | U23, U28, U34, U40 | 0339-00803-0029 |
| 74S86 | 1 | U20 | 0339-00803-0030 |
| 74S158 | 1 | U51 | 0339-00803-0032 |
| 74S161 | 1 | U18 | 0339-00803-0033 |
| 74S175 | 1 | U17 | 0339-00803-0034 |
| 74S374 | 4 | U21, U26, U50 | 0339-00803-0035 |
| 74F112 | 1 | U45 | 0339-00803-0091 |
| CUSTOM U22-27-33-39 | 4 | U22, U27, U33, U39 | 0339-00803-0016 |
| CUSTOM U19 | 1 | U19 | 0339-00803-0017 |
| CUSTOM U55 | 1 | U55 | 0339-00803-0018 |
| MID2600 | 16 | U1-U16 | 0339-00803-0015 |
| 16-PIN IC SOCKET | 16 | | 0339-00804-0003 |
| 20-PIN IC SOCKET | 18 | | 0339-00804-0005 |
| CARD EJECTORS | 2 | | 0339-00804-0010 |
| 28.636360 MHZ | 1 | Y1 | 0339-00804-0012 |
| PC BOARD, BLANK | 1 | | A080-91466-A000 |

| REVISIONS |
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|---------------------------------|--|-----------------------|-----------------|
| PROJECT ENG: D. OTTO | | USED ON PROF. PAC-MAN | |
| DO NOT SCALE DWG | | SCALE FULL | NO. REQ'D 1 PER |
| DIM TOLERANCES UNLESS SPECIFIED | | ASSEMBLY DWG. | |
| DATE 7/5/83 | | SCREEN RAM P.C. BD. | |
| | | A082-91466-A000 | |
| | | PART NO | |
| | | M051 - 00339 - A003 | |



| PROJECT ENG: | | USED ON SYS XVI | | REVISIONS | |
|--|------|-----------------|-------|--|--|
| DO NOT SCALE | DATE | NO | REQ'D | PER | |
| 7/15/83 | | | | | |
| SCREEN RAM SCHEMATIC DWG A082-91466-A000 | | | | Rely / MIDWAY MFG. CO. FRANKLIN, ILL. PART NO M051-00339-A004 | |

DESIGNATION LIST

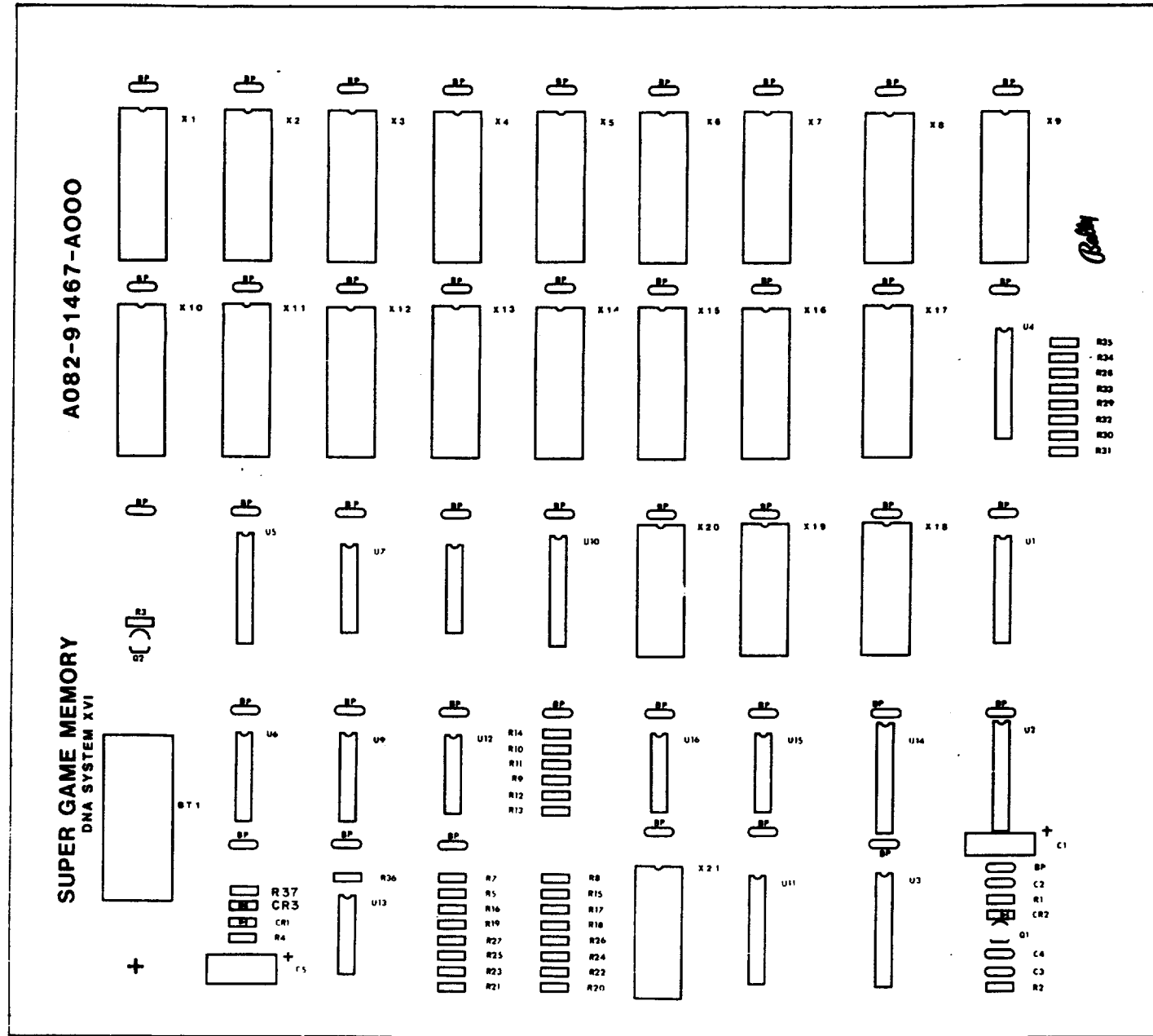
| DESIGNATION NO. | DESCRIPTION |
|-----------------|--------------------------|
| BP | 0.1 MFD +80-20% AX. CER. |
| C1 | 15 MFD 20% TANT. |
| C2 | 0.1 MFD +80-20% AX. CER. |
| C3 | 0.1 MFD +80-20% AX. CER. |
| C4 | 0.1 MFD +80-20% AX. CER. |
| C5 | 15 MFD 20% TANT. |
| C6 | 0.1 MFD +80-20% AX. CER. |
| R1 | 1000 OHM 1/4W 5% |
| R2 | 120 OHM 1/4W 5% |
| R3 | 2700 OHM 1/4W 5% |
| R4 | 220K OHM 1/4W 5% |
| R5 | 10K OHM 1/4W 5% |
| R6 | 470K OHM 1/4W 5% |
| R7-R27 | 10K OHM 1/4W 5% |
| R28-R35 | 110 OHM 1/4W 5% |
| R36 | 10K OHM 1/4W 5% |
| R37 | 470 OHM 1/4W 5% |
| BT1 | 3.6V NICD |
| CR1 | 1N4004 |
| CR2 | 1N4004 |
| CR3 | 1N4616 |
| Q1 | 2N4401 |
| Q2 | 2N4401 |
| U1 | 74LS244 |
| U2 | 74LS244 |
| U3 | 74LS244 |
| U4 | 74LS245 |
| U5 | CUSTOM U5 |
| U6 | 74LS175 |
| U7 | 74LS138 |
| U8 | 74LS138 |
| U9 | 74LS139 |
| U10 | CUSTOM U10 |
| U11 | CUSTOM U11 |
| U12 | 74LS74 |
| U13 | 7403 |
| U14 | 74LS245 |
| U15 | 7417 |
| U16 | 7417 |

X1-X17 28-PIN IC SOCKET
X18-X21 24-PIN IC SOCKET

NON-REFERENCED
20-PIN IC SOCKET
CARD EJECTORS
PC BOARD

NON-REFERENCED
USED ON PROFESSOR
PAC-MAN
2763 EPROM POS X1
2763 EPROM POS X2
2763 EPROM POS X3
2763 EPROM POS X4
2763 EPROM POS X5
2763 EPROM POS X6
2763 EPROM POS X7
2763 EPROM POS X8
2763 EPROM POS X9

2K X 8 RAM POS X18
2K X 8 RAM POS X19
2K X 8 RAM POS X20
2K X 8 RAM POS X21



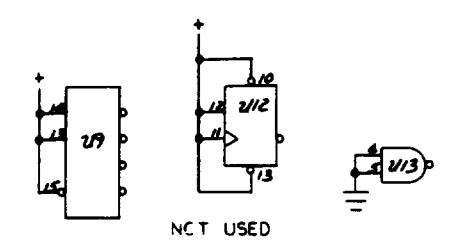
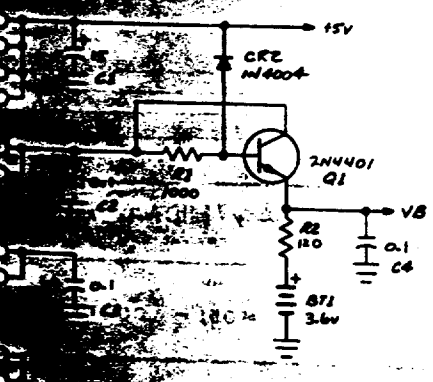
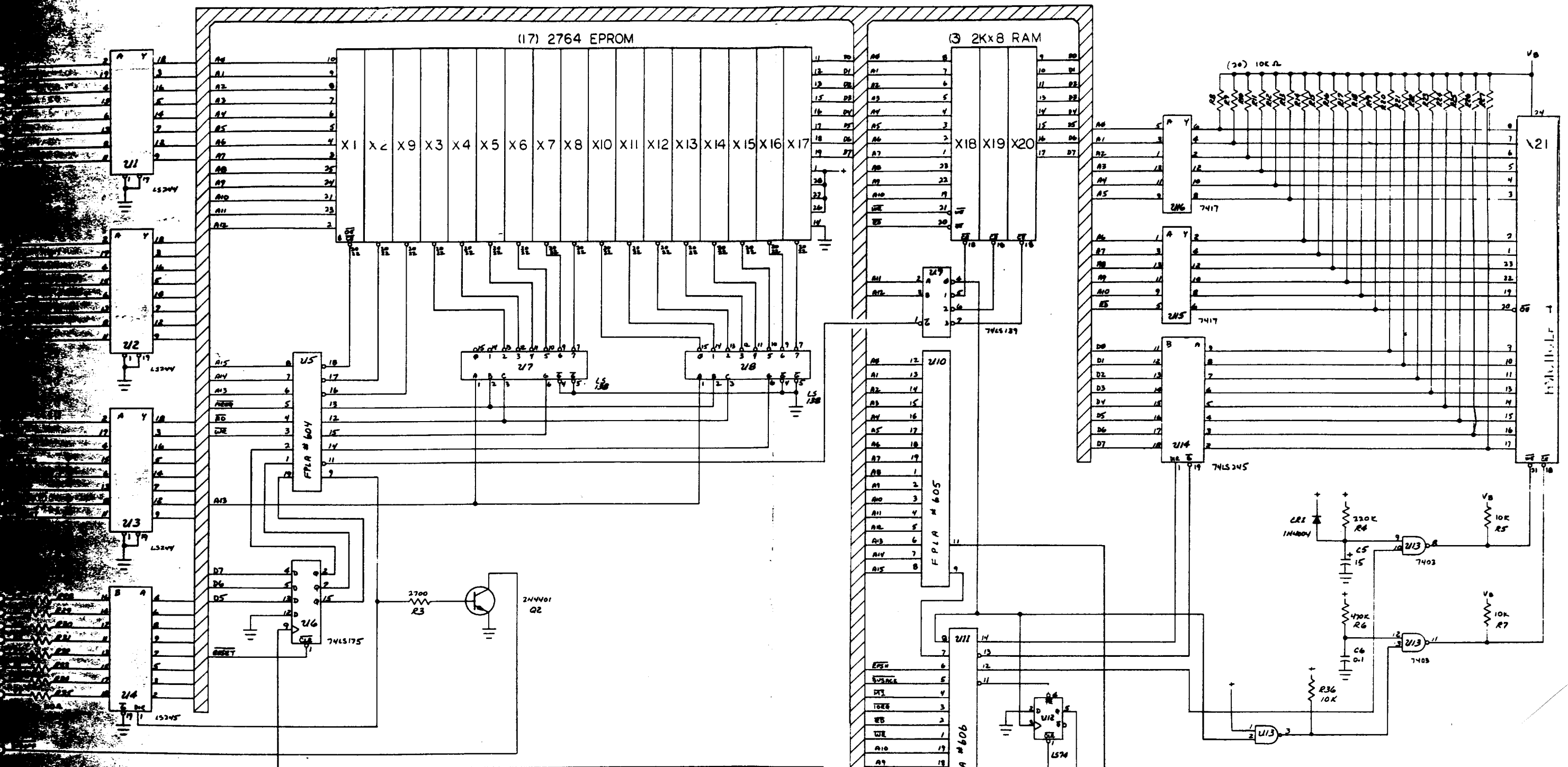
CROSS REFERENCE LIST

| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|-------------------|-----|-----------------|----------------|
| 0.1 MFD | 45 | | 0339-00800-00 |
| 15 MFD | 2 | C1, C5 | 0339-00800-00 |
| 3.6V | 1 | BT1 | 0339-00804-00 |
| 110 OHM | 8 | R28-R35 | 0062-113B3-1X |
| 120 OHM | 1 | R2 | 0062-116B3-1X |
| 470 OHM | 1 | R37 | 0062-156B3-1X |
| 1000 OHM | 1 | R1 | 0062-179B3-1X |
| 2700 OHM | 1 | R3 | 0062-199B3-1X |
| 10K OHM | 23 | R7-R27 | 0062-227B3-1X |
| 220K OHM | 1 | R4 | 0062-291B3-1X |
| 1N4004 | 2 | CR1, CR2 | 0339-00801-00 |
| 1N4616 | 1 | CR3 | 0339-00801-00 |
| 2N4401 | 2 | Q1, Q2 | 0339-00802-00 |
| 74LS74 | 1 | U12 | 0339-00803-00 |
| 74LS138 | 2 | U7, U8 | 0339-00803-00 |
| 74LS139 | 1 | U9 | 0339-00803-00 |
| 74LS175 | 1 | U6 | 0339-00803-00 |
| 74LS244 | 3 | U1-U3 | 0339-00803-00 |
| 74LS245 | 2 | U4, U14 | 0339-00803-00 |
| 7403 | 1 | U13 | 0339-00803-00 |
| 7417 | 2 | U15, U16 | 0339-00803-00 |
| CUSTOM U5 | 1 | U5 | 0339-00803-00 |
| CUSTOM U10 | 1 | U10 | 0339-00803-00 |
| CUSTOM U11 | 1 | U11 | 0339-00803-00 |
| 20-PIN IC SOCKET | 8 | | 0339-00804-00 |
| 24-PIN IC SOCKET | 4 | X18-X21 | 0339-00804-00 |
| 28-PIN IC SOCKET | 17 | X1-X17 | 0339-00804-00 |
| CARD EJECTORS | 2 | | 0339-00804-00 |
| P.C. BOARD, BLANK | 1 | | A080-91467-A00 |
| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
| PROG 2763 | 1 | | 5730-40AXA-AX |
| PROG 2763 | 1 | | 5730-40AXA-BX |
| PROG 2763 | 1 | | 5730-40AXA-CX |
| PROG 2763 | 1 | | 5730-40AXA-DX |
| PROG 2763 | 1 | | 5730-40AXA-EX |
| PROG 2763 | 1 | | 5730-40AXA-FX |
| PROG 2763 | 1 | | 5730-40AXA-GX |
| PROG 2763 | 1 | | 5730-40AXA-HX |
| PROG 2763 | 1 | | 5730-40AXA-JX |
| PHAN 2K X 8 | 4 | | 0339-00803-00 |

| REVISIONS |
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|---------------------------------|------------|------------------------------|--------------|
| PROJECT ENG: D.OTTO | | USED ON PROF. PACMAN | |
| DO NOT SCALE DWG | HEAT TREAT | SCALE FULL | NO REQ'D PER |
| DIM TOLERANCES UNLESS SPECIFIED | DRG BAK | ASSY. DWG. SUPER GAME MEMORY | |
| DATE 7/15/85 | DATE | PART NO M051 - 00339 - A005 | |

Bally / MIDWAY MFG. CO.
FRANKLIN, PA. U.S.A.

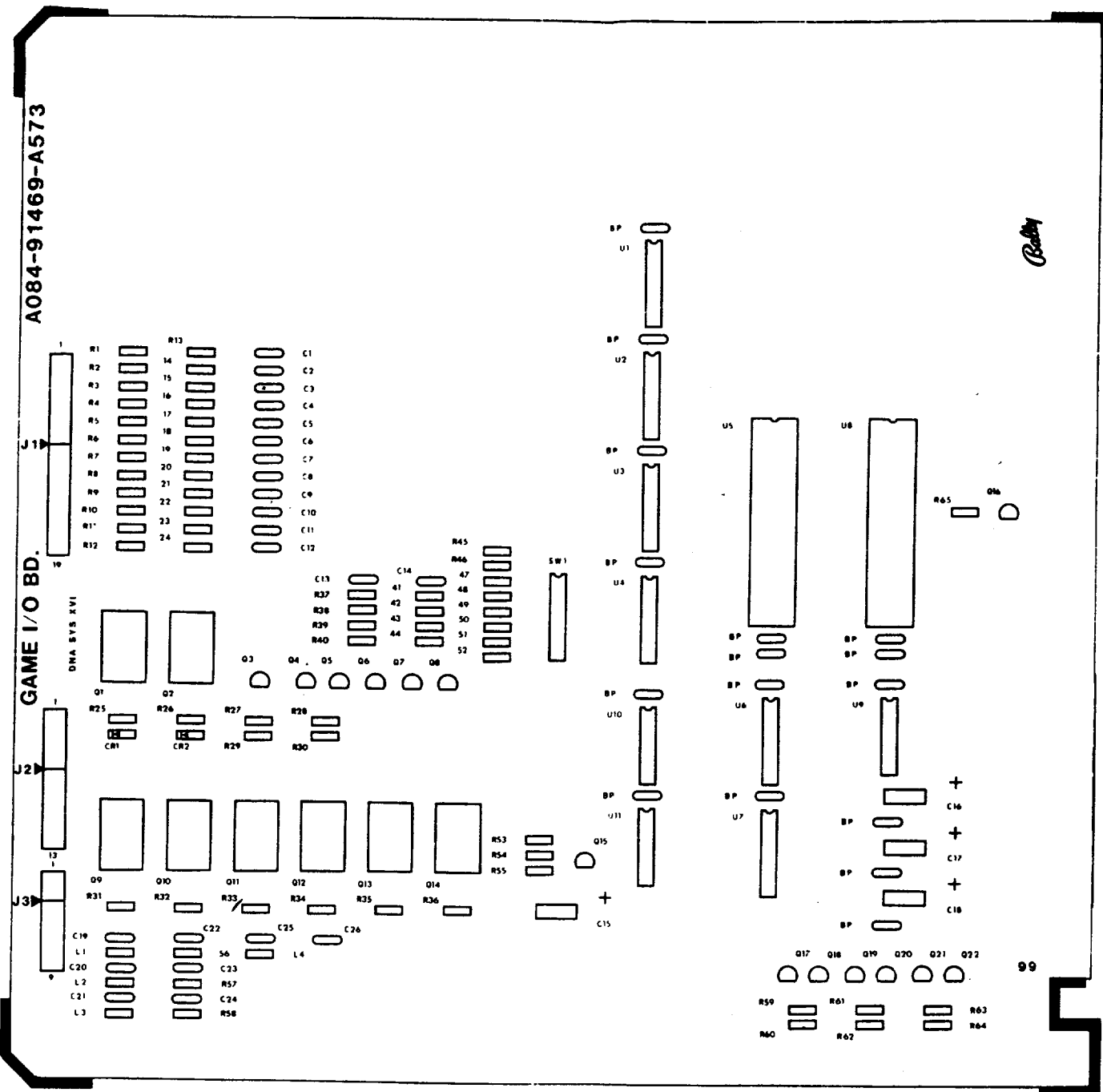


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|-------------------|---------|-----------------|-----------|---|--|
| PROJECT ENG. | | USED ON SYS XVI | | REVISED | |
| DO NOT WRITE OVER | | DATE | NO. REV'D | Bally / MIDWAY MFG. CO. FRANKLIN, PA. U.S.A. | |
| DESIGNER | DATE | NO. | PER | PART NO. | |
| OTTO | 7/15/83 | FULL | 1 | MO51-00339 - A008 | |
| SUPER GAME MEMORY | | | | A082-91467-A000 | |

DESIGNATION LIST

| DESIGNATION NO. | DESCRIPTION |
|-----------------|--------------------------|
| BP | 0.1 MFD +80-20% AX. CER. |
| C1-C14 | 0.1 MFD +80-20% AX. CER. |
| C15-C18 | 15 MFD 20% TANT. |
| C19-C24 | 27 PFD 5% AX. CER. |
| C25-C26 | 470 PFD 20% AX. CER. |
| R1-R12 | 220 OHM 1/4W 5% |
| R13-R24 | 2700 OHM 1/4W 5% |
| R25-R28 | 270 OHM 1/4W 5% |
| R29-R30 | 220 OHM 1/4W 5% |
| R31-R36 | 270 OHM 1/4W 5% |
| R37-R38 | 100 OHM 1/4W 5% |
| R39-R40 | 330 OHM 1/4W 5% |
| R41-R42 | 2200 OHM 1/4W 5% |
| R43-R44 | 47K OHM 1/4W 5% |
| R45-R52 | 2700 OHM 1/4W 5% |
| R53 | 22K OHM 1/4W 5% |
| R54 | 5100 OHM 1/4W 5% |
| R55 | 100 OHM 1/4W 5% |
| R56-R58 | 150 OHM 1/4W 5% |
| R59 | 11 OHM 1/4W 5% |
| R60 | 22 OHM 1/4W 5% |
| R61 | 11 OHM 1/4W 5% |
| R62 | 22 OHM 1/4W 5% |
| R63 | 11 OHM 1/4W 5% |
| R64 | 22 OHM 1/4W 5% |
| R65 | 2700 OHM 1/4W 5% |
| CR1-CR2 | 1N4004 |
| Q1-Q2 | TIP-110 |
| Q3-Q6 | 2N4401 |
| Q7-Q8 | 2N4403 |
| Q9-Q14 | TIP-31 |
| Q15 | 2N6427 |
| Q16 | 2N4401 |
| Q17-Q22 | 2N4403 |
| U1-U4 | MC14539B |
| U5 | CUSTOM I/O |
| U6-U7 | 74LS174 |
| U8 | CUSTOM I/O |
| U9 | 74LS86 |
| U10-U11 | 7417 |
| L1-L4 | FERRITE BEAD |
| J1 | KK100-19RA |
| J2 | KK100-13RA |
| J3 | KK100-09RA |
| SW1 | 8-POS DIP SWITCH |

