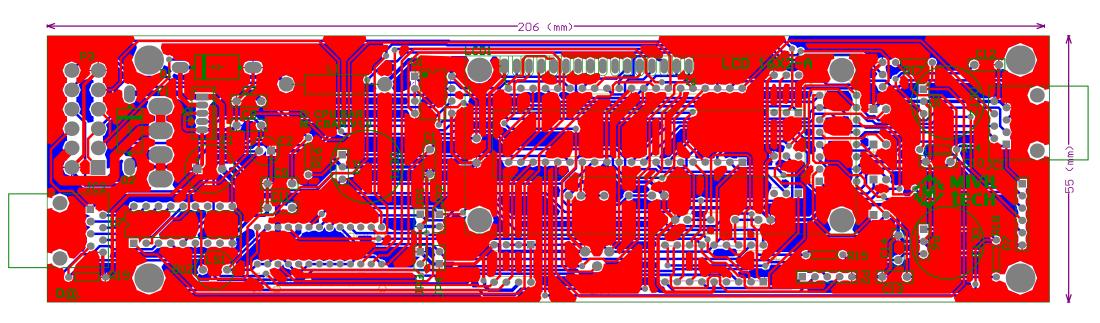


```
H:\PCB\CAJA COMUN_\BARRAS DE CONTEO\PRINCIPAL\MDL_CONTROL.Vhd
   -- SubModule MDL_CONTROL
   -- Created 15/01/2015 15:18:32
  Library IEEE;
  Use IEEE.Std Logic 1164.all;
  entity MDL CONTROL is port
                : inout std_logic_vector(0 to 7);
       TX TTL V2 : out std logic;
       RX TTL V2 : in std_logic;
       TX 485 DI : out std_logic;
       RX_485_RO : in std_logic;
       485 RE
              : out std_logic;
       TX_TTL_V1 : out std_logic;
       RX_TTL_V1 : in std_logic;
       PRB : inout std_logic_vector(0 to 7);
SN_OP1 : in std_logic;
SN_OP2 : in std_logic
     );
  end MDL CONTROL;
  architecture Structure of MDL CONTROL is
  -- Component Declarations
  -- Signal Declarations
  begin
  end Structure;
               ______
```



| Dipped Ratial Multilayer Ceramic Capacitor X7R (2007)   C11 (C12 C13) (C14   VP04-2.5   VP0448V224U8   10   VP0425   VP0448V224U8   10   VP0426   VP0 | Comment        | Description             | Designator               | Footprint        | LibRef         | Quantity |
|--|----------------|-------------------------|--------------------------|------------------|----------------|----------|
| Capación x/Rs 220nf   Cl. C2, C7, C8, C9, C10, C10   VP442.5   VP448Y224JB   10   VP448Y24JB   1 |                |                         |                          |                  |                |          |
| No.   No.  |                |                         | C1, C2, C7, C8, C9, C10, |                  |                |          |
| Multibayer Ceramic Capacitor Coli, Col. Col. Col. Col. Col. Col. Col. Col.   | VP44BY224JB    |                         | C11, C12, C13, C14       | VP44-2.5         | VP44BY224JB    | 10       |
| P318A220IB   Capacitor COG (RPC):   C3, C4, C5, C6   VP31-2.5   VP318A220IB   4  |                |                         |                          |                  |                |          |
| Cap2   Capacitor   |                | Capacitor COG (NPO):    |                          |                  |                |          |
| Diodo   Diodo rectificador   Di. D.2   184000   Diodo   Diod |                |                         |                          |                  |                | 4        |
| Polarized Capacitor   E1   |                |                         |                          |                  |                |          |
| El   Cloopur   Cap Poll   Fuse   Fu | Diodo          |                         | D1, D2                   | 1N4000           | Diodo          | 2        |
| Right Angle, Standard   Profile, R45*-Keyed,   Flange Mount PCB Jack   JCL, JC2   15-43-6233   15-43-6233   2     Header 2   | Cap Pol1       |                         | E1                       | C1000UF          | Cap Pol1       | 1        |
| Profile, Rids-Keyed,   Flange Mount PCB Jack   CLJ / LG  | Fuse 1         | Fuse                    | F1                       | fusible1         | Fuse 1         | 1        |
| Profile, Rids-Keyed,   Flange Mount PCB Jack   CLJ / LG  |                | Right Angle Standard    |                          |                  |                |          |
| Header 2   |                | Profile, RJ45-Keyed,    |                          |                  |                |          |
| Inductor Adj   |                |                         |                          |                  | 1              |          |
| ICD 16X2   |                |                         |                          |                  | 1              |          |
| Speaker  |                | ,                       |                          |                  |                |          |
| Optocoupler  |                |                         |                          |                  |                | 1        |
| Priototransistor   Output, Dual Channel   OP1, OP2   | Speaker        | Loudspeaker             | LS1                      | C100UFA          | Speaker        | 1        |
| Output, Dual Channel, TRL Compatible, Pb-free   PP1, OP2   An35,4n33,6pines   ILD74   2   2   2   2   3   3   4   4   4   4   4   4   4   4  |                | Optocoupler,            |                          |                  |                |          |
| ### AN33   |                |                         |                          |                  |                |          |
| Header 6X2   Header, 6-Pin, Dual row   | 4N33           |                         | OP1, OP2                 | 4n35_4n33_6pines | ILD74          | 2        |
| Header 6X2   row   | Header 5       | Header, 5-Pin           | P2                       | HDR1X5           | Header 5       | 1        |
| Header 3   |                |                         |                          |                  |                | _        |
| Header 6   |                |                         |                          |                  | -              |          |
| PT   |                |                         |                          |                  | <b>.</b>       |          |
| Process  | Header 6       |                         | Ρ/                       | HDKIX6           | Header 6       | 1        |
| 2N3904   | PT             |                         | PR1                      | potenciometro    | RPot SM        | 1        |
| R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R13, R14, R15, R13, R14, R15, R13, R14, R15, R15, R15, R15, R15, R15, R15, R15   | 2N2004         |                         | 01                       | 2N2004 OV        | 2N2004         | 1        |
| Resistor   R12, R13, R14, R15, R16, R17, R18, R19   AXIAL-0.3   Res1   19  | 2113304        | Ampimer                 |                          | 2113304_OK       | 2113304        | 1        |
| Resistor   R16, R17, R18, R19   AXIAL-0.3   Resi   |                |                         |                          |                  |                |          |
| Multipoint   R5485/R5422   Transceiver/Repeater   U1   | Res            | Resistor                |                          | AXIAL-0.3        | Res1           | 19       |
| DS3695N   Transceiver/Repeater   U1  |                |                         |                          |                  |                |          |
| Enhanced Flash Microcontroller with 10- Bit A/D and nanoWatt Technology, 64K Flash, 40-Pin PDIP, Industrial Temperature Range U2 PDIP600-P40 PIC18F4620-I/P Temperature Range U2 PDIP600-P40 PIC18F4620-I/P 1  512 Kbit SPI Bus Serial EEPROM, 8-Pin PDIP, Industrial Temperature U3 24Ic215_invertido 25LC512-I/P 1  FLASH-Based 8-Bit CMOS Microcontroller with nanoWatt Technology, 2K (xl4-Bit words) FLASH, 224 Bytes SRAM, 18-Pin PDIP, 3.0 to 5.5V Supply Range, Industrial Temperature U4 PDIP300-P18 PIC16F628A-I/P Temperature U4 PDIP300-P18 PIC16F628A-I/P 1  SIMPLE SWITCHER 1A Step-Down Voltage Regulator U5 T05A LM2575T-5.0 1  MAX232N Driver/Receiver U6 N016 MAX232N 1  High-Voltage, High- Current Darlington Array U7 A18 ULN2803A  | D\$3695N       |                         | 111                      | NORE             | D\$3695N       | 1        |
| Microcontroller with 10-   | 23303314       | nansceivel/Repeater     | 01                       | 14002            | D3303314       |          |
| Bit A/D and nanoWatt Technology, 64K Flash, 40-Pin PDIP, Industrial Temperature Range  |                |                         |                          |                  |                |          |
| A0-Pin PDIP, Industrial   Temperature Range   U2   |                |                         |                          |                  |                |          |
| PIC18F4620-I/P   Temperature Range   U2  |                |                         |                          |                  |                |          |
| S12 Kbit SPI Bus Serial   EEPROM, 8-Pin PDIP,   Industrial Temperature   U3   24lc215_invertido   25LC512-I/P   1   1   1   1   1   1   1   1   1  | PIC18F4620-I/P |                         | U2                       | PDIP600-P40      | PIC18F4620-I/P | 1        |
| 25LC512-I/P   Industrial Temperature   U3  |                | 512 Kbit SPI Bus Serial |                          |                  |                |          |
| FLASH-Based 8-Bit   CMOS Microcontroller   with nanoWatt   Technology, 2K (x14-Bit   words) FLASH, 224   Bytes SRAM, 18-Pin   PDIP, 3.0 to 5.5V Supply   Range, Industrial   PIC16F628A-I/P   Temperature   U4   PDIP300-P18   PIC16F628A-I/P   1   SIMPLE SWITCHER 1A   Step-Down Voltage   Step-Down Voltage   Regulator   U5   T05A   LM2575T-5.0   1   Dual EIA-232   Driver/Receiver   U6   N016   MAX232N   1   High-Voltage, High-Current Darlington   U7   A18   ULN2803A   1  | 25LC512-I/P    |                         | U3                       |                  | 25LC512-I/P    | 1        |
| With nanoWatt   Technology, ZK (x14-Bit words) FLASH, 224   Bytes SRAM, 18-Pin   PDIP, 3.0 to 5.5V Supply   Range, Industrial   Temperature   U4   PDIP300-P18   PIC16F628A-I/P   1   SIMPLE SWITCHER 1A   Step-Down Voltage   Regulator   U5   T05A   LM2575T-5.0   1   LM2575T-5.0   Dual EIA-232   Driver/Receiver   U6   N016   MAX232N   1   High-Voltage, High-Current Darlington   LM2803A   Array   U7   A18   ULN2803A   1  | 2320322 4.     | FLASH-Based 8-Bit       | -                        | z nezza_mvertido | 2520312 41     |          |
| Technology, 2K (x14-Bit words) FLASH, 224  |                |                         |                          |                  |                |          |
| Bytes SRAM, 18-Pin   PDIP, 3.0 to 5.5V Supply   Range, Industrial   Temperature  |                |                         |                          |                  |                |          |
| PDIP, 3.0 to 5.5V Supply Range, Industrial Range, Industrial Temperature   |                |                         |                          |                  |                |          |
| PIC16F628A-I/P   Temperature   |                |                         |                          |                  |                |          |
| SIMPLE SWITCHER 1A   Step-Down Voltage   Regulator   U5   T05A   LM2575T-5.0   1   | Dict crean     | Range, Industrial       |                          | DDVD300 D10      | DIGI CECCOA TO |          |
| Step-Down Voltage Regulator   U5   T05A   LM2575T-5.0   1  | PIC16F628A-I/P |                         | U4                       | PDIP300-P18      | PIC16F628A-I/P | 1        |
| Dual EIA-232   |                | Step-Down Voltage       |                          |                  | l              |          |
| MAX232N         Driver/Receiver         U6         N016         MAX232N         1           High-Voltage, High-Current Darlington         U7         A18         ULN2803A         ULN2803A         1   | LM2575T-5.0    |                         | U5                       | T05A             | LM2575T-5.0    | 1        |
| High-Voltage, High- Current Darlington ULN2803A Array U7 A18 ULN2803A 1  | MAX232N        |                         | U6                       | N016             | MAX232N        | 1        |
| ULN2803A Array U7 A18 ULN2803A 1   |                | High-Voltage, High-     |                          |                  |                |          |
|  | ULN2803A       | 3                       | U7                       | A18              | ULN2803A       | 1        |
|  |                | · ·                     |                          |                  |                |          |
|  |                |                         | , =                      |                  |                |          |