

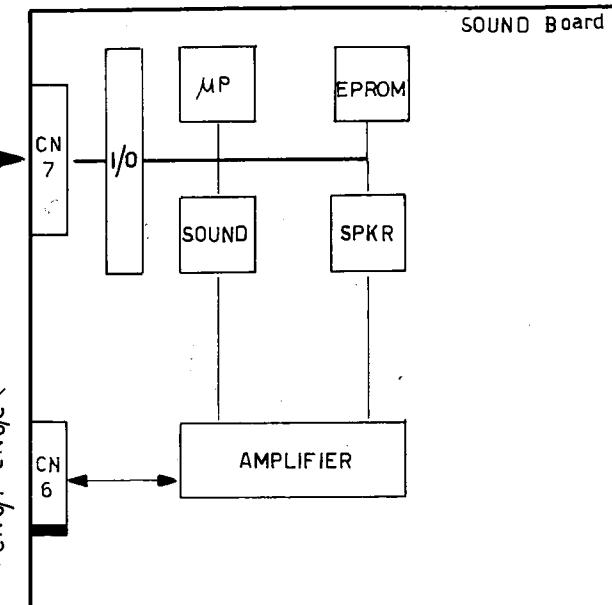
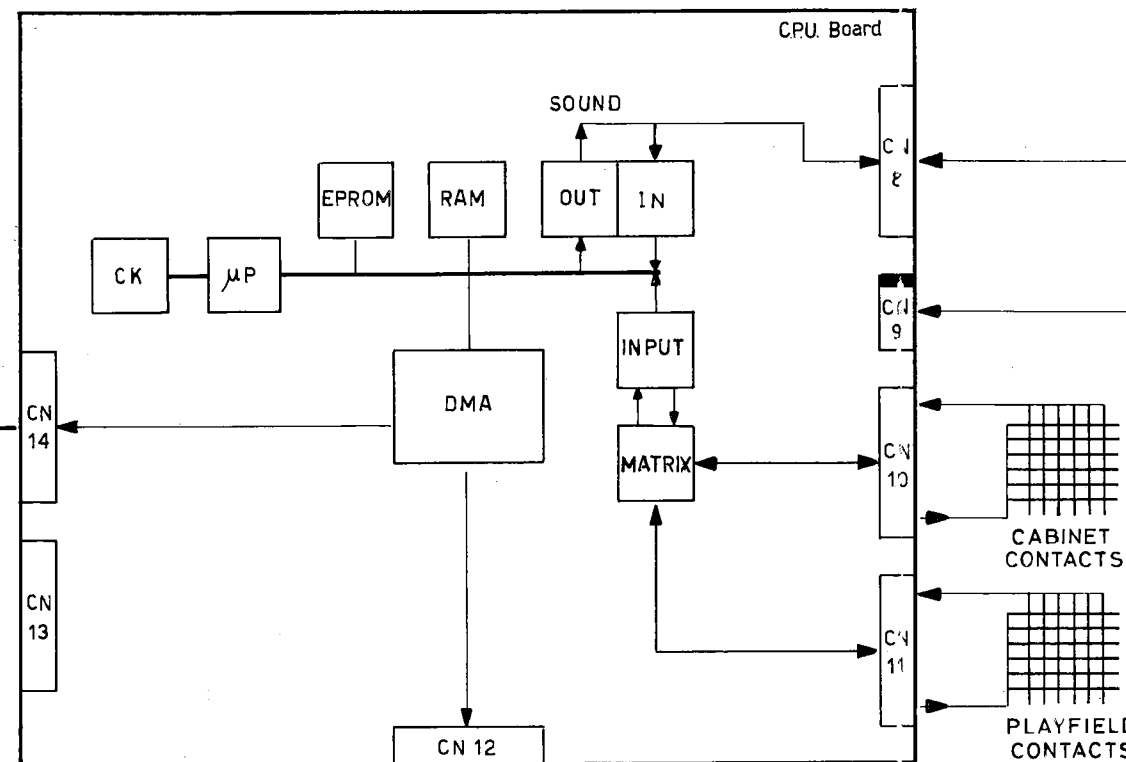
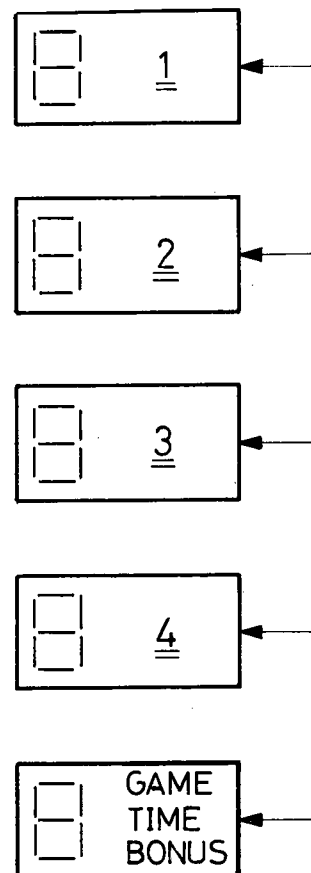
**ZACCARIA<sup>®</sup>**