NON-REFERENCED
40-PIN IC SOCKET
CARD EJECTORS
METAL SNAPS
PC BOARD



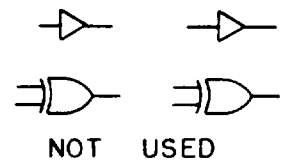
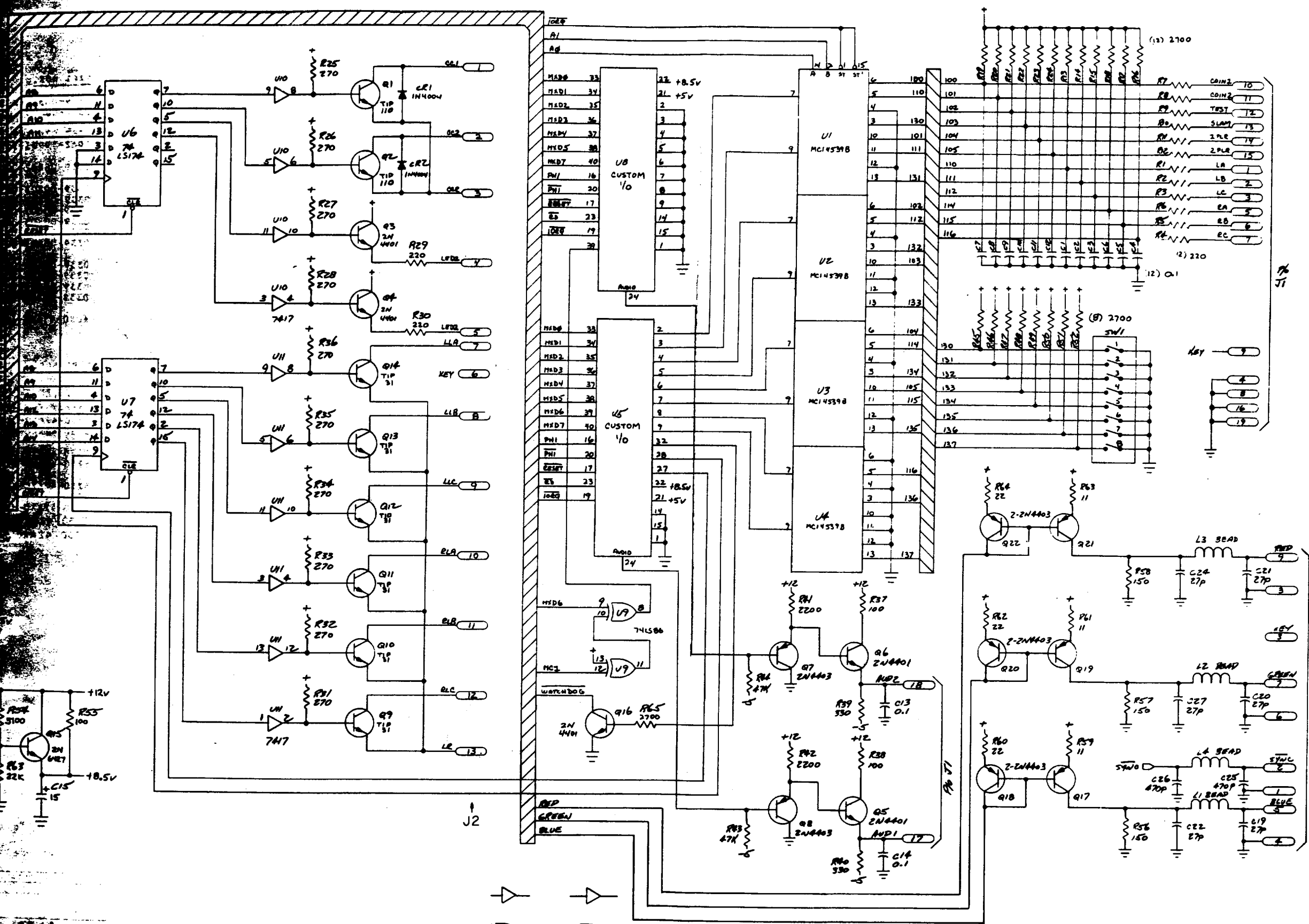
CROSS REFERENCE LIST

| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|------------------|-----|-----------------------|-----------------|
| 27 PFD | 6 | C19-C24 | 0573-00800-0005 |
| 470 PFD | 2 | C25, C26 | 0573-00800-0006 |
| 0.1 MFD | 30 | | 0573-00800-0001 |
| 15 MFD | 4 | C15-C18 | 0573-00800-0002 |
| 11 OHM | 3 | R59, R61, R63 | 0062-052B3-1XXX |
| 22 OHM | 3 | R60, R62, R64 | 0062-063B3-1XXX |
| 100 OHM | 3 | R37, R38, R55 | 0062-110B3-1XXX |
| 150 OHM | 3 | R56-R58 | 0062-122B3-1XXX |
| 220 OHM | 14 | R1-R12, R29, R30 | 0062-133B3-1XXX |
| 270 OHM | 10 | R25-R28, R31-R36 | 0062-138B3-1XXX |
| 330 OHM | 2 | R39, R40 | 0062-144B3-1XXX |
| 2200 OHM | 2 | R41, R42 | 0062-195B3-1XXX |
| 2700 OHM | 21 | R13-R24, R45-R52, R65 | 0062-199B3-1XXX |
| 5100 OHM | 1 | R54 | 0062-213B3-1XXX |
| 22K OHM | 1 | R53 | 0062-243B3-1XXX |
| 47K OHM | 2 | R43, R44 | 0062-259B3-1XXX |
| 1N4004 | 2 | CR1, CR2 | 0573-00801-0001 |
| 2N4401 | 5 | Q3-Q6, Q16 | 0573-00802-0001 |
| 2N4403 | 8 | Q7, Q8, Q17-Q22 | 0573-00802-0002 |
| 2N6427 | 1 | Q15 | 0573-00802-0003 |
| TIP-31 | 6 | Q9-Q14 | 0573-00802-0004 |
| TIP-110 | 2 | Q1, Q2 | 0573-00802-0005 |
| 7417 | 2 | U10, U11 | 0573-00803-0005 |
| 74LS86 | 1 | U9 | 0573-00803-0002 |
| 74LS174 | 2 | U6, U7 | 0573-00803-0003 |
| MC14539B | 4 | U1-U4 | 0573-00803-0004 |
| CUSTOM I/O | 2 | U5, U8 | 0573-00803-0001 |
| 8-POS DIP SW. | 1 | SW1 | 0339-00804-0011 |
| FERRITE BEAD | 4 | L1-L4 | 0069-275XX-XCGX |
| KK100-09RA | 1 | J3 | 3000-16468-0900 |
| KK100-13RA | 1 | J2 | 3000-16468-1300 |
| KK100-19RA | 1 | J1 | 3000-16468-1900 |
| 40-PIN IC SOCKET | 2 | | 0339-00804-0009 |
| METAL SNAPS | 8 | | 0573-00804-0001 |
| CARD EJECTORS | 2 | | 0573-00804-0010 |
| PC BOARD, BLANK | 1 | | A080-91469-A573 |

| REVISIONS | |
|-----------|--|
| | |
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| | |

| | | | |
|---------------------------------|-------------|----------------------|------------------------------|
| PROJECT ENG: D. OTTO | | USED ON PROF. PACMAN | |
| DO NOT SCALE DWG | SCALE FULL | NO. REQ'D I/PER | |
| DIM TOLERANCES UNLESS SPECIFIED | DATE 7/5/83 | ASSY. DWG. I/O BD. | PART NO. M051 - 00573 - A008 |
| UNLESS OTHERWISE SPECIFIED | | A084-91469-A573 | |

Bally / MIDWAY MFG. CO.
FRANKLIN PK ILL

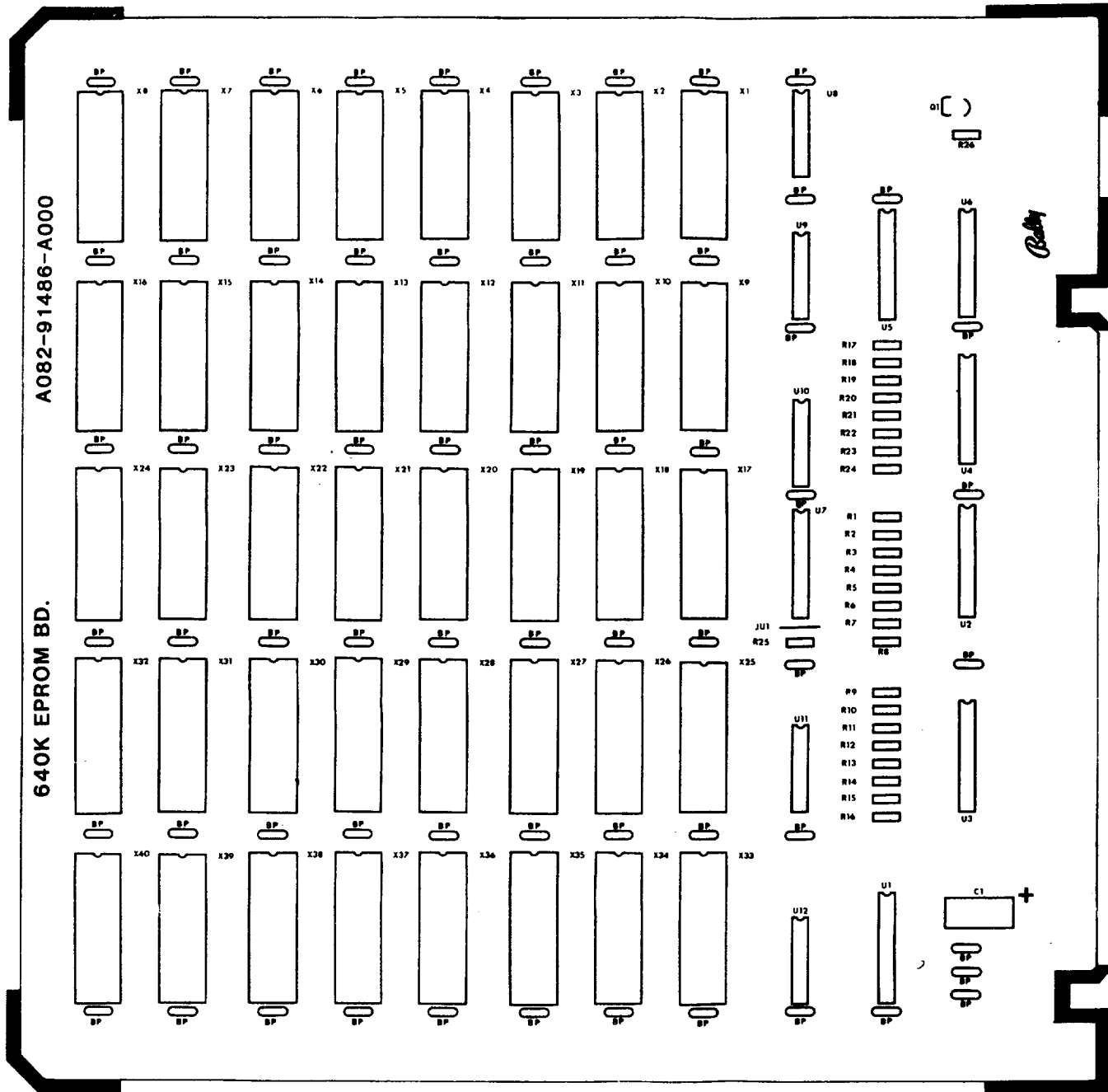


ALL CAPACITORS IN MFD
 ALL RESISTORS IN OHMS
 UNLESS MARKED OTHERWISE

| PROJECT ENG | | DESIGN | | CHECKED | | DATE | | USED OR PROF. PAC-MAN | | REVISIONS | |
|---|------|--------|----|---------|----|------|----|-------------------------|------|-----------|--|
| DATE | BY | DATE | BY | DATE | BY | DATE | BY | NO | REQD | PER | |
| 7/6/83 | OTTO | | | | | | | | | | |
| GAME BOARD SCHEMATIC DWG A 084-91469-A573 | | | | | | | | PART NO MOSI-00573-A009 | | | |

DESIGNATION LIST

| DESIGNATION NO. | DESCRIPTION |
|---|--|
| BP | 0.1 MFD +80-20X AX. CER. |
| C1 | 15 MFD 20% TANT. |
| R1-R24 R25-R26 | 33 OHM 1/4W 5% 2700 OHM 1/4W 5% |
| Q1 | 2N4401 |
| U1-U3 U4 U5 U6 U7 U8-U12 | 74LS244 74LS245 74LS273 CUSTOM U6 CUSTOM U7 74LS138 |
| X1-X40 | 28-PIN IC SOCKET |
| JU1 | WIRE JUMPER |
| | NON-REFERENCED USED ON PROFESSOR PAC-MAN |
| | 27128 EPROM POS X1 |
| | 27128 EPROM POS X2 |
| | 27128 EPROM POS X3 |
| | 27128 EPROM POS X4 |
| | 27128 EPROM POS X5 |
| | 27128 EPROM POS X6 |
| | 27128 EPROM POS X7 |
| | 27128 EPROM POS X8 |
| | 27128 EPROM POS X9 |
| | 27128 EPROM POS X10 |
| | 27128 EPROM POS X11 |
| | 27128 EPROM POS X12 |
| | 27128 EPROM POS X13 |
| | 27128 EPROM POS X14 |

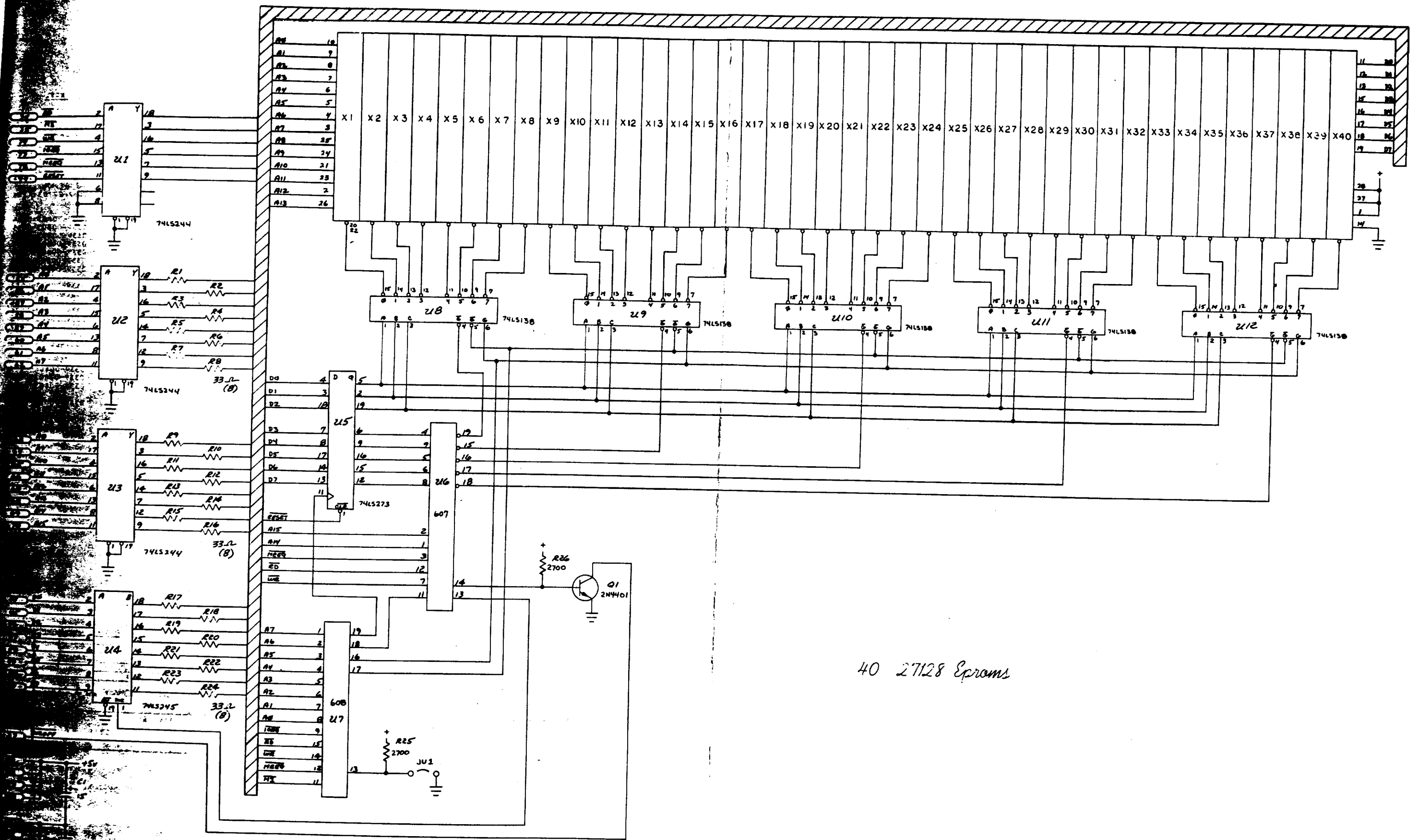


CROSS REFERENCE LIST

| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|------------------|-----|-----------------|-----------------|
| 0.1 MFD | 63 | | 0339-00800-0017 |
| 15 MFD | 1 | C1 | 0339-00800-0018 |
| 33 OHM | 24 | R1-R24 | 0062-07483-1XXX |
| 2700 OHM | 2 | R25,R26 | 0062-19983-1XXX |
| 2N4401 | 1 | Q1 | 0339-00802-0005 |
| 74LS138 | 5 | U8-U12 | 0339-00803-0031 |
| 74LS244 | 3 | U1-U3 | 0339-00803-0082 |
| 74LS245 | 1 | U4 | 0339-00803-0083 |
| 74LS273 | 1 | U5 | 0339-00803-0084 |
| CUSTOM U6 | 1 | U6 | 0339-00803-0085 |
| CUSTOM U7 | 1 | U7 | 0339-00803-0086 |
| 20-PIN | 7 | | 0339-00804-0005 |
| 28-PIN IC SOCKET | 40 | X1-X40 | 0339-00804-0008 |
| CARD EJECTORS | 1 | JU1 | 0339-00804-0016 |
| | 2 | | 0339-00804-0010 |
| PC. BOARD, BLANK | 1 | | A080-91486-A000 |

| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|-------------|-----|-----------------|-----------------|
| PROG 27128 | 1 | | 5730-42AXC-AXFD |
| PROG 27128 | 1 | | 5730-42AXC-BXFD |
| PROG 27128 | 1 | | 5730-42AXC-CXFD |
| PROG 27128 | 1 | | 5730-42AXC-DXFD |
| PROG 27128 | 1 | | 5730-42AXC-EXFD |
| PROG 27128 | 1 | | 5730-42AXC-FXFD |
| PROG 27128 | 1 | | 5730-42AXC-GXFD |
| PROG 27128 | 1 | | 5730-42AXC-HXFD |
| PROG 27128 | 1 | | 5730-42AXC-IXFD |
| PROG 27128 | 1 | | 5730-42AXC-KXFD |
| PROG 27128 | 1 | | 5730-42AXC-LXFD |
| PROG 27128 | 1 | | 5730-42AXC-MXFD |
| PROG 27128 | 1 | | 5730-42AXC-NXFD |
| PROG 27128 | 1 | | 5730-42AXC-PXFD |

| | | | | | |
|----------------------------------|--|-----------------------|--------------|--|--|
| PROJECT ENG: D. OTTO | | USED ON PROF. PAC-MAN | | REVISIONS | |
| DO NOT SCALE DIM. | | HEAT TREAT | SCALE FULL | NO. REQ'D 1 PER | |
| DIM. TOLERANCES UNLESS SPECIFIED | | DRG. <i>Rev</i> | DATE 7/11/83 | ASSEMBLY DWG. 640K EPROM BD. A082-91486-A000 | |
| | | | | PART NO M051 - 00114 - A024 | |
| | | | | Betty / MIDWAY MFG. CO. FRANKLIN PK ILL | |



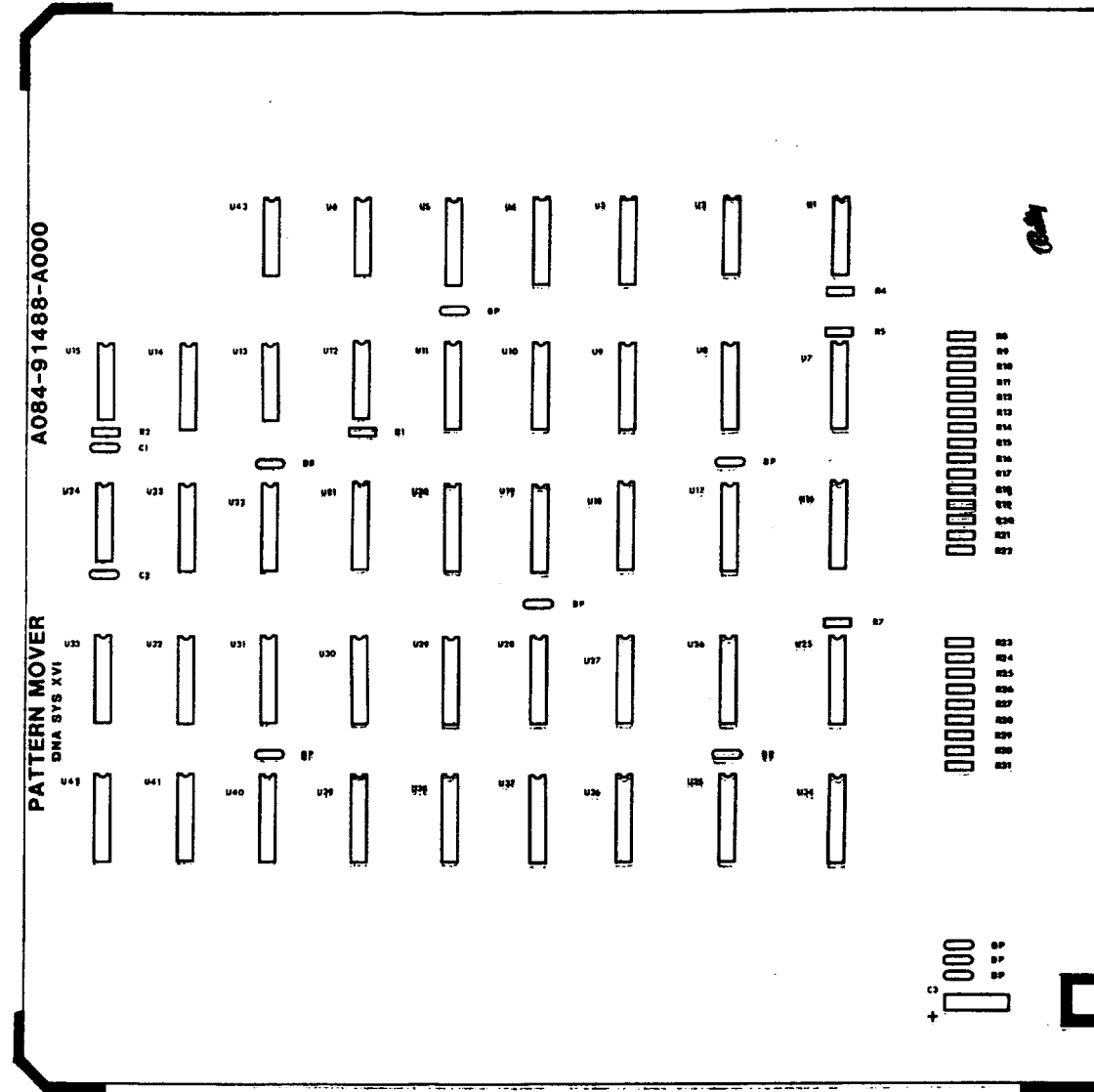
40 27128 Eproms

| PROJECT ENG | | USED ON SYS XVI | | REVISIONS | |
|-------------------------------|----------|-----------------|-------------------------|-----------|--|
| DO NOT SCALE | REV | DATE | NO REVS | PER | |
| DESIGNED BY | CHKD BY | DATE | | | |
| DRAWN BY | APP'D BY | DATE | | | |
| 64K EPROM BOARD SCHEMATIC DWG | | | PART NO M051-00114-A025 | | |

DESIGNATION LIST

| DESIGNATION NO. | DESCRIPTION | DESIGNATION NO. | DESCRIPTION |
|-----------------|--------------------------|-----------------|-------------|
| BP | 0.1 MFD +80-20X AX. CER. | U1 | MC14068 |
| | | U2 | MC14068 |
| | | U3 | MC14572UB |
| C1 | 33 PFD 5X AX. CER. | U4 | MC14555 |
| C2 | 1000 PFD 10X AX. CER. | U5 | 74LS161 |
| | | U6 | 74LS04 |
| C3 | 15 MFD 20X TANT. | U7 | MC14516 |
| | | U8 | 74LS257 |
| | | U9 | MC14516 |
| R1 | 10K OHM 1/4W 5X | U10 | 74LS175 |
| R2 | 10K OHM 1/4W 5X | U11 | 74LS367 |
| R3 | NOT USED | U12 | 74LS00 |
| R4 | 10K OHM 1/4W 5X | U13 | 74LS74 |
| R5 | 6200 OHM 1/4W 5X | U14 | MC14572UB |
| R6 | NOT USED | U15 | MC14013 |
| R7 | 2700 OHM 1/4W 5X | U16 | MC14516 |
| R8 | 100 OHM 1/4W 5X | U17 | 74LS257 |
| R9 | 6200 OHM 1/4W 5X | U18 | MC14516 |
| R10 | 100 OHM 1/4W 5X | U19 | 74LS175 |
| R11 | 6200 OHM 1/4W 5X | U20 | 74LS367 |
| R12 | 100 OHM 1/4W 5X | U21 | MC14174 |
| R13 | 6200 OHM 1/4W 5X | U22 | 74LS157 |
| R14 | 100 OHM 1/4W 5X | U23 | MC14539 |
| R15 | 6200 OHM 1/4W 5X | U24 | MC14081 |
| R16 | 100 OHM 1/4W 5X | U25 | MC14516 |
| R17 | 6200 OHM 1/4W 5X | U26 | 74LS257 |
| R18 | 100 OHM 1/4W 5X | U27 | MC14516 |
| R19 | 6200 OHM 1/4W 5X | U28 | MC14175 |
| R20 | 100 OHM 1/4W 5X | U29 | MC14008 |
| R21 | 6200 OHM 1/4W 5X | U30 | MC14175 |
| R22 | 100 OHM 1/4W 5X | U31 | MC14516 |
| R23 | 10K OHM 1/4W 5X | U32 | MC14175 |
| R24 | 10K OHM 1/4W 5X | U33 | MC14516 |
| R25 | 10K OHM 1/4W 5X | U34 | MC14516 |
| R26 | 10K OHM 1/4W 5X | U35 | 74LS257 |
| R27 | 10K OHM 1/4W 5X | U36 | MC14516 |
| R28 | 10K OHM 1/4W 5X | U37 | MC14175 |
| R29 | 10K OHM 1/4W 5X | U38 | MC14008 |
| R30 | 10K OHM 1/4W 5X | U40 | MC14175 |
| R31 | 10K OHM 1/4W 5X | U41 | MC14516 |
| | | U42 | MC14175 |
| | | U43 | MC14516 |
| | | | 74LS04 |

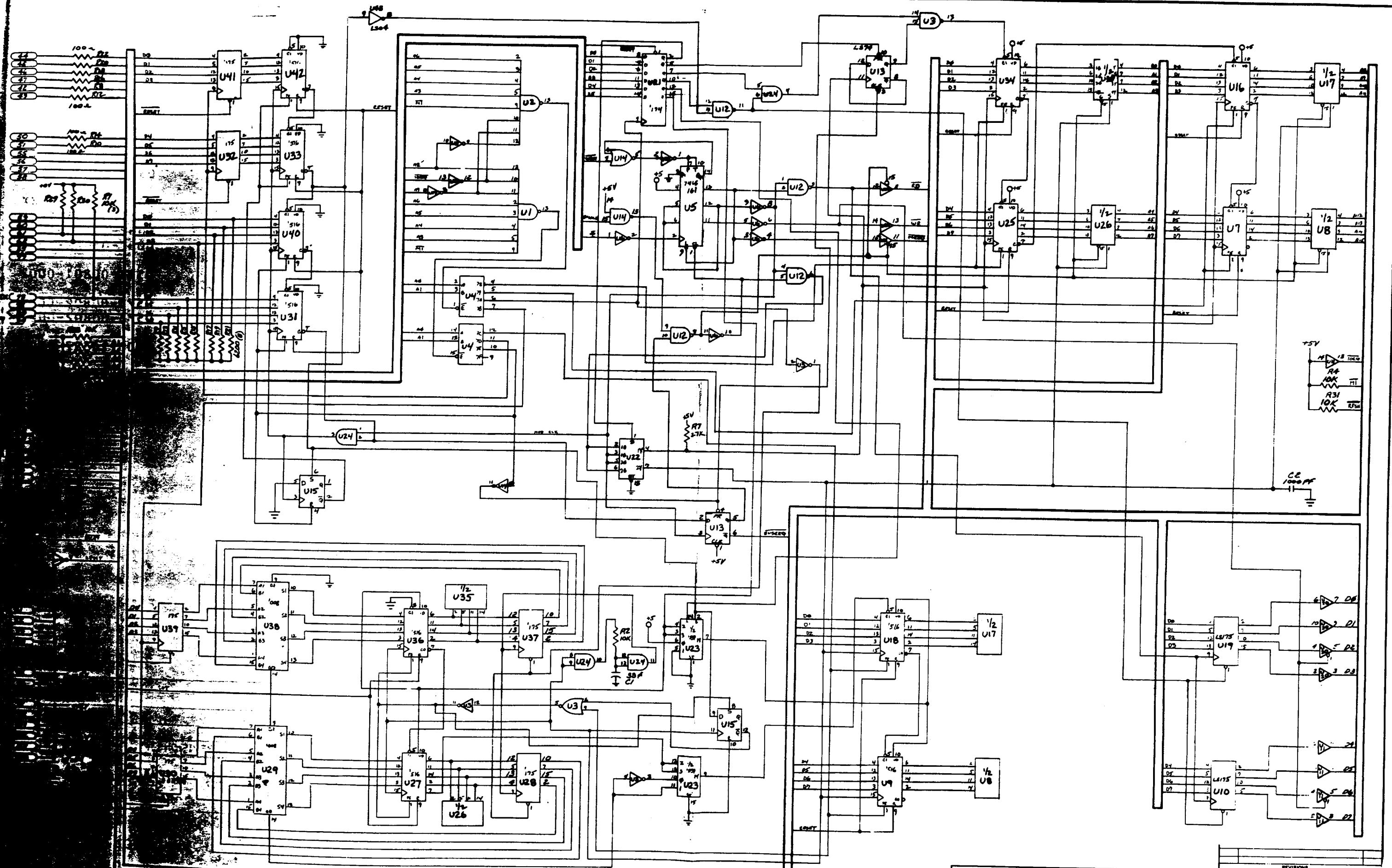
NON-REFERENCED
CARD EJECTORS
PC BOARD



CROSS REFERENCE LIST

| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|-------------------|-----|--|-----------------|
| 33 PFD | 1 | C1 | 0339-00800-0011 |
| 1000 PFD | 1 | C2 | 0339-00800-0012 |
| 0.1 MFD | 9 | | 0339-00800-0013 |
| 15 MFD | 1 | C3 | 0339-00800-0014 |
| 100 OHM | 8 | R8, R10, R12, R14, R16, R18, R20, R22 | 0062-11083-1XXX |
| 2700 OHM | 1 | R7 | 0062-19983-1XXX |
| 6200 OHM | 8 | R5, R9, R11, R13, R15, R17, R19, R21 | 0062-21783-1XXX |
| 10K OHM | 12 | R1, R2, R4, R23-R31 | 0062-22783-1XXX |
| 74LS00 | 1 | U12 | 0339-00803-0064 |
| 74LS04 | 2 | U6, U43 | 0339-00803-0065 |
| 74LS74 | 1 | U13 | 0339-00803-0066 |
| 74LS157 | 1 | U22 | 0339-00803-0067 |
| 74LS161 | 1 | U5 | 0339-00803-0068 |
| 74LS175 | 2 | U10, U19 | 0339-00803-0069 |
| 74LS257 | 4 | U8, U17, U26, U35 | 0339-00803-0070 |
| 74LS367 | 2 | U11, U20 | 0339-00803-0071 |
| MC14008B | 2 | U29, U38 | 0339-00803-0072 |
| MC14013B | 1 | U15 | 0339-00803-0073 |
| MC14068B | 2 | U1, U2 | 0339-00803-0074 |
| MC14081B | 1 | U24 | 0339-00803-0075 |
| MC14174B | 1 | U21 | 0339-00803-0076 |
| MC14175B | 6 | U28, U30, U32, U37, U39, U41 | 0339-00803-0077 |
| MC14516B | 12 | U7, U9, U16, U18, U25, U27, U31, U33, U34, U36, U40, U42 | 0339-00803-0078 |
| MC14539B | 1 | U23 | 0339-00803-0079 |
| MC14555B | 1 | U4 | 0339-00803-0080 |
| MC14572UB | 2 | U3, U14 | 0339-00803-0081 |
| CARD EJECTORS | 2 | | 0339-00804-0010 |
| P.C. BOARD, BLANK | 1 | | A080-91488-A000 |

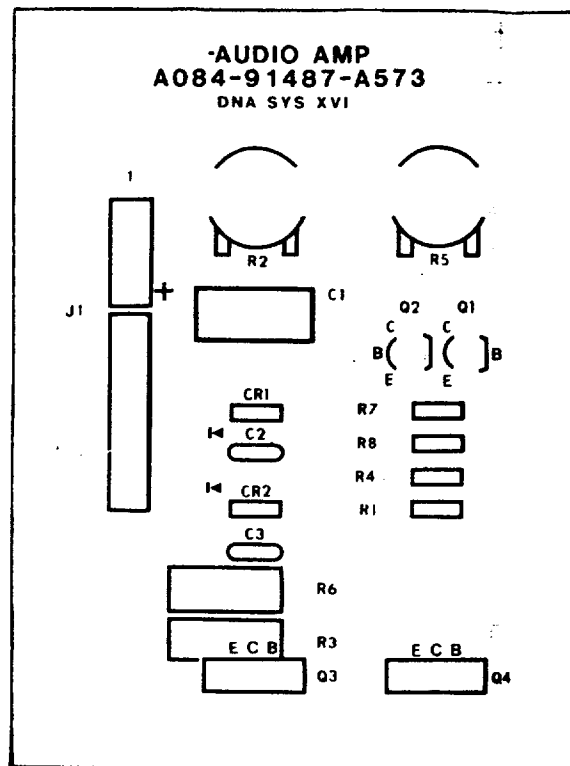
| | | | | | |
|---------------------------------|--|------------------------|----------------|--|--|
| PROJECT ENG: D. OTTO | | USED ON PROF. PAC-MAN | | REVISIONS | |
| DO NOT SCALE DWG | | SCALE FULL | NO. REVD 1 PER | Baldwin / MIDWAY MFG. CO. FRANKLIN PK. ILL. | |
| DIM TOLERANCES UNLESS SPECIFIED | | ASSEMBLY DWG. | | PART NO. | |
| DATE 7/5/83 | | PATTERN MOVER P.C. BD. | | M 051 - 00339 - A009 | |
| | | A084-91488-A000 | | | |



| | | | | | |
|-------------|------|-----------------|-----|----------------------|--|
| PROJECT ENG | | USED ON SYS XVI | | REVISIONS | |
| DESIGNED BY | DATE | NO REQS | PER | BY / MIDWAY MFG. CO. | |
| DWG NO. | | | | FRANKLIN, PA. | |

DESIGNATION LIST

| <u>DESIGNATION NO.</u> | <u>DESCRIPTION</u> |
|------------------------|-----------------------------|
| C1 | 15 MFD 20% TANT. |
| C2 | 0.1 MFD +80-20% AX. CER. |
| C3 | 0.1 MFD +80-20% AX. CER. |
| R1 | 330 OHM 1/4W 5% |
| R2 | 200 OHM POTENTIOMETER |
| R3 | 3.3 OHM 1W 5% |
| R4 | 330 OHM 1/4W 5% |
| R5 | 200 OHM POTENTIOMETER |
| R6 | 3.3 OHM 1W 5% |
| R7 | 33 OHM 1/4W 5% |
| R8 | 33 OHM 1/4W 5% |
| CR1 | 1N4004 |
| CR2 | 1N4004 |
| Q1 | 2N4403 |
| Q2 | 2N4403 |
| Q3 | TIP-31 |
| Q4 | TIP-31 |
| J1 | KK156-10RA |
| | NON-REFERENCED PC BOARD |

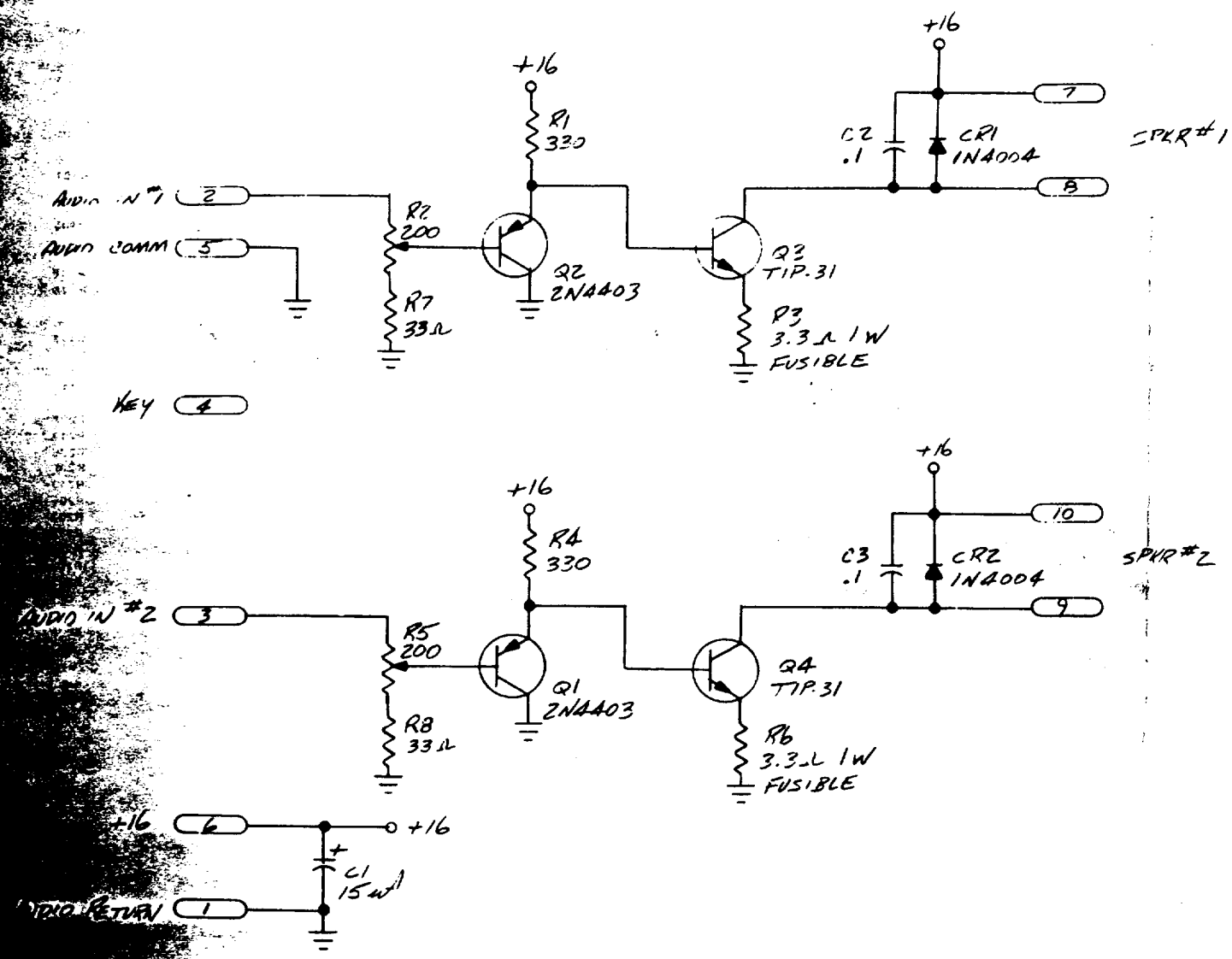


CROSS REFERENCE LIST

| <u>DESCRIPTION</u> | <u>QTY</u> | <u>DESIGNATION NO.</u> | <u>PART NOS.</u> |
|--------------------|------------|------------------------|------------------|
| 0.1 MFD | 2 | C2, C3 | 0573-00800-0003 |
| 15 MFD | 1 | C1 | 0573-00800-0004 |
| 3.3 OHM 1W | 2 | R3, R6 | 0062-038F3-1XXX |
| 33 OHM | 2 | R7, R8 | 0062-074B3-1XXX |
| 330 OHM | 2 | R1, R4 | 0062-144B3-1XXX |
| 200 OHM | 2 | R2, R5 | 0062-050AX-1JED |
| 1N4004 | 2 | CR1, CR2 | 0573-00801-0002 |
| 2N4403 | 2 | Q1, Q2 | 0573-00802-0006 |
| TIP-31 | 2 | Q3, Q4 | 0573-00802-0007 |
| KK156-10RA | 1 | J1 | 3000-16387-1000 |
| P.C BOARD, BLANK | 1 | | A080-91487-A573 |

| REVISIONS | |
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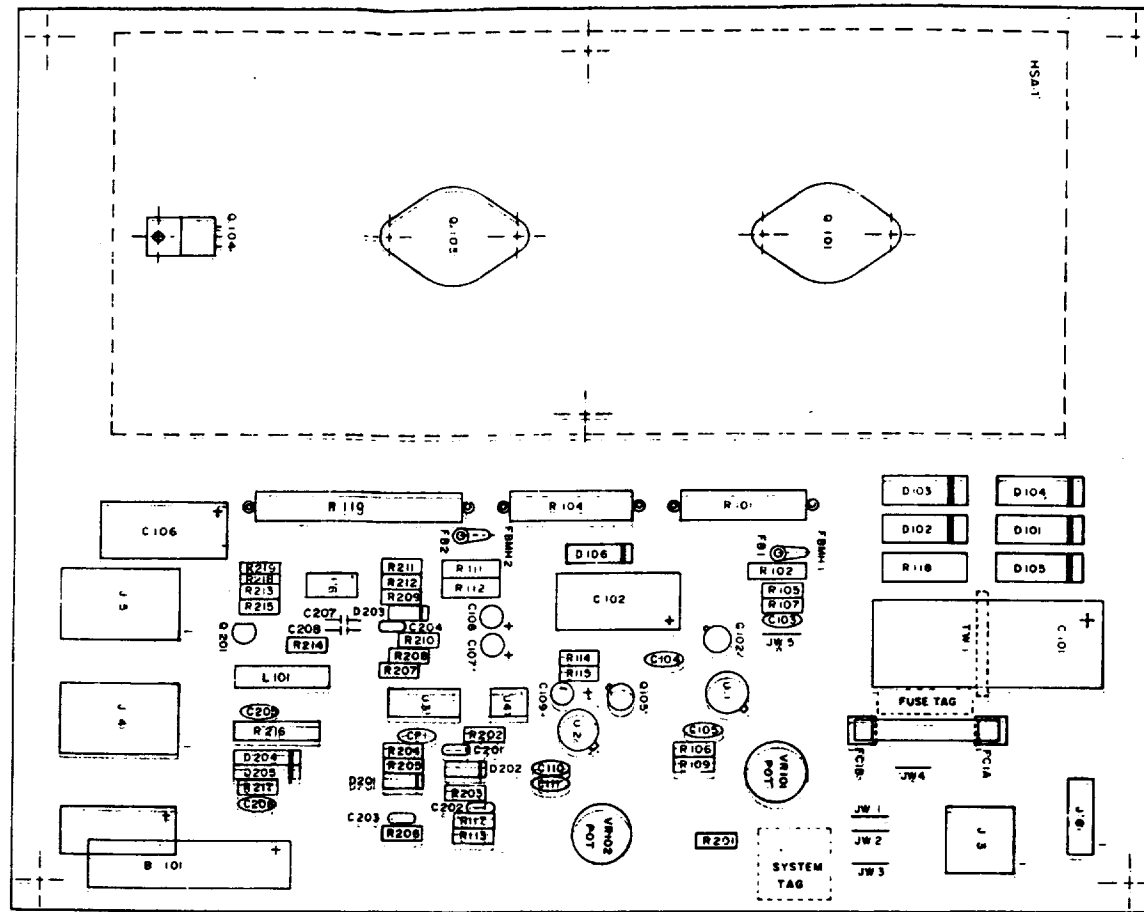
| | | | | |
|-----------------------------------|------------|----------------------|---|---|
| PROJECT ENG: DAVE OTTO | | USED ON PROF. PACMAN | | Bally / MIDWAY MFG. CO. FRANKLIN PK. ILL. |
| DO NOT SCALE DIMS. | HEAT TREAT | SCALE FULL | NO. REQ'D 1 PER | |
| DIM. TOLERANCE - UNLESS SPECIFIED | DRN | MAT'L | ASSY. DWG. AUDIO AMP A084 - 91487 - A573 | |
| DATE 7/15/83 | CKD. | FINISH | | |
| PART NO | | | M051 - 00573 - A010 | |



| DO NOT SCALE DWG. | | HEAT TREAT | SCALE | USED ON | NO REQ'D | PER | REVISIONS |
|---------------------------------|---------------|----------------|---------|--|----------|----------|------------------------------------|
| DIM TOLERANCES UNLESS SPECIFIED | | ORN <i>HCA</i> | 2=1 | SYS XVI | 1 | PER | MIDWAY MFG. CO. FRANKLIN PK ILL |
| CONCENTRICITY | ± .002 | CKD | | AUDIO AMP SCHEMATIC DWG A084-91487-A573 | | PART NO. | MOSI-00573-A011 |
| FRACTIONAL | 1/64 | | | | | | |
| DECIMAL | .005 | | | | | | |
| HOLE DIA | ± .002 - .005 | | | | | | |
| | | DATE | 7/15/83 | | | | |

