



|              |                         |          |
|--------------|-------------------------|----------|
| ALR4600      | Allgon Compact Repeater | 10-25-00 |
| FCCID        | L6GALR4600              |          |
| Grantee Code | L6G                     |          |

### **Frequency Stabilization:**

Allgon repeaters are dependent on the donor (or drive) signal transmitted by the carrier's base station for re-transmitted frequency stability. The repeater is a transparent amplifier in both uplink and downlink RF paths with no means of frequency generation.

### **Suppression of Spurious Radiation:**

Allgon repeaters amplify an existing, compliant, donor signal and utilize duplexers, crystal filters, and spurious filters throughout the gain path. Adjustable filters for the pass band attenuate any unwanted ambient signals further. Custom SAW filters assure sharp filter characteristics. Class A amplifier configuration is also utilized for linearity of amplified signal.

### **Modulation Limiting:**

Allgon repeaters do not modulate the amplified signal. The unit is transparent and passes the received modulated RF from the donor site on the downlink path, and the mobile subscriber unit on the uplink path.

### **Power Limiting:**

Power limiting is accomplished via microprocessor controlled AGC. A feedback loop for output power via CPL1 through Q3710 (page 12 schematics) is processed and fed to the buss FDET to AN, then to the uP. PLL loops for controlling pass band filtering are monitored via Flock1 and Flock2 on the forward link. If unlock is detected, "RFON" (page 12) is removed and the supply for the final (Q2613) and drivers (Q2506, Q2603) is also removed. Means of output control is accomplished via processor control with PABIAS, FPABIAS (page12) from Q3504 (page17) and the processor input. Gain control is accomplished by inter-stage attenuators via control lines FPATT (page 11), and FGC1A/ FGC1B (page 10). The same is mirrored on the uplink schematics.

### **Active RF Devices:**

Downlink: Q2102, Q2108, Q2111, Q2202, Q2302, Q2402, Q2406, Q2506 (pre-drive), Q2603 (driver), Q2613 (final).

Uplink: Q1102, Q1108, Q1202, Q1302, Q1402, Q1406, Q1502, Q1506 (pre-drive), Q1603 (driver), Q1613 (final).

### **Crystal and Resonator Frequencies:**

|                |       |           |
|----------------|-------|-----------|
| PLL's          | X3301 | 12.8MHz   |
| Microprocessor | X3102 | 16.0MHz   |
| Memory latch   | X3101 | 32.768KHz |

THP2000

Product number: K308/4-301

PCB Assembly

BSC Board 800MHz/25MHz, Compact repeater

Revision: PA1

| Pos   | Part number | Qty | Description               | Value 1    | Value 2        | Value 3 | Val 4 | Remark 1  | Remark 2 |
|-------|-------------|-----|---------------------------|------------|----------------|---------|-------|-----------|----------|
| P113  | PM212 12/2  | 1   | Connector                 | 1 x 2p M   |                |         |       | UL 94 V-0 |          |
| P115  | PM212 22/5  | 1   | Connector 5-pole straight | 1 x 5p M   |                |         |       | UL 94 V-0 |          |
| P116  | PM212 12/2  | 1   | Connector                 | 1 x 2p M   |                |         |       | UL 94 V-0 |          |
| P117  | PM212 12/3  | 1   | Connector                 | 1 x 3p M   |                |         |       | UL 94 V-0 |          |
| P118  | PM212 10/5  | 1   | Connector                 | 1 x 5p M   |                |         |       | UL 94 V-0 |          |
| P119  | PM212 10/7  | 1   | Connector                 | 1 x 7p M   |                |         |       | UL 94 V-0 |          |
| P120  | PM212 10/3  | 1   | Connector                 | 1 x 3p M   |                |         |       | UL 94 V-0 |          |
| P121  | PM211 09/1  | 1   | Coax conn                 | receptacle | SMA, straight, |         |       |           |          |
| P122  | PM211 09/1  | 1   | Coax conn                 | receptacle | SMA, straight, |         |       |           |          |
| P123  | PM211 09/1  | 1   | Coax conn                 | receptacle | SMA, straight, |         |       |           |          |
| P124  | PM212 10/5  | 1   | Connector                 | 1 x 5p M   |                |         |       | UL 94 V-0 |          |
| P126  | PM211 09/1  | 1   | Coax conn                 | receptacle | SMA, straight, |         |       |           |          |
| P127  | PM211 09/1  | 1   | Coax conn                 | receptacle | SMA, straight, |         |       |           |          |
| P128  | PM211 09/1  | 1   | Coax conn                 | receptacle | SMA, straight, |         |       |           |          |
| P130  | PM212 09/34 | 1   | Connector                 | 2 x 17p M  | DIN41651       |         |       | UL 94 V-0 |          |
| P131  | PM212 09/10 | 1   | Connector                 | 2 x 5p M   | DIN41651       |         |       | UL 94 V-0 |          |
| Q1101 | PQ211 12/1  | 1   | Transistor                | (BCX71J)   |                | SOT23   |       |           |          |
| Q1102 | PQ231 15/1  | 1   | RF-trans                  | BFP450     |                | SOT343  |       |           |          |
| Q1103 | PQ211 12/1  | 1   | Transistor                | (BCX71J)   |                | SOT23   |       |           |          |
| Q1104 | PQ211 12/1  | 1   | Transistