

## **BLOCK DIAGRAM(S) OF THE EUT**

### **Block Diagram Description**

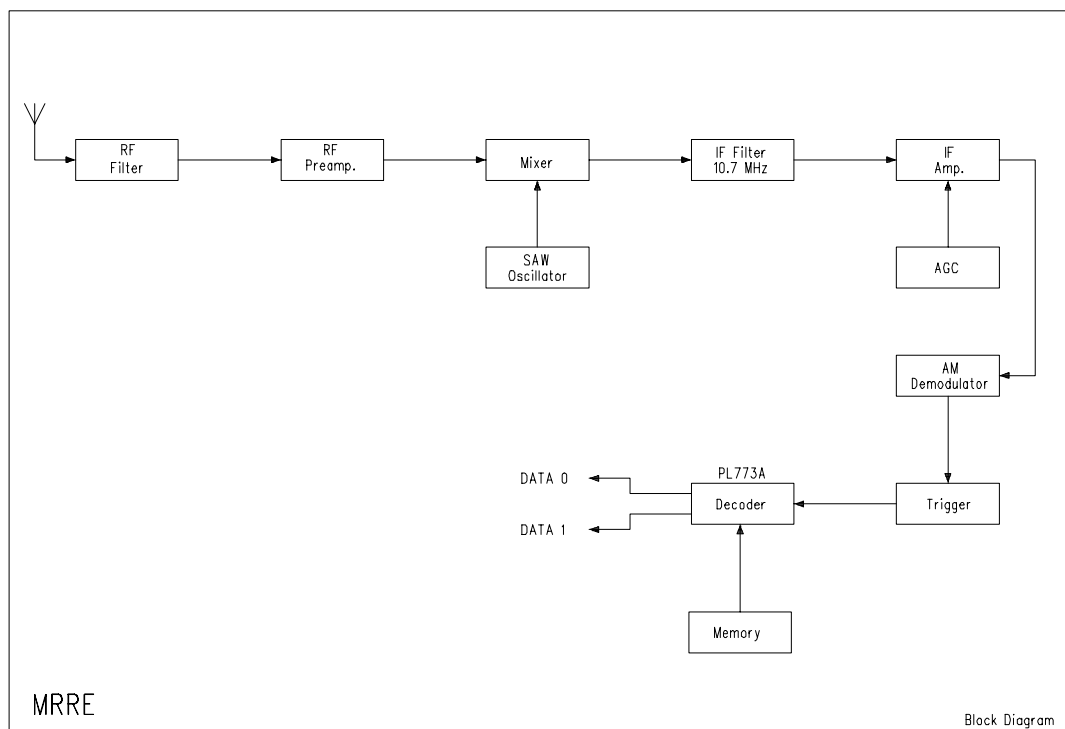
The Controller Board of the EUT is provided with:

- ceramic resonator X1 = 4 MHz

Contained in PL118 radio module:

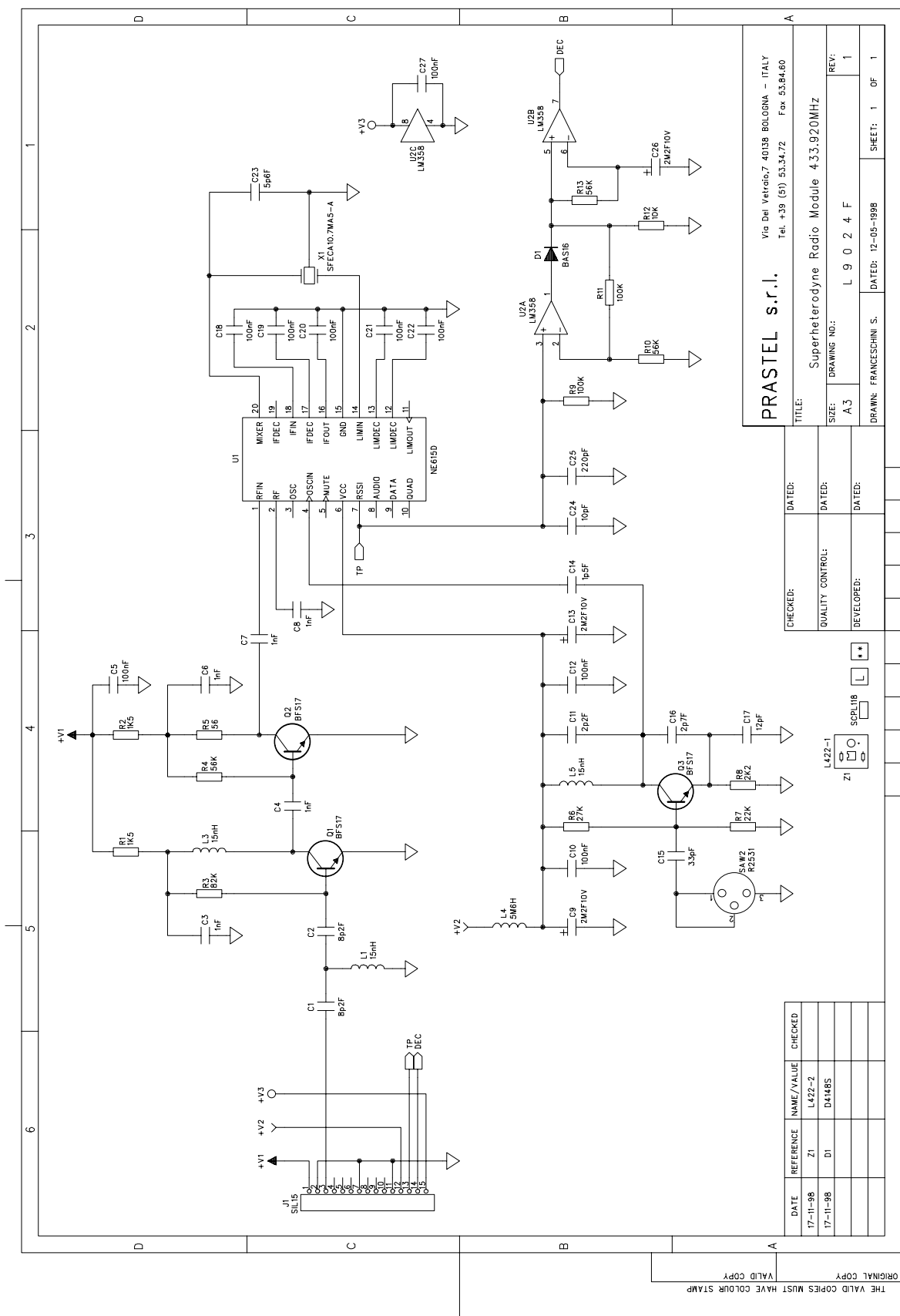
- SAW resonator SAW2 = 423.22 MHz
- Ceramic filter 10.7 MHz

**Fig. 1 - Block Diagram of the EUT**

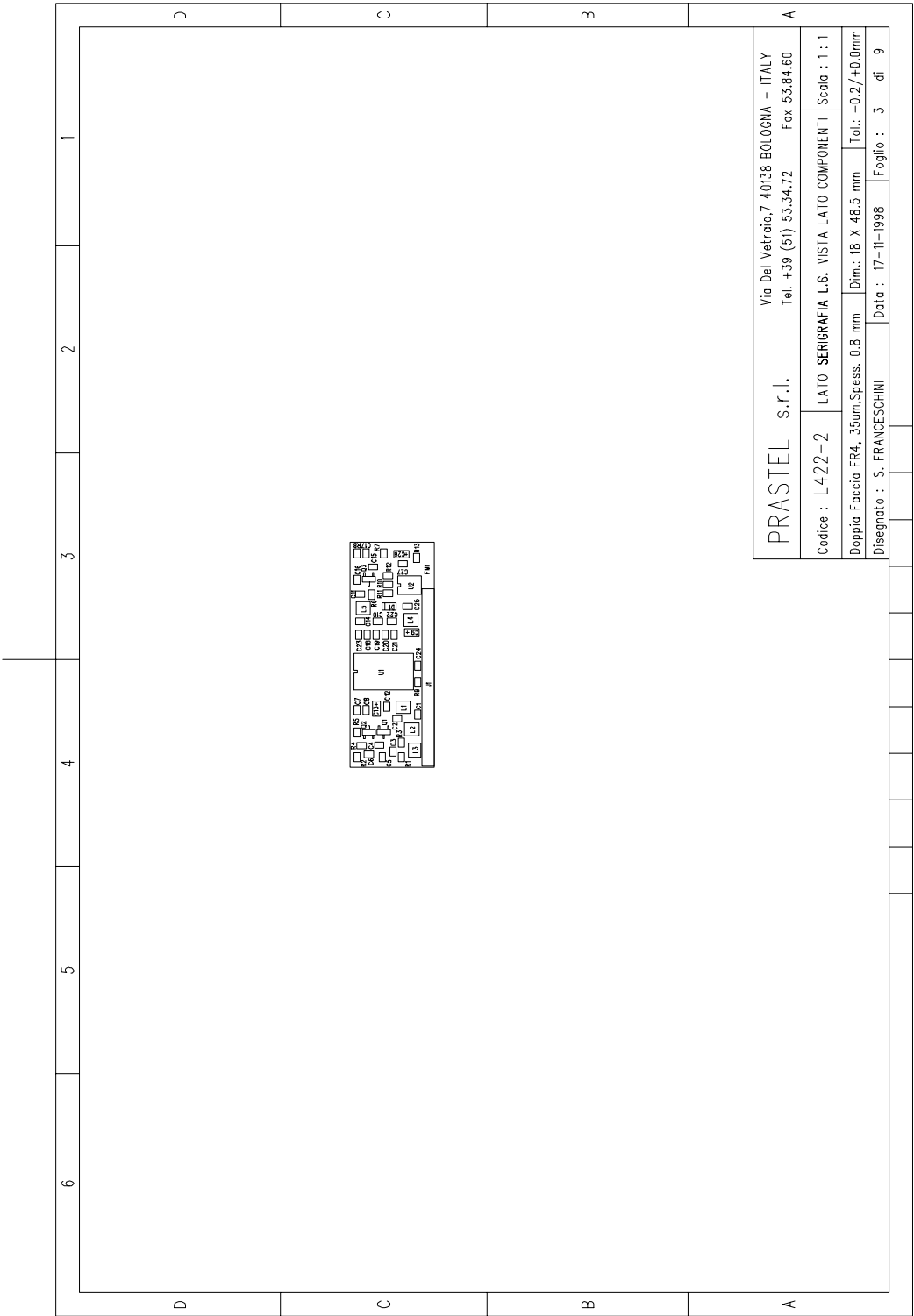


**IN THE FOLLOWING PAGES YOU CAN FIND ALL THE INFORMATION ABOUT THE RADIO MODULE (PL118) WHICH IS INSERTED IN THE RECEIVER**

# PL118 electrical scheme



PL118 circuit layout



## PL118 part list

| Bill Of Materials for L9024F1.sch on Mon Mar 22 11:53:29 1999 |     |                       |               |                   |            |                                           |
|---------------------------------------------------------------|-----|-----------------------|---------------|-------------------|------------|-------------------------------------------|
| Item                                                          | Qty | Ref.                  | Prestel Code  | Name              | Value      | Tol. Description                          |
| 1                                                             | 1   | A2                    |               | Manufacturing     |            | Manufacturing                             |
| 2                                                             | 1   | A1                    |               | NOTE              |            | Row Pitch, Dimension See Sample           |
| 3                                                             | 1   | C24                   | C10PCS        | CSMD              | 10pF       | NP0 Ceramic Capacitor 0805 SMT            |
| 4                                                             | 1   | C17                   | C12PCS        | CSMD              | 12pF       | NP0 Ceramic Capacitor 0805 SMT            |
| 5                                                             | 5   | C3-4 C6-8             | C1N0CS        | CSMD              | 1nF        | Z5U Ceramic Capacitor 0805 SMT            |
| 6                                                             | 1   | C14                   | C1P5CS        | CSMD              | 1p5F       | Z5U Ceramic Capacitor 0805 SMT            |
| 7                                                             | 3   | C9 C13 C26            | C2M2V10S      | CSMD              | 2M2F10V    | Tantalum Capacitor CaseA SMT              |
| 8                                                             | 1   | C11                   | C2P2CS        | CSMD              | 2p2F       | NP0 Ceramic Capacitor 0805 SMT            |
| 9                                                             | 1   | C16                   | C2P7CS        | CSMD              | 2p7F       | NP0 Ceramic Capacitor 0805 SMT            |
| 10                                                            | 1   | C15                   | C33PCS        | CSMD              | 33pF       | NP0 Ceramic Capacitor 0805 SMT            |
| 11                                                            | 1   | C23                   | C5P6CS        | CSMD              | 5p6F       | NP0 Ceramic Capacitor 0805 SMT            |
| 12                                                            | 2   | C1-2                  | C8P2CS        | CSMD              | 8p2F       | NP0 Ceramic Capacitor 0805 SMT            |
| 13                                                            | 9   | C5 C10 C12 C18-22 C27 | CM10CS        | CSMD              | 100nF      | Z5U Ceramic Capacitor 0805 SMT            |
| 14                                                            | 1   | C25                   | CN22CS        | CSMD              | 220pF      | X7R Ceramic Capacitor 0805 SMT            |
| 15                                                            | 1   | Z1                    | CSL422-2      | LL422-2           | 0.8mm/35um | PCB Double Side 18 x 48.5 mm              |
| 16                                                            | 1   | D1                    | D4148S        | LL4148            |            | Signal Diode SOD80 SMT                    |
| 17                                                            | 3   | L1 L3 L5              | LI5NHST5      | LSMD              | 15nH       | 5% Inductor SIMID02 SMT                   |
| 18                                                            | 1   | L4                    | LI5UH6ST5     | LSMD              | 5M6H       | 5% Inductor SIMID02 SMT                   |
| 19                                                            | 1   | U2                    | ICLM358S      | LM358             |            | Dual Op Amp 8pin SMT                      |
| 20                                                            | 1   | U1                    | ICNE615D      | NE615D            |            | Low Power FM IF System SMT                |
| 21                                                            | 1   | R12                   | R10KS         | RSMD              | 10K        | 5% Resistor 0805 SMT                      |
| 22                                                            | 2   | R1-2                  | R1K5S         | RSMD              | 1K5        | 5% Resistor 0805 SMT                      |
| 23                                                            | 1   | R7                    | R22KS         | RSMD              | 22K        | 5% Resistor 0805 SMT                      |
| 24                                                            | 1   | R6                    | R27KS         | RSMD              | 27K        | 5% Resistor 0805 SMT                      |
| 25                                                            | 1   | R8                    | R2K2S         | RSMD              | 2K2        | 5% Resistor 0805 SMT                      |
| 26                                                            | 3   | R4 R10 R13            | R56KS         | RSMD              | 56K        | 5% Resistor 0805 SMT                      |
| 27                                                            | 1   | R5                    | R56RS         | RSMD              | 56         | 5% Resistor 0805 SMT                      |
| 28                                                            | 1   | R3                    | R82KS         | RSMD              | 82K        | 5% Resistor 0805 SMT                      |
| 29                                                            | 1   | X1                    | RISCER8       | SFECA10.7MA5-A    |            | Ceramic Filter 10.7 MHz                   |
| 30                                                            | 1   | SAW2                  | RISSAW4       | R2531             |            | SAW Resonator 423.22 MHz                  |
| 31                                                            | 2   | R9 R11                | RM10S         | RSMD              | 100K       | 5% Resistor 0805 SMT                      |
| 32                                                            | 1   | SC1                   | SCPL118       |                   |            | Shield                                    |
| 33                                                            | 1   | J1                    | STRIPPIN(15P) | 518-0718-0-42-111 |            | Soldering Terminals SIL 15P Center 2.54mm |
| 34                                                            | 3   | Q1-3                  | TBFS17        | BFS17             |            | NPN Small Signal Transistor SOT23 SMT     |

### PL118 block diagram