# PINBALL CHAMP '82

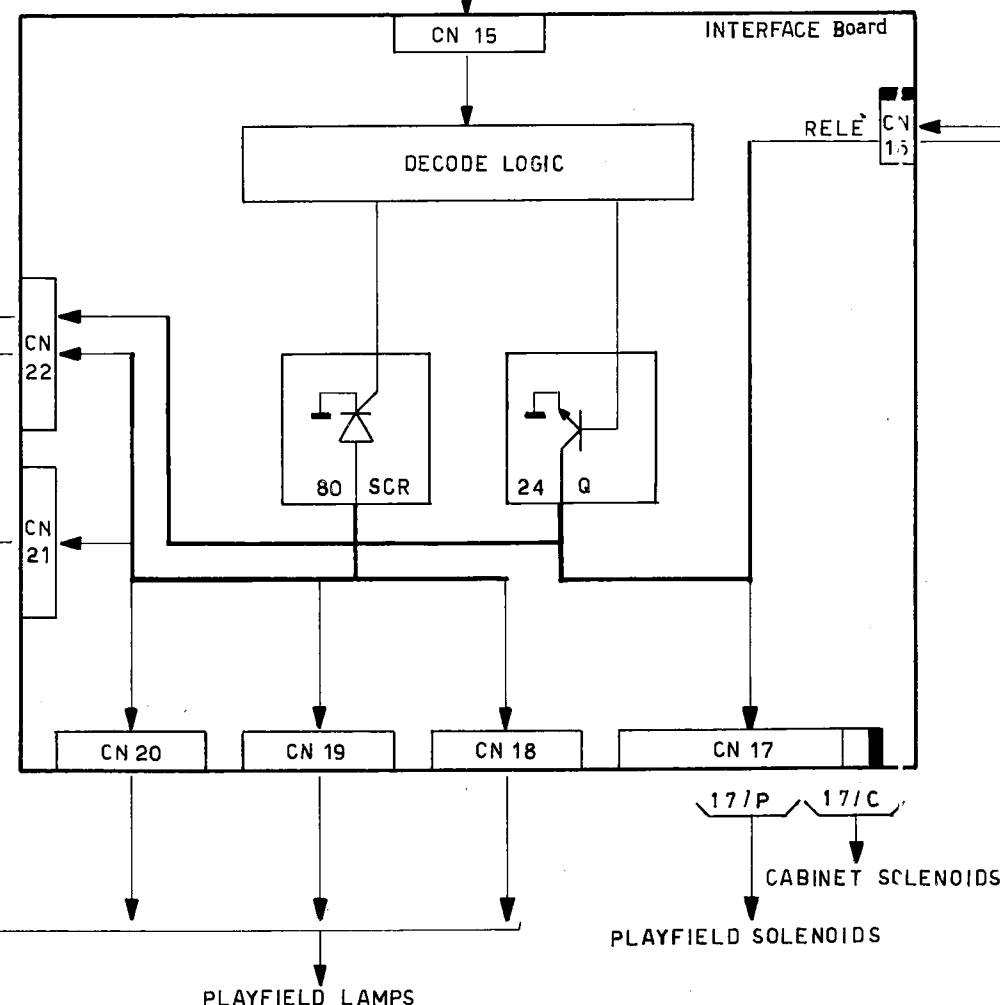
**ELETRICAL  
DIAGRAMS**



DRIVER DISPLAY Boards



(HEAD SOLENOIDS)  
HEAD LAMPS



GND  
+ 5  
+ 12  
- 5

GND  
+ 5

POWER TO HEAD

POWER TO PLAYFIELD

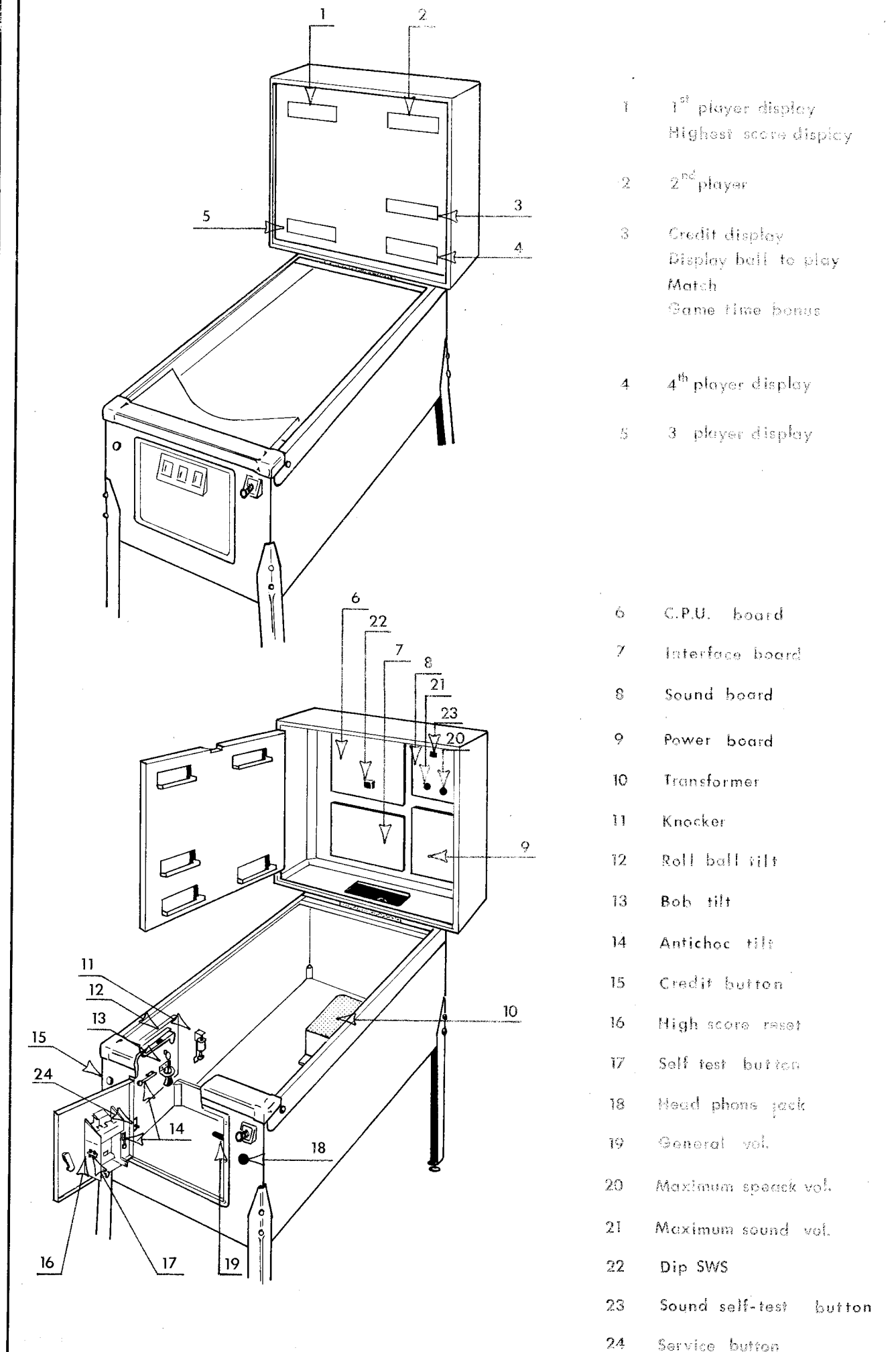
POWER TO CABINET

FROM TRANSFORMER

|                                                                                                |           |
|------------------------------------------------------------------------------------------------|-----------|
| <b>F.LLI ZACCARIA s.n.c.</b><br>Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) Italy          |           |
| PART NAME                                                                                      | PART NO.  |
| BLOCK DIAGRAM "PINBALL CHAMP"                                                                  |           |
| DWN                                                                                            | DATE      |
| 20/1/82                                                                                        | 28-2-82   |
| REV                                                                                            | DATE REV. |
|                                                                                                |           |
| NOTES: UNLESS OTHERWISE SPECIFIED<br>1) ALL RESISTORS VALUES IN<br>2) ALL CAPACITORS VALUES IN |           |

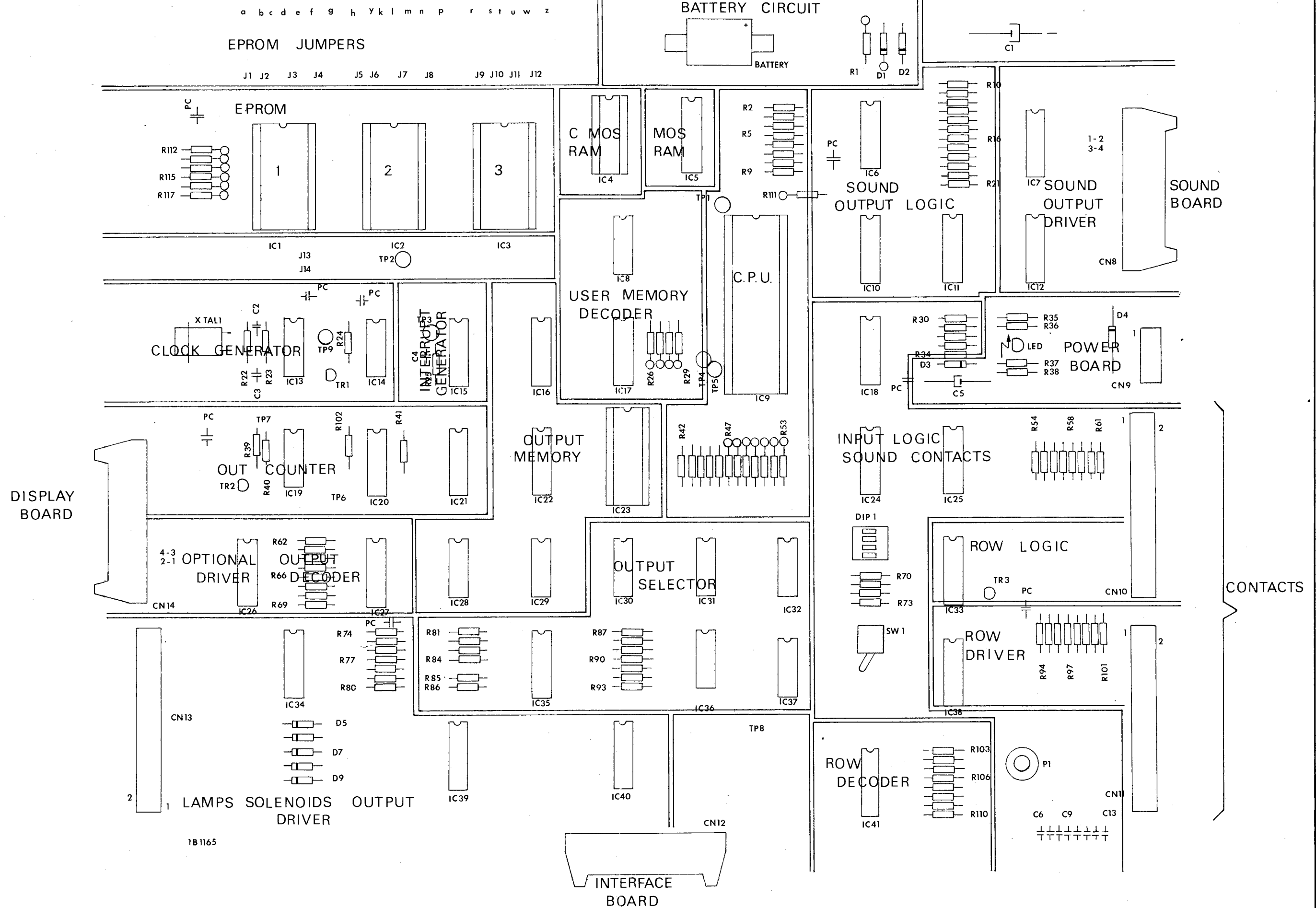
## LIST OF ILLUSTRATIONS

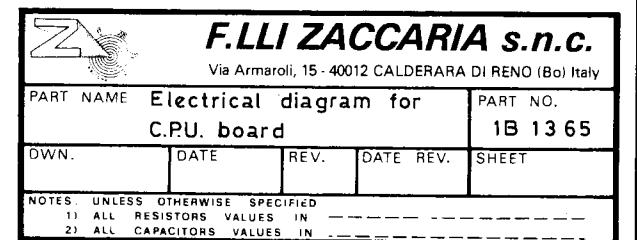
- Block diagram
- Assembly drawing
- Layout Diagram } for C.P.U. board
- Layout Diagram } for Interface board
- Layout Diagram } for Power board
- Layout Diagram } for Driver & Display boards
- Layout Diagram } for Sound & Speech board
- Diagram for Playfield contacts
- Diagram for Coils
- Diagram for Lamps
- Diagram for Cabinet & Front door wiring
- Diagram for Power Supply



# C.P.U. board

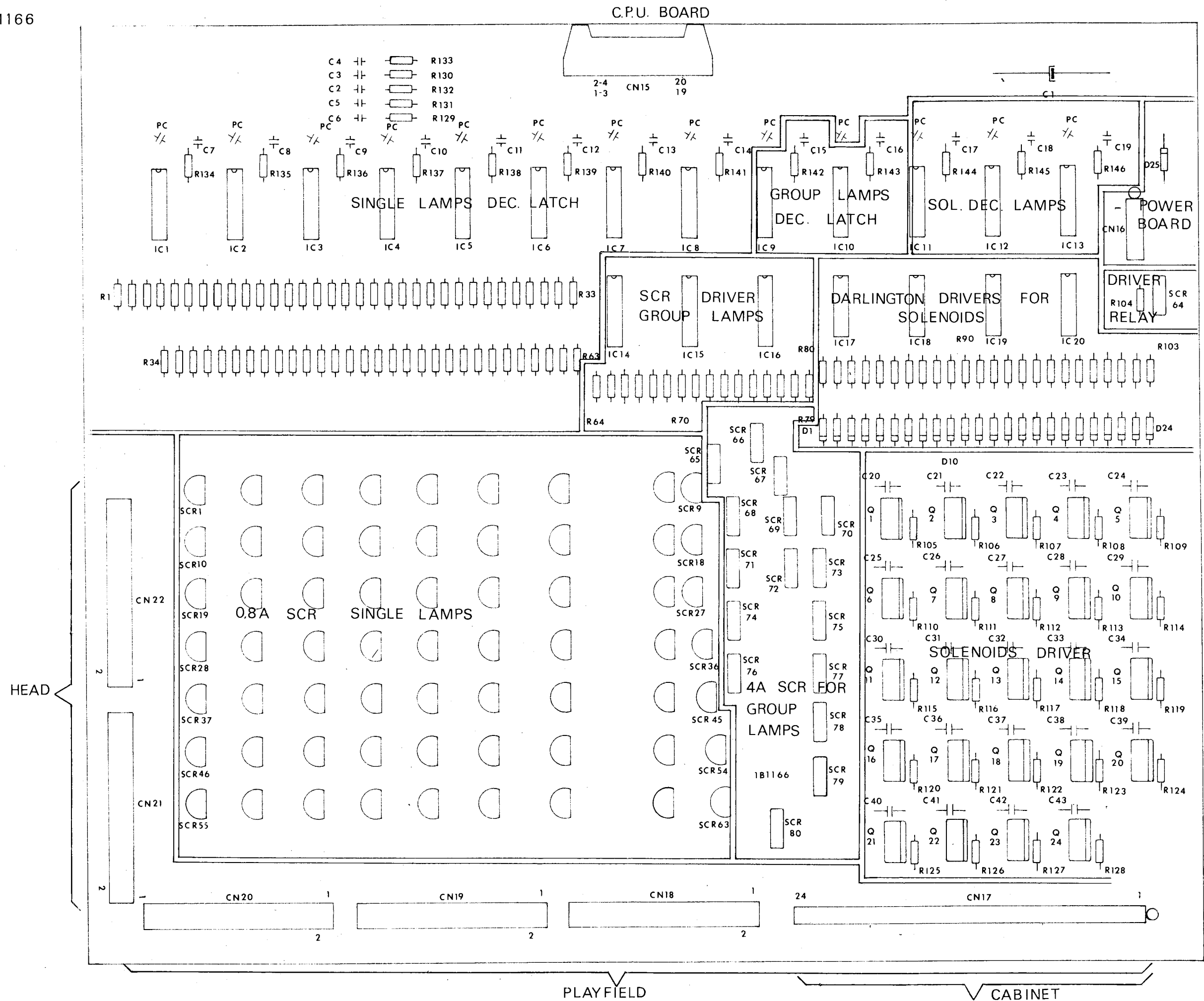
P.C.1 B 1165

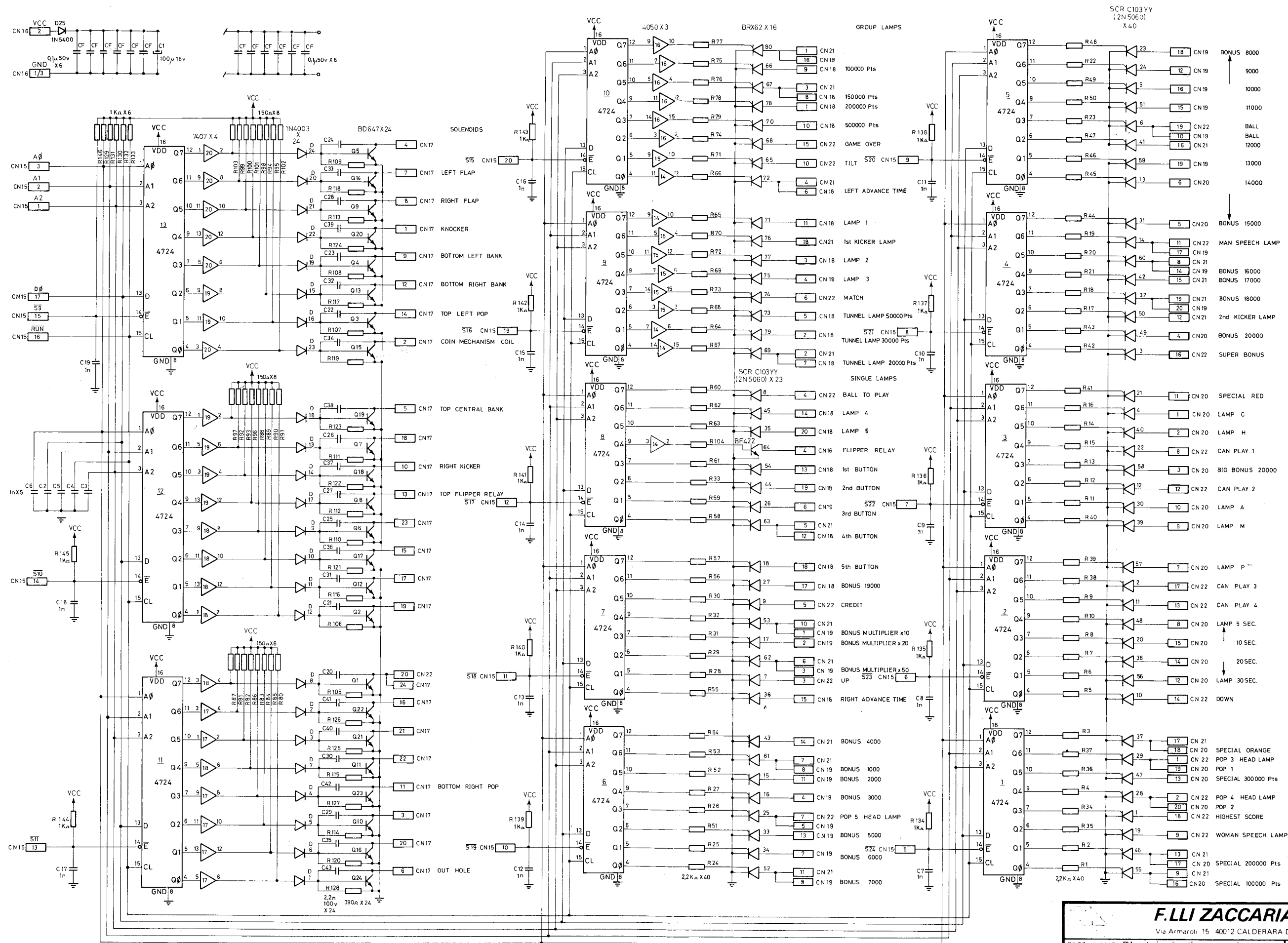




# INTERFACE board

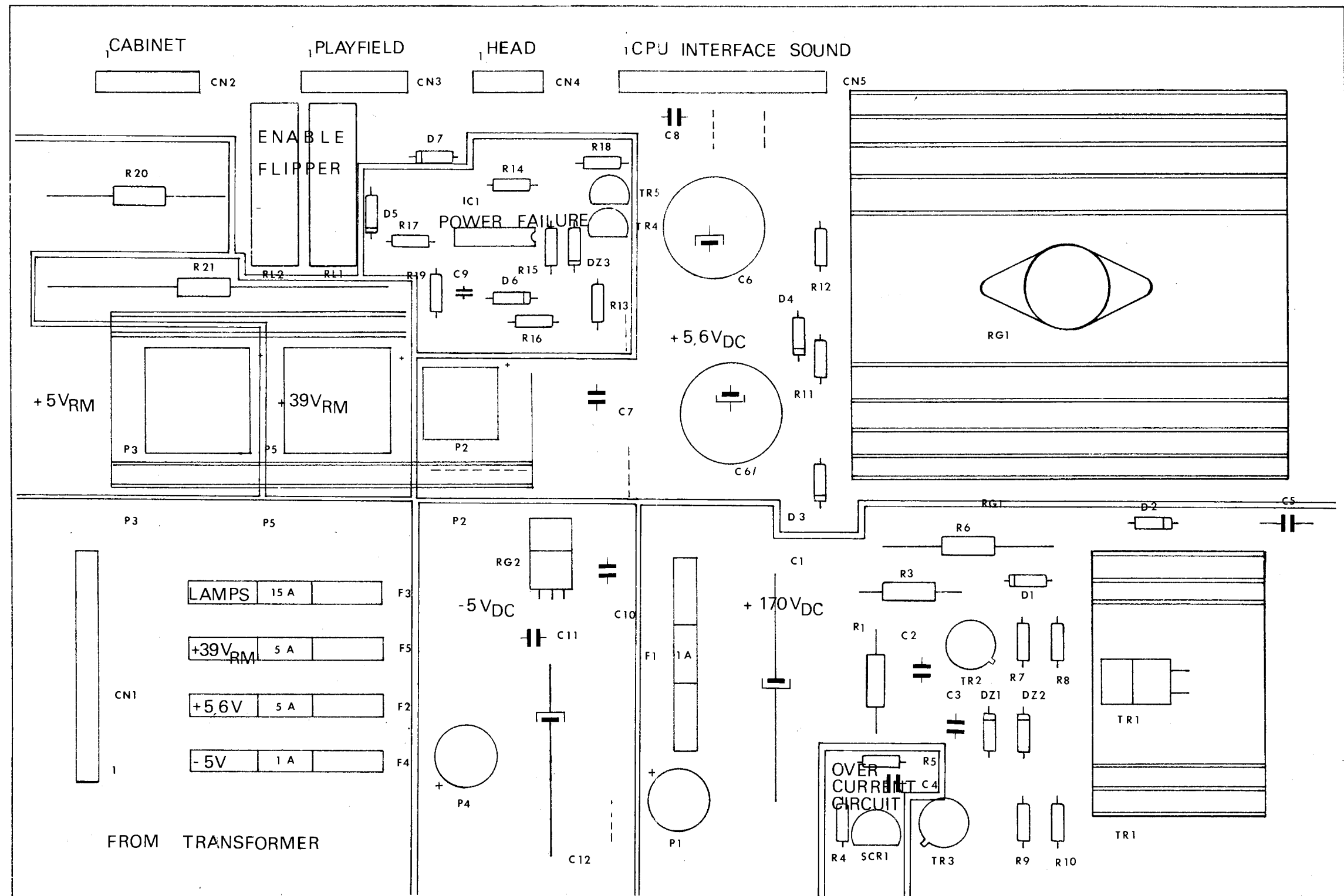
P.C. 1B1166

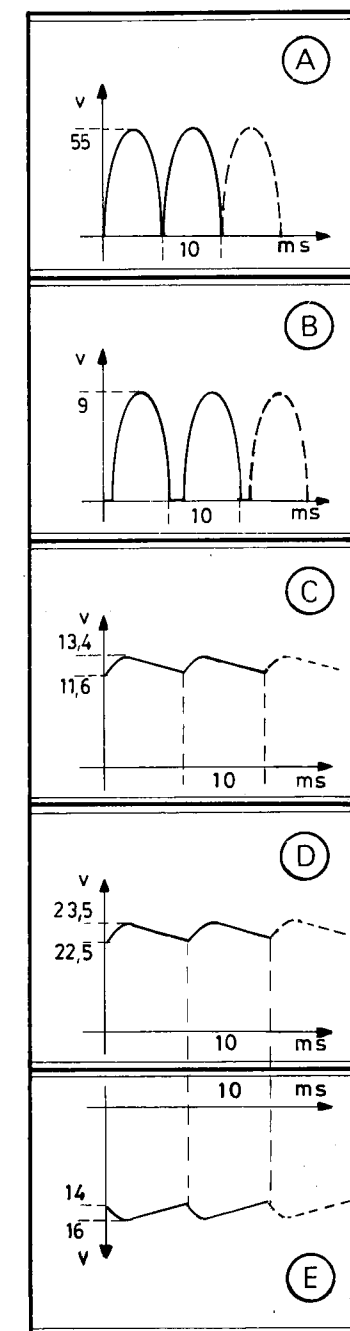
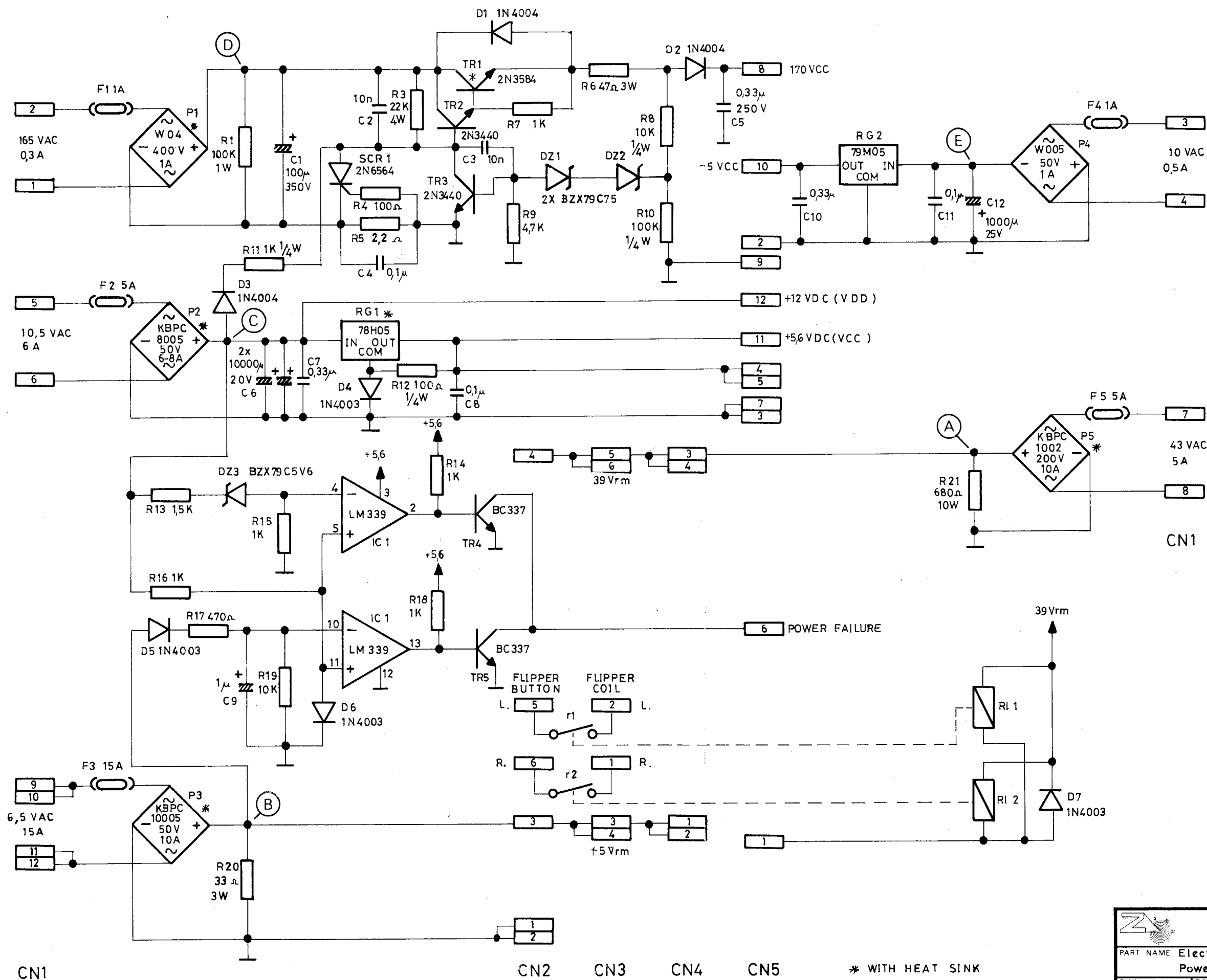




# POWER board

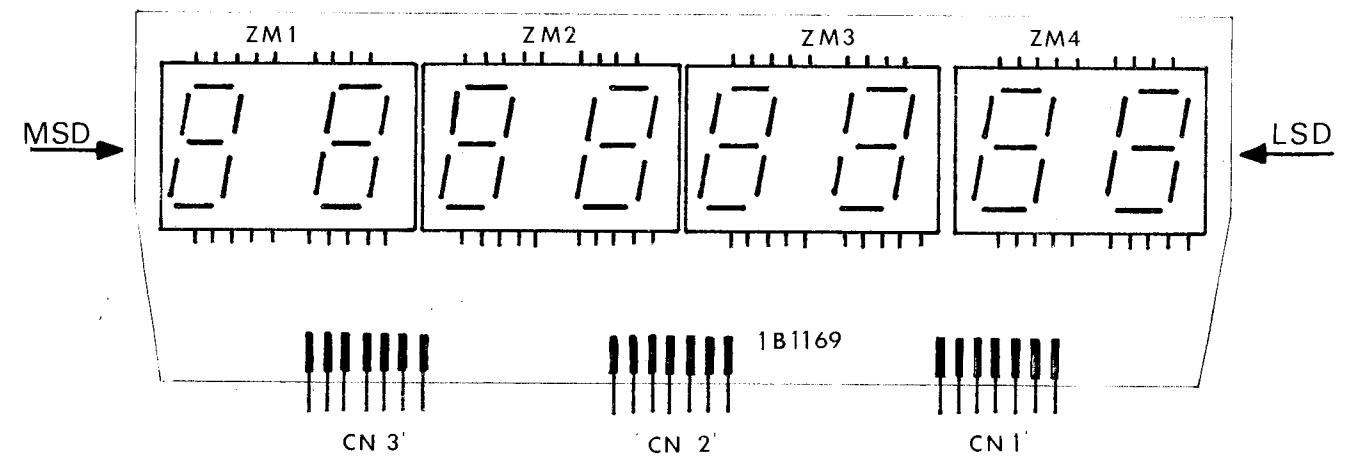
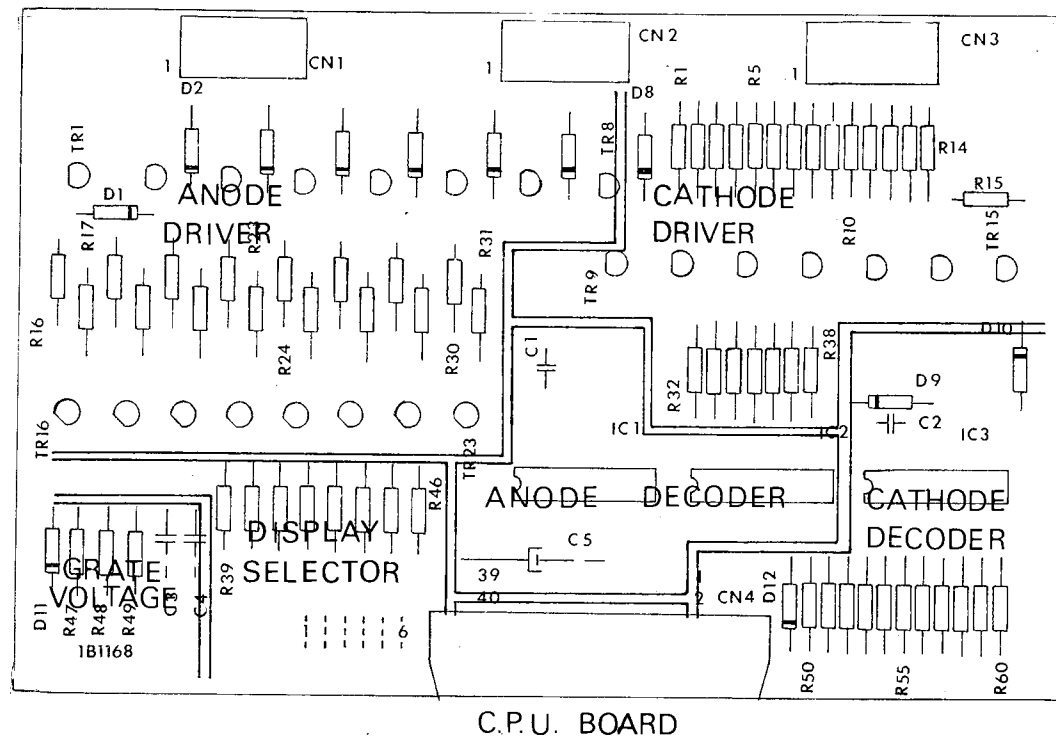
P.C.1B1167

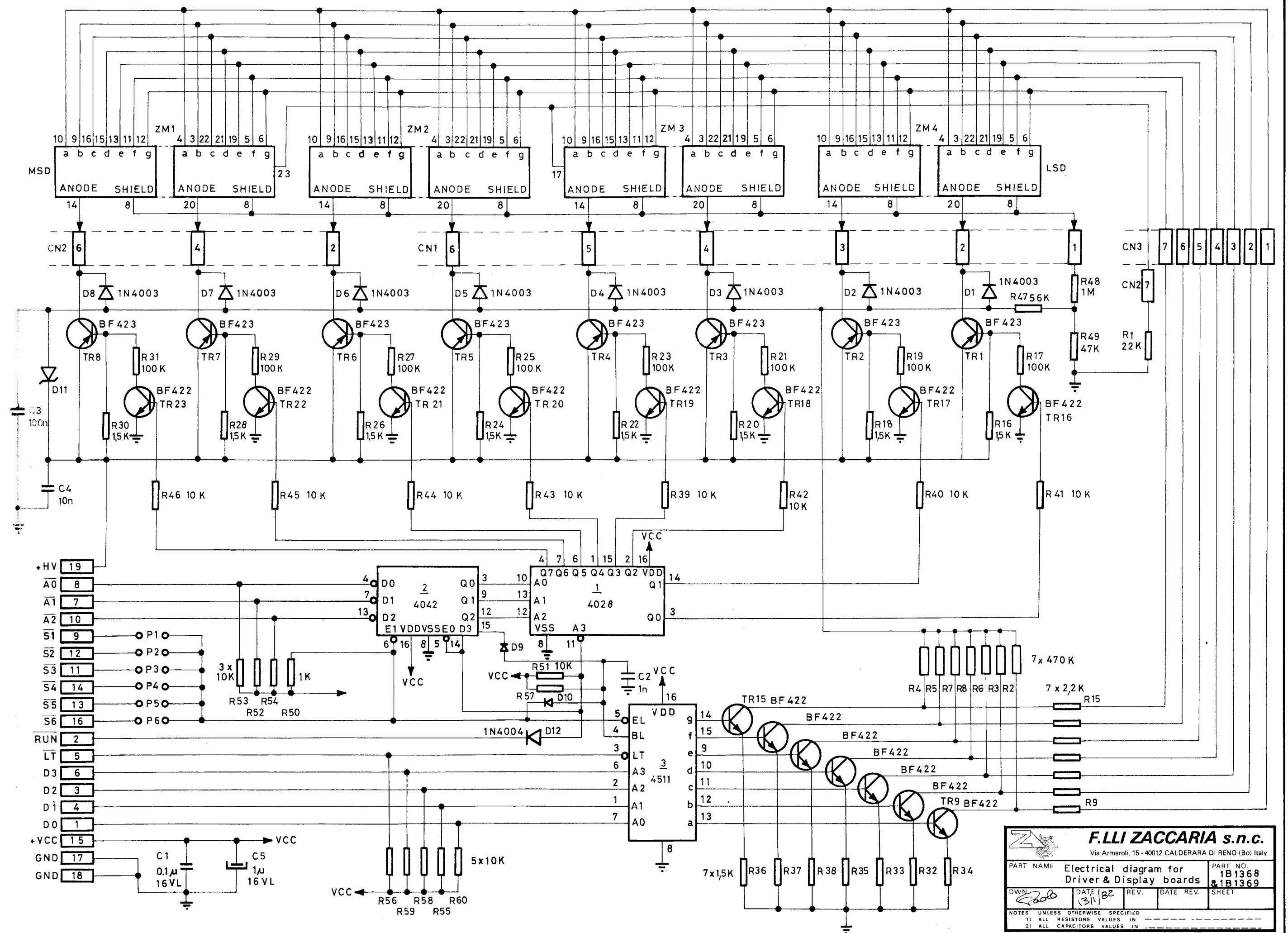




## DRIVER & DISPLAY boards

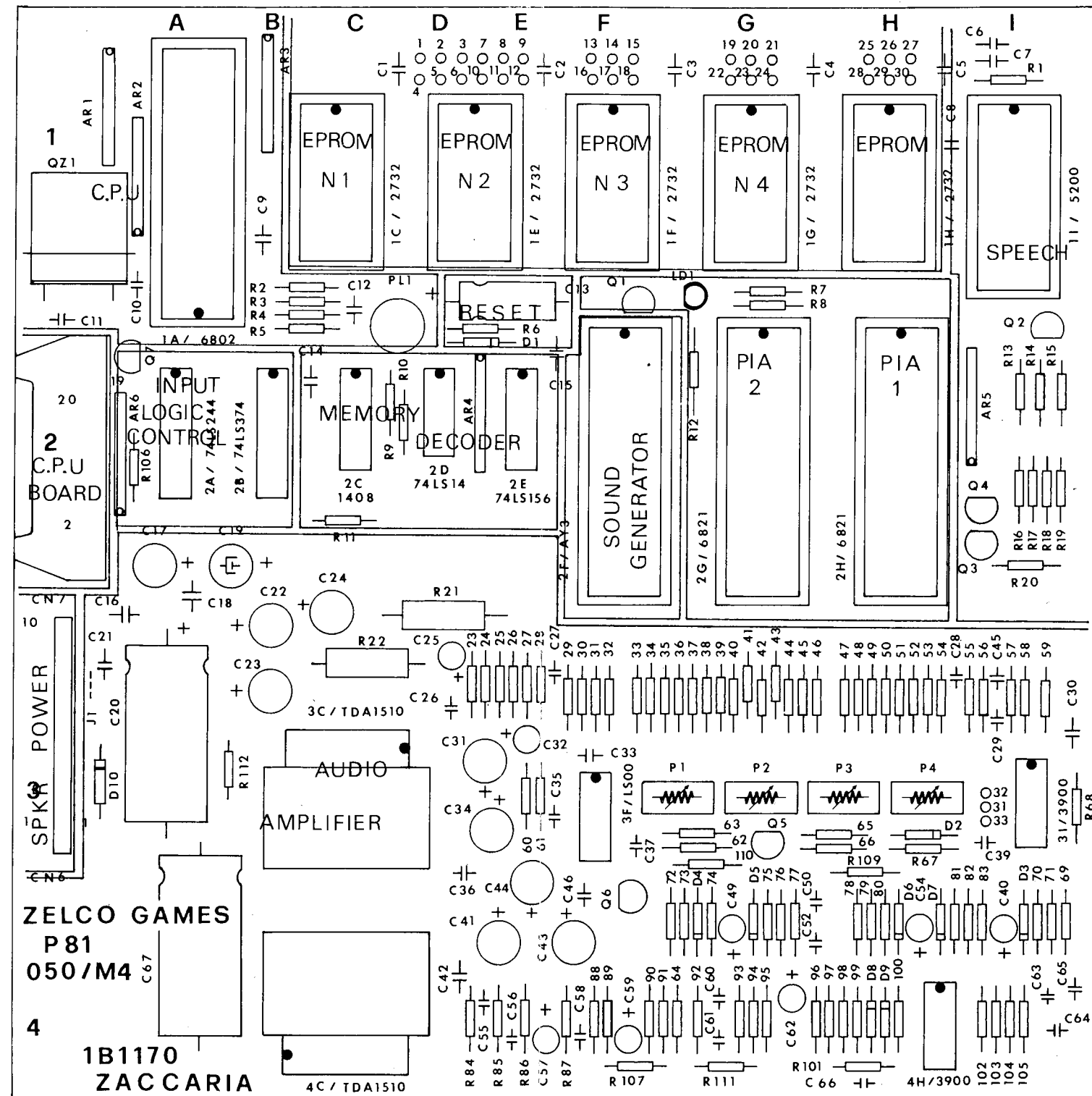
P.C. 1 B 1168 & P.C. 1 B 1169

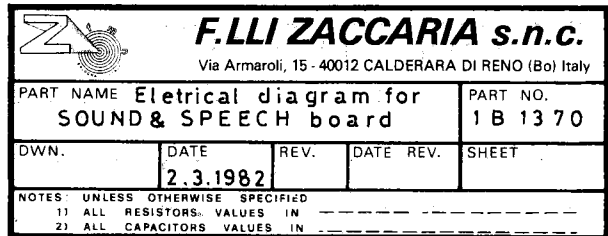


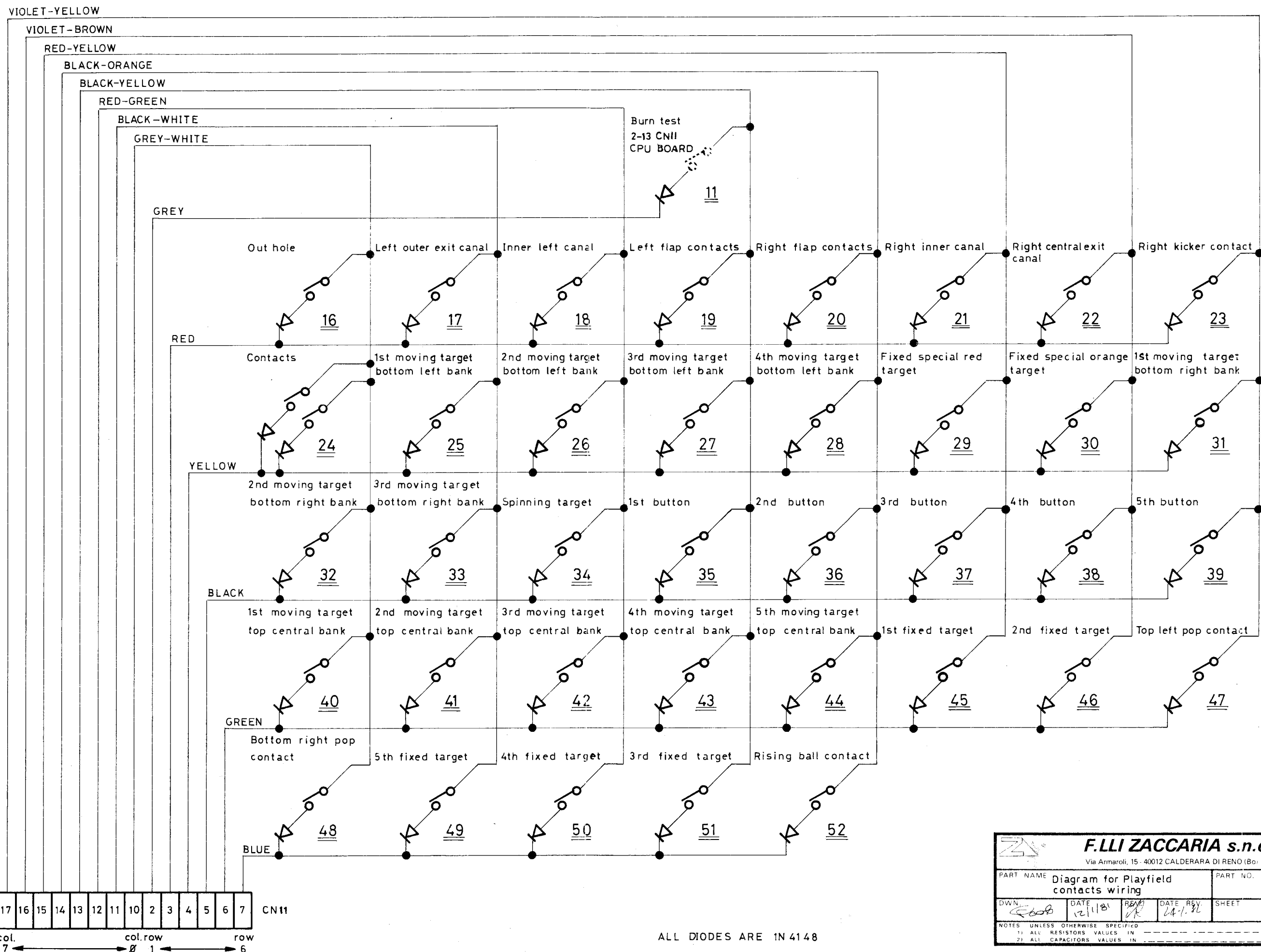


# SOUND & SPEECH board

PC.1 B1170







ALL DIODES ARE 1N4148

|                                                                                                          |         |          |         |
|----------------------------------------------------------------------------------------------------------|---------|----------|---------|
| <b>F.LLI ZACCARIA s.n.c.</b><br>Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) Italy                    |         |          |         |
| PART NAME                                                                                                |         | PART NO. |         |
| Diagram for Playfield contacts wiring                                                                    |         |          |         |
| DWN.                                                                                                     | DATE    | REV.     | DATE    |
| 608                                                                                                      | 12/1/81 | 1        | 12/1/81 |
| SHEET                                                                                                    |         | SHEET    |         |
| NOTES: UNLESS OTHERWISE SPECIFIED<br>1) ALL RESISTORS VALUES IN OHMS<br>2) ALL CAPACITORS VALUES IN P.F. |         |          |         |



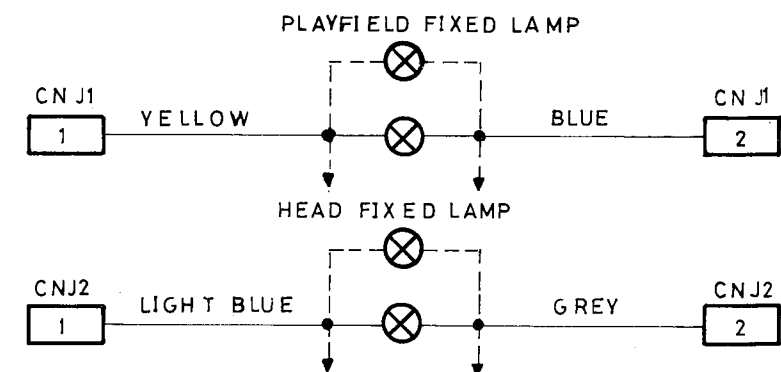
# PLAYFIELD LAMPS

|      |    |                    |                          |
|------|----|--------------------|--------------------------|
| CN 3 | 5  | BROWN              |                          |
| CN18 | 1  | YELLOW WHITE       | ⊗ 200'000 Pts            |
|      | 2  | LIGHT BLUE         | ⊗ TUNNEL LAMP 30'000 Pts |
|      | 3  | BLUE-YELLOW        | ⊗ LAMP 2                 |
|      | 4  | LIGHT GREEN-GREY   | ⊗ LAMP 3                 |
|      | 5  | WHITE-PINK         | ⊗ TUNNEL LAMP 50'000 Pts |
|      | 9  | YELLOW-ORANGE      | ⊗ 100'000 Pts            |
|      | 10 | WHITE-GREEN        | ⊗ 500'000 Pts            |
|      | 11 | RED-WHITE          | ⊗ LAMP 1                 |
|      | 12 | LIGHT GREEN-ORANGE | ⊗ 4th BUTTON             |
|      | 13 | WHITE              | ⊗ 1st BUTTON             |
|      | 14 | BROWN              | ⊗ LAMP 4                 |
|      | 15 | BLUE-RED           | ⊗ RIGHT ADVANCE TIME     |
|      | 17 | BLUE-GREY          | ⊗ BONUS 19'000 Pts       |
|      | 18 | RED-BLACK          | ⊗ 5th BUTTON             |
|      | 19 | BLUE-ORANGE        | ⊗ 2nd BUTTON             |
| CN18 | 20 | BLUE-WHITE         | ⊗ LAMP 5                 |
| CN19 | 1  | PINK               | ⊗ BONUS MULTIPLIER x10   |
|      | 2  | WHITE-ORANGE       | ⊗ BONUS MULTIPLIER x20   |
|      | 3  | LIGHT GREEN-BROWN  | ⊗ BONUS MULTIPLIER x50   |
|      | 4  | VIOLET-RED         | ⊗ BONUS 3'000 Pts        |
|      | 6  | ORANGE             | ⊗ 3rd BUTTON             |
|      | 7  | BROWN-ORANGE       | ⊗ BONUS 6'000 Pts        |
|      | 8  | PINK-VIOLET        | ⊗ BONUS 1'000 Pts        |
|      | 9  | YELLOW-GREY        | ⊗ BONUS 7'000 Pts        |
|      | 10 | GREEN-BLUE         | ⊗ BONUS BALL             |
|      | 11 | YELLOW-BROWN       | ⊗ BONUS 2'000 Pts        |
|      | 12 | VIOLET             | ⊗ BONUS 9'000 Pts        |
|      | 13 | VIOLET-BLUE        | ⊗ BONUS 5'000 Pts        |
|      | 15 | BLACK-BLUE         | ⊗ BONUS 11'000 Pts       |
|      | 16 | PINK-BLUE          | ⊗ BONUS 10'000 Pts       |
| CN19 | 18 | PINK-YELLOW        | ⊗ BONUS 8'000 Pts        |

|      |    |                    |                          |
|------|----|--------------------|--------------------------|
| CN19 | 19 | PINK-BLACK         | ⊗ BONUS 13'000 Pts       |
| CN19 | 20 | GREEN-YELLOW       | ⊗ BONUS 18'000 Pts       |
| CN20 | 1  | YELLOW-WHITE       | ⊗ LAMP C                 |
|      | 2  | LIGHT BLUE         | ⊗ LAMP H                 |
|      | 3  | YELLOW-BLUE        | ⊗ BIG BONUS 20'000 Pts   |
|      | 4  | LIGHT GREEN-GREY   | ⊗ BONUS 20'000 Pts       |
|      | 5  | PINK-WHITE         | ⊗ BONUS 15'000 Pts       |
|      | 6  | PINK-BROWN         | ⊗ BONUS 14'000 Pts       |
|      | 7  | ORANGE-GREY        | ⊗ LAMP P                 |
|      | 8  | LIGHT GREEN-VIOLET | ⊗ LAMP 5 sec             |
|      | 9  | YELLOW-ORANGE      | ⊗ LAMP M                 |
|      | 10 | GREEN-WHITE        | ⊗ LAMP A                 |
|      | 11 | BLACK-VIOLET       | ⊗ SPECIAL RED            |
|      | 12 | WHITE-BROWN        | ⊗ LAMP 30 sec            |
|      | 13 | BLACK-GREEN        | ⊗ SPECIAL 300'000 Pts    |
|      | 14 | BLUE-BROWN         | ⊗ LAMP 20 sec            |
|      | 15 | BLUE-RED           | ⊗ LAMP 10 sec            |
|      | 16 | GREEN-BLUE         | ⊗ SPECIAL 100'000 Pts    |
|      | 17 | GREY-BLUE          | ⊗ SPECIAL 200'000 Pts    |
|      | 18 | BLACK-RED          | ⊗ SPECIAL ORANGE         |
|      | 19 | BLUE-ORANGE        | ⊗ POP 1                  |
| CN20 | 20 | WHITE-BLUE         | ⊗ POP 2                  |
| CN21 | 2  | ORANGE-GREY        | ⊗ TUNNEL LAMP 20'000 Pts |
|      | 3  | LIGHT GREEN-VIOLET | ⊗ 15'000 Pts             |
|      | 4  | PINK-BROWN         | ⊗ LEFT ADVANCE TIME      |
|      | 8  | ORANGE-WHITE       | ⊗ BONUS 16'000 Pts       |
|      | 12 | WHITE-RED          | ⊗ 2nd KICKER LAMP        |
|      | 14 | WHITE-VIOLET       | ⊗ BONUS 4'000 Pts        |
|      | 15 | BLACK-GREY         | ⊗ BONUS 17'000 Pts       |
|      | 16 | ORANGE-BROWN       | ⊗ BONUS 12'000 Pts       |
| CN21 | 18 | RED-VIOLET         | ⊗ 1st KICKER LAMP        |