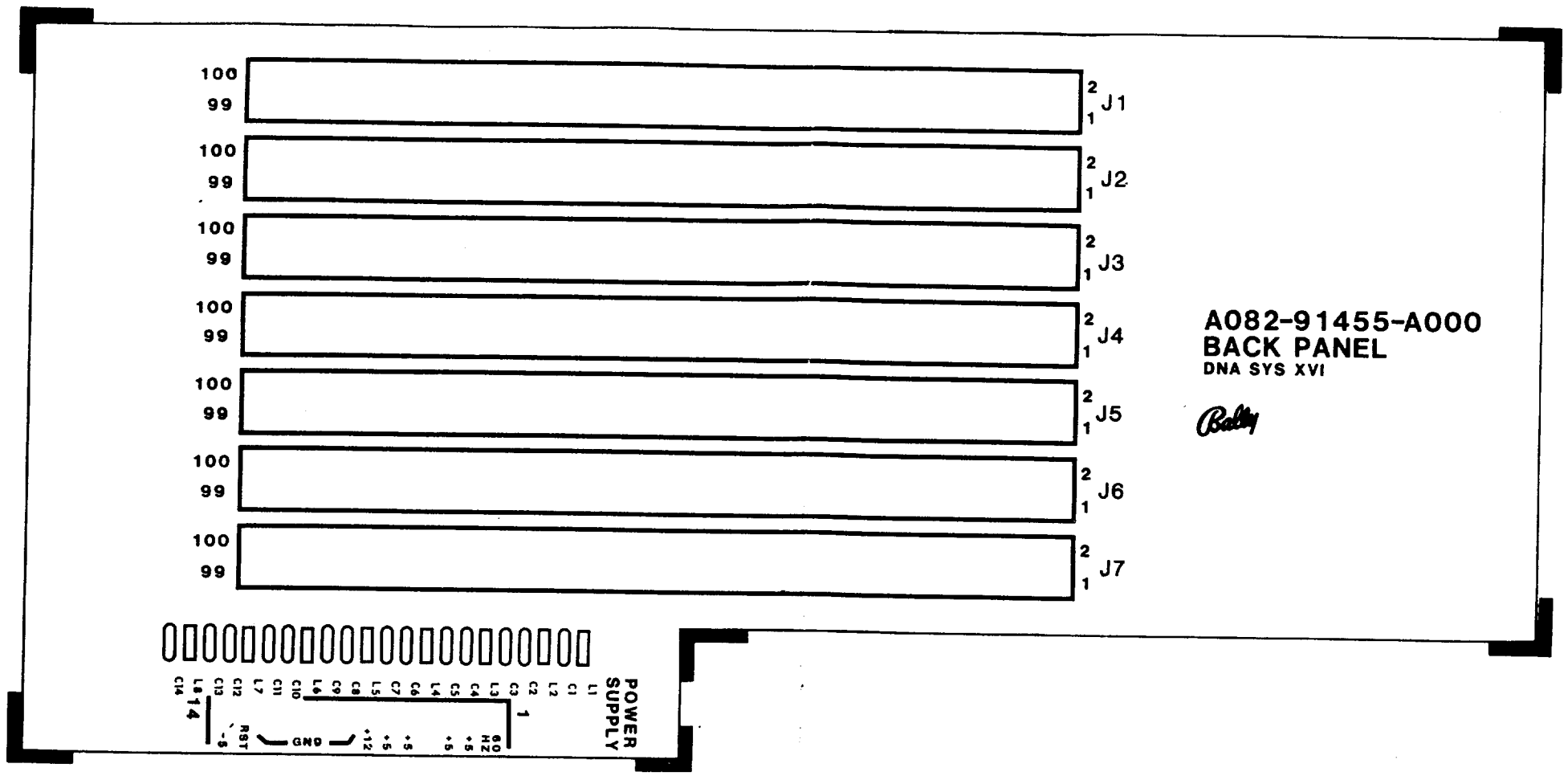
DESIGNATION LIST

| DESIGNATION | DESCRIPTION | DESIGNATION | DESCRIPTION |
|-------------|--|-------------|--------------------------------|
| C101 | 4700uf AX. ELECT. | R117 | 560ohm 1/4W 5% |
| C102 | 470uf AX. ELECT. | R118 | 150ohm 2W |
| C103 | .1uf AX. CER. | R201 | 270ohm 1/4W 5% |
| C104 | .1uf AX. CER. | R202 | 1.2K 1/4W 5% |
| C105 | 47pf AX. CER. | R203 | 1.1M 1/4W 5% |
| C106 | 470uf AX. ELECT. | R204 | 3.3M 1/4W 5% |
| C107 | 100uf RD. TANT. | R205 | 10M 1/4W 5% |
| C108 | .1uf RD. TANT. | R206 | 100K 1/4W 5% |
| C109 | 4.7uf RD. TANT. | R207 | 33K 1/4W 5% |
| C110 | .1uf AX. CER. | R208 | 2M 1/4W 5% |
| C111 | .1uf AX. CER. | R209 | 1M 1/4W 5% |
| C201 | .01uf MYLAR | R210 | 1.2M 1/4W 5% |
| C202 | .033uf MYLAR | R211 | 75K 1/4W 5% |
| C203 | .01uf MYLAR | R212 | 75K 1/4W 5% |
| C204 | .047uf MYLAR | R213 | 220K 1/4W 5% |
| C205 | 820pf AX. CER. | R214 | 3.9K 1/4W 5% |
| C206 C208 | .01uf AX. CER. | R215 | 1.2K 1/4W 5% |
| C207 | 0.082uf MYLAR | R216 | 82ohm 1W 10% |
| | | R217 | 270ohm 1/4W 5% |
| | | R218 | 110K 1/4W 5% |
| | | R219 | 68ohm 1/2W 5% |
| | | VR101,102 | 100ohm POT |
| CP1 | .1uf AX. CER. | D101 | A15F |
| R101 | 18ohm 5W W/RES SPACER | D102 | A15F |
| R102 | 68ohm 1/2W 5% | D103 | A15F |
| R104 | 10ohm 5W W/RES SPACER | D104 | A15F |
| R105 | 27ohm 1/4W 5% | D105 | A15F |
| R106 | 270ohm 1/4W 5% | D106 | 1N4001 |
| R107 | 6.2K 1/4W 5% | D201 | 1N4148 |
| | | D202 | 1N4148 |
| | | D203 | 1N4148 |
| | | D204 | 1N4001 |
| | | D205 | 1N4001 |
| R109 | 1K 1/4W 5% | Q102 | 2N2905 |
| R110 | .16ohm 15W W/RES SPACER | Q105 | 2N2905 |
| R111 | 6.8ohm 1/2W 5% | Q201 | 2N4401 |
| R112 | 68ohm 1/2W 5% | U1 | LM305 REG |
| R113 | 1.2K 1/4W 5% | U2 | LM305 REG |
| R114 | 47ohm 1/4W 5% | U3 | LM3000 |
| R115 | 160ohm 1/4W 5% | U4 | 1N28 |
| | | U6 | 555 |
| | | L101 | 22uH INDUCTOR |
| | | B101 | BATTERY 3.6VDC 60DEG C |
| | | F1 | 3 RA S BLO FUSE |
| | | FC1A,1B | FUSE CLIP |
| | | FB1,2 | FERRITE BEAD |
| | | TW1 | TIE WRAP |
| | | J3 | 9PIN P.C. MOUNT CONN (MALE) |
| | | J4 | 15PIN P.C. MOUNT CONN (FEMALE) |
| | | J5 | 15PIN P.C. MOUNT CONN (MALE) |
| | | J6 | 3PIN P.C. MOUNT CONN (MALE) |
| LB1 | FUSE TAG | | |
| LB2 | SYSTEM TAG | | |
| HSA1 | HEAT SINK ASS'Y 1 | | |
| MHSA1 | MOUNTING HARDWARE (HEAT SINK) 2 SCREW 4 WASHER 2 HEXNUT | | |
| JW1-5 | JUMPER WIRE | | |
| FBMH1,2 | FERRITE BEAD MOUNTING HARDWARE | | |



| | | | |
|-----------------------|-------------------------------|-----------------|----------------|
| PROJ. ENG.: L. DEKKER | | MIDWAY MFG. CO. | |
| DO NOT SCALE DRAWING | FULL | NO WELD TUBER. | FRANKLIN, ILL. |
| DATE: 5/14/82 | ASSEMBLY DRAWING I25VA PWRSPY | | |
| | A082-90412-D000 | M051-00945-B006 | |

| DESCRIPTION | Q'ty | DESIGNATION # | PART # |
|---|------|-----------------------|-----------------|
| 47pf AX. CER. | 1 | C105 | 0945-00811-0100 |
| 820pf AX. CER. | 1 | C205 | 0945-00816-0400 |
| .01uf AX. CER. | 2 | C206,208 | 0945-00016-0100 |
| .01uf MYLAR | 2 | C201,203 | 0945-00016-0200 |
| .033uf MYLAR | 1 | C202 | 0945-00816-0500 |
| .047uf MYLAR | 1 | C204 | 0945-00816-0300 |
| 0.082uf AX. CER. | 1 | C207 | 0945-00816-1900 |
| .1uf AX. CER. | 5 | C103,104,110,111, CP1 | 0945-00811-0200 |
| .1uf RAD. TANT. | 1 | C108 | 0945-00811-0300 |
| 4.7uf RAD. TANT. | 1 | C109 | 0945-00811-0400 |
| 100uf RAD. TANT. | 1 | C107 | 0945-00811-0500 |
| 470uf AX. ELECT. | 2 | C102,106 | 0945-00816-0600 |
| 4700uf AX. ELECT. | 1 | C101 | 0945-00811-0700 |
| 16ohm 15W 5% | 1 | R110 | 0945-00815-0100 |
| .18ohm 5W 5% | 1 | R101 | 0945-00815-0200 |
| 6.8ohm 1/2W 5% | 1 | R111 | 0062-04703-1XXX |
| 10ohm 5W 5% | 1 | R104 | 0945-00812-0100 |
| 27ohm 1/4W 5% | 1 | R105 | 0062-068B3-1XXX |
| 47ohm 1/4W 5% | 1 | R114 | 0062-086B3-1XXX |
| 68ohm 1/2W 5% | 3 | R102,112,219 | 0062-098D3-1XXX |
| 82ohm 1W 10% | 1 | R216 | 0062-104F5-1XXX |
| 150ohm 2W 5% | 1 | R118 | 0945-00812-0200 |
| 160ohm 1/4W 5% | 1 | R115 | 0062-124B3-1XXX |
| 270ohm 1/4W 5% | 3 | R106,201,217 | 0062-138B3-1XX |
| 560ohm 1/4W 5% | 1 | R117 | 0062-162B3-1XX |
| 1K 1/4W 5% | 1 | R109 | 0062-179B3-1XX |
| 1.2K 1/4W 5% | 3 | R113,202,215 | 0062-183B3-1XX |
| 3.9K 1/4W 5% | 1 | R214 | 0062-217B3-1XX |
| 6.2K 1/4W 5% | 1 | R107 | 0062-251B3-1XX |
| 33K 1/4W 5% | 1 | R207 | 0062-269B3-1XXX |
| 75K 1/4W 5% | 2 | R211,212 | 0062-275B3-1XXX |
| 100K 1/4W 5% | 1 | R206 | 0062-277B3-1XXX |
| 110K 1/4W 5% | 1 | R218 | 0062-291B3-1XXX |
| 220K 1/4W 5% | 1 | R213 | 0062-323B3-1XXX |
| 1M 1/4W 5% | 1 | R209 | 0062-325B3-1XXX |
| 1.1M 1/4W 5% | 1 | R203 | 0062-327B3-1XXX |
| 1.2M 1/4W 5% | 1 | R210 | 0062-337B3-1XXX |
| 2M 1/4W 5% | 1 | R208 | 0062-347B3-1XXX |
| 3.3M 1/4W 5% | 1 | R204 | 0062-371B3-1XXX |
| 10M 1/4W 5% | 1 | R205 | 0062-371B3-1XXX |
| 100ohm POT | 2 | VR101,102 | 0945-00814-0000 |
| LM305 REG | 2 | U1,2 | 0945-00813-0100 |
| 555 | 1 | U6 | 0929-00810-450 |
| LM3900 | 1 | U3 | 0945-00813-0200 |
| 4N28 | 1 | U4 | 0945-00813-0300 |
| A15F RECTIFIER | 5 | D101-105 | 0945-00804-0200 |
| 1N4001 | 3 | D106,204,205 | 0945-00804-0300 |
| 1N4148 | 3 | D201-203 | 0945-00804-0500 |
| 2N2905 | 2 | Q102,105 | 0945-00808-0300 |
| 2N4401 | 1 | Q201 | 0945-00804-0400 |
| BATTERY 3.6VDC 60DEG-C | 1 | B101 | 0017-00003-0377 |
| FUSE 3/8A S-BLO | 1 | F1 | 0945-00808-0400 |
| FUSE CLIP | 2 | FC1A,1B | 0017-00003-0214 |
| TIE WRAP | 1 | TW1 | 0945-00814-0300 |
| FERRITE BEAD | 2 | FB1,2 | 0017-00009-02 |
| FERRITE MOUNTING HDW. | 2 | FBMH1,2 | 0017-00033-01 |
| 22uH INDUCTOR | 1 | L101 | 0945-00814-0200 |
| FUSE TAG | 1 | | M051-00945-A004 |
| SYSTEM TAG | 1 | | M051-00945-A009 |
| P.C.B. | 1 | | A080-90412-U000 |
| HEAT SINK ASS'Y (SEE HS ASS'Y DRAWING "HK NOTE") | 1 | HSA1 | A945-00008-0000 |
| 4-40 X 10 SLT RND | 2 | MHSA1A,2A | 0017-00101-0072 |
| 4-40 HEX NUT | 2 | MHSA1E,2E | 0017-00103-0002 |
| WSH 4-120-250-018 | 4 | MHSA1B,10 | 0017-00104-0071 |
| | | MHSA2B,20 | |
| 3PIN P.C. MOUNT CONN (MALE) | 1 | J6 | 0017-00021-044 |
| 9PIN P.C. MOUNT CONN (MALE) | 1 | J3 | 0017-00021-042 |
| 15PIN P.C. MOUNT CONN (FEMALE) | 1 | J4 | 0017-00021-044 |
| 15PIN P.C. MOUNT CONN (MALE) | 1 | J5 | 0017-00021-044 |
| 22AWG T & R BARE 2.5" | 5 | JW1-5 | 0151-00087-0000 |