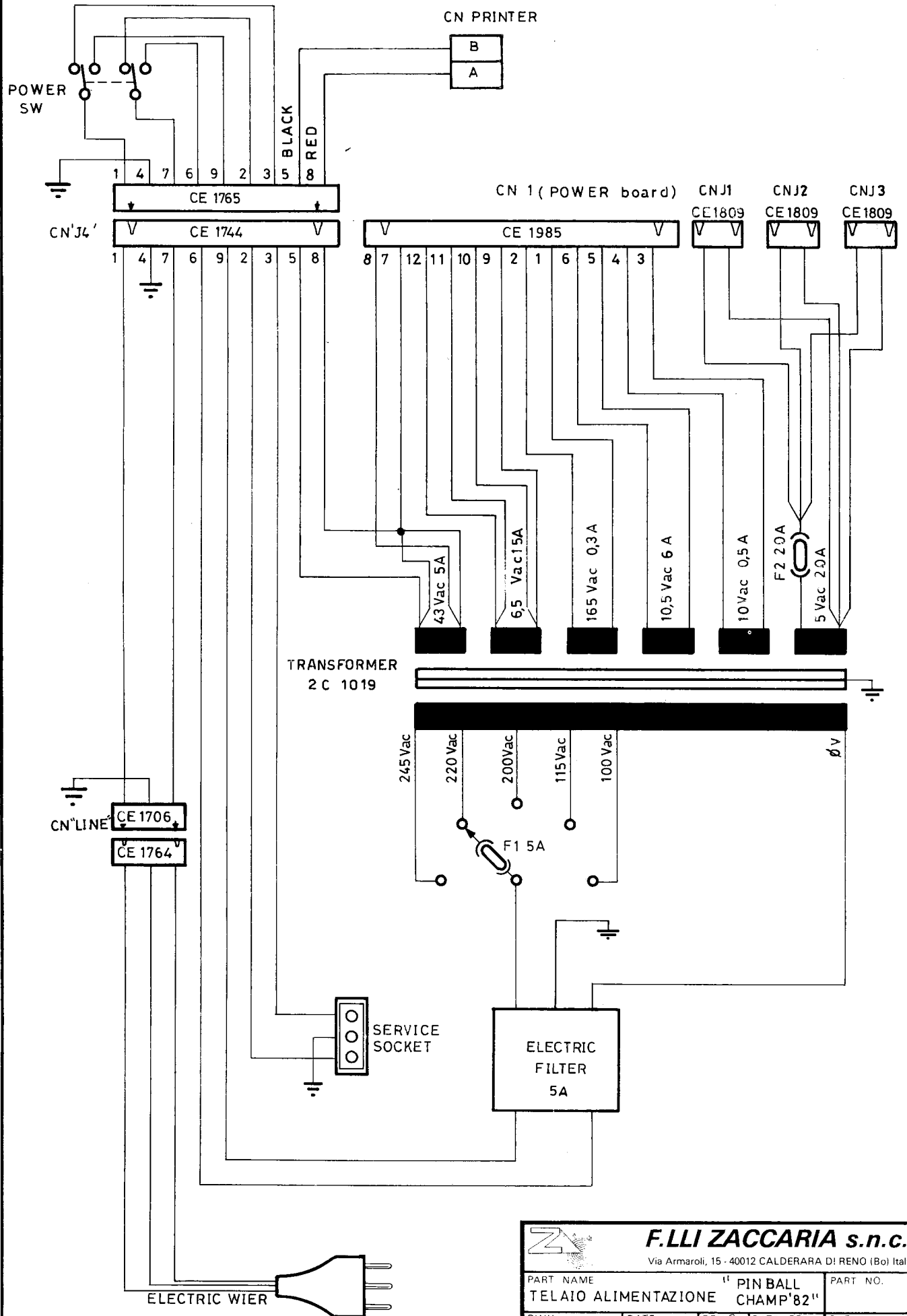
# HEAD LAMPS

|       |    |               |                     |
|-------|----|---------------|---------------------|
| CN 4  | 3  | BROWN         |                     |
| CN 22 | 1  | ORANGE-BROWN  | ⊗ POP 3             |
|       | 2  | PINK-VIOLET   | ⊗ POP 4 UP          |
|       | 3  | VIOLET-BROWN  | ⊗ (GAME TIME BONUS) |
|       | 4  | ORANGE-BLACK  | ⊗ BALLS TO PLAY     |
|       | 5  | YELLOW-RED    | ⊗ CREDIT            |
|       | 6  | YELLOW-BLACK  | ⊗ MATCH             |
|       | 7  | PINK-BROWN    | ⊗ POP 5             |
|       | 8  | GREEN         | ⊗ CAN PLAY 1        |
|       | 9  | RED-VIOLET    | ⊗ WOMAN SPEECH LAMP |
|       | 10 | WHITE-BLACK   | ⊗ TILT              |
|       | 11 | WHITE-ORANGE  | ⊗ MAN SPEECH LAMP   |
|       | 12 | YELLOW        | ⊗ CAN PLAY 2        |
|       | 13 | BLACK         | ⊗ CAN PLAY 4 DOWN   |
|       | 14 | VIOLET-YELLOW | ⊗ (GAME TIME BONUS) |
|       | 15 | WHITE-GREY    | ⊗ GAME OVER         |
|       | 16 | GREEN-RED     | ⊗ SUPER BONUS       |
|       | 17 | RED           | ⊗ CAN PLAY 3        |
|       | 18 | BLUE          | ⊗ HIGHEST SCORE     |
| CN 22 | 19 | GREEN-BLUE    | ⊗ BONUS BALL        |



|                                                               |                                                 |
|---------------------------------------------------------------|-------------------------------------------------|
| <b>F.LLI ZACCARIA s.n.c.</b>                                  |                                                 |
| Via Armaroli, 15 - 40012 CALDERARA DI RENO (Bo) Italy         |                                                 |
| PART NAME                                                     | Electrical diagram for "PLAYFIELD & HEAD LAMPS" |
| PART NO.                                                      |                                                 |
| DWN.                                                          | DATE                                            |
| REV.                                                          | DATE REV.                                       |
| SHEET                                                         |                                                 |
| NOTES: 1) ALL RESISTORS VALUES IN 2) ALL CAPACITORS VALUES IN |                                                 |





|                                                                                                                                                                            |        |                     |           |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------|-----------|----------|
|  <b>F.LLI ZACCARIA s.n.c.</b><br>Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) Italy |        |                     |           |          |
| PART NAME                                                                                                                                                                  |        | "PIN BALL CHAMP'82" |           | PART NO. |
| TELAIO ALIMENTAZIONE                                                                                                                                                       |        |                     |           |          |
| DWN.                                                                                                                                                                       | DATE   | REV.                | DATE REV. | SHEET    |
| <i>[Signature]</i>                                                                                                                                                         | 8/1/82 | <i>[Signature]</i>  | 23/2/82   |          |
| NOTES: UNLESS OTHERWISE SPECIFIED<br>1) ALL RESISTORS VALUES IN _____<br>2) ALL CAPACITORS VALUES IN _____                                                                 |        |                     |           |          |