DESIGNATION LIST

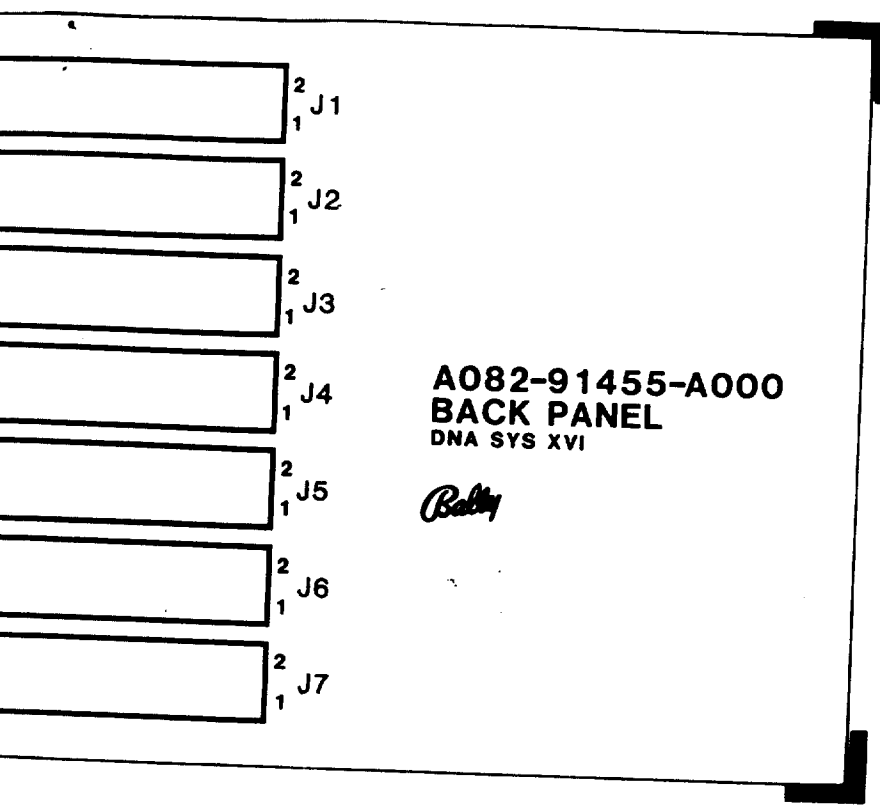
| DESIGNATION NO. | DESCRIPTION |
|-----------------|--|
| C1-C14 | 0.1 MFD +80-20% AX. CER. |
| J1-J7 | EDGE CONNECTOR |
| L1-L8 | FERRITE BEAD |
| | NON-REFERENCED KK156-14ST PC BOARD |

CROSS REFERENCE LIST

| DESCRIPTION | QTY | DESIGNATION NO. | PART NOS. |
|-------------------|-----|-----------------|-----------------|
| 0.1 MFD | 14 | C1-C14 | 0339-00800-0010 |
| FERRITE BEAD | 8 | L1-L8 | 0339-00804-0015 |
| 100-P0S | 7 | J1-J7 | 0339-00804-0014 |
| KK156-14ST | 1 | | 3000-16367-1400 |
| P.C. BOARD, BLANK | 1 | | A080-91455-A000 |

| REVISIONS | |
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| | | | | | |
|----------------------------------|-------------|----------------------|-----------------------|--|---------------------------------|
| PROJECT ENG: DAVE OTTO | | USED ON PROF. PACMAN | | REVISIONS | |
| DO NOT SCALE DWG. | | HEAT TREAT | SCALE FULL | NO. REQ'D 1 PER | |
| DIM. TOLERANCES UNLESS SPECIFIED | | MAT'L. | ASSY. DWG. BACK PANEL | | PART NO. M051 - 00114 - A092 |
| CONCENTRICITY TYP. 0.005 | | FINISH | A082-91455-A000 | | |
| DRG. / / | DATE 7/5/83 | | | Bally / MIDWAY MFG. CO. FRANKLIN PK. ILL. | |



**A082-91455-A000
BACK PANEL
DNA SYS XVI**



REFERENCE LIST

| QTY | DESIGNATION NO. | PART NOS. |
|-----|-----------------|-----------------|
| 14 | C1-C14 | 0339-00800-0010 |
| 8 | L1-L8 | 0339-00804-0015 |
| 7 | J1-J7 | 0339-00804-0014 |
| 1 | | 3000-16367-1400 |
| 1 | | A080-91455-A000 |

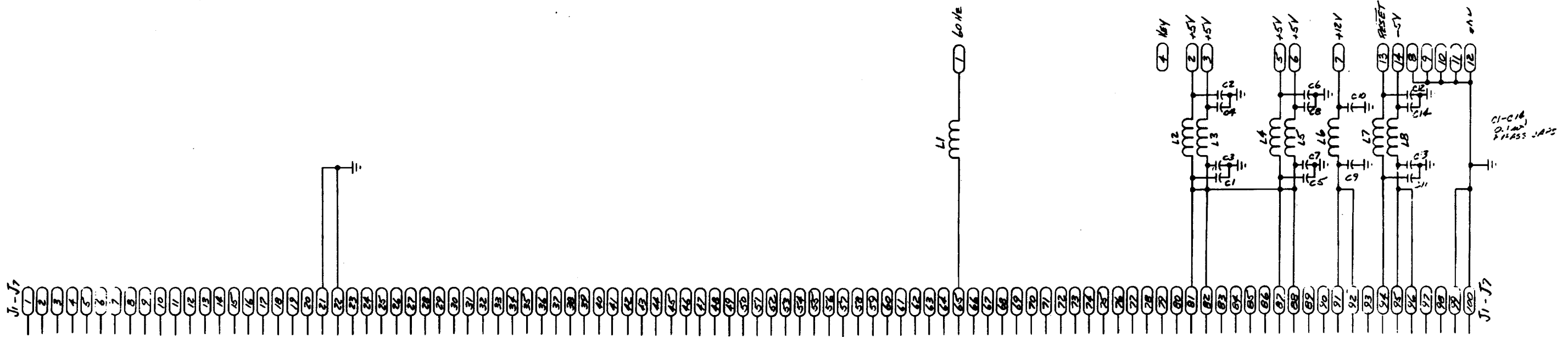
| REVISIONS | |
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|------------|-----------------------|----------------------|---------------------|---|--|
| TO | | USED ON PROF. PACMAN | | REVISIONS | |
| MEAT TREAT | SCALE | NO. REQ'D I PER | | Bally / MIDWAY MFG. CO. FRANKLIN PK. ILL. | |
| | FULL | | | | |
| MAT'L. | ASSY. DWG. BACK PANEL | | PART NO. | | |
| FINISH | A082-91455-A000 | | M051 - 00114 - A092 | | |
| / 5 / 83 | | | | | |

**PROFESSOR PAC-MAN
OPTION SWITCH SETTINGS**

| ////////////////////////////////////LOCATED ON GAME BOARD//////////////////////////////////// | | | | | | | |
|---|-----------|------|------|------|------|--------------------------|-------------------------|
| | SW#1 | SW#2 | SW#3 | SW#4 | SW#5 | SW#6 | SW#7 SW#8 |
| COCKTAIL TABLE ONLY * UPRIGHT AND MINI | ON OFF | | | | | NOT USED | NOT USED NOT USED |
| FULL RESET * NORMAL OPERATION | ON OFF | | | | | | |
| LOCKUP ON ERROR DURING CONTINUOUS TEST | ON | | | | | | |
| * NORMAL OPERATION | OFF | | | | | | |
| GAME GIVES AUDIO RE- SPONSE TO TEST RESULTS | ON | | | | | | |
| * NO AUDIO RESPONSE | OFF | | | | | | |
| * GAME USES 32K ROM'S GAME USES 8K & 16K ROM'S | ON OFF | | | | | | |
| * INDICATES FACTORY RECOMMENDED SETTINGS | | | | | | PART NO. M051-00573-A007 | |

THE REMAINDER OF YOUR NEW GAME'S MOST COMMON OPTION SETTINGS ARE CONDUCTED DURING THE THE SELF-TEST MODE AND WILL BE COVERED IN DETAIL IN THAT SECTION OF YOUR MANUAL.



THIS DRAWING IS CONFIDENTIAL & PROPERTY OF MIDWAY MFG. CO.

| | | | |
|---|--|--|---|
| DATE RELEASED ORIGINAL OPERATING SPEC. CONSTRUCTION T/R FUNCTIONAL SERIAL WELD DA ASSEMBLY DO NOT SCALE THIS | CASE NO. #033 DATE 7/12/83 BY 167 | MIDWAY MFG. CO. <small>FRANKLIN, PA., U.S.A.</small> A SALLY CO. | REVISIONS PART NO. M051-00114-A093 |
| BACK PANEL PC BD A082-91455-A000 | | | |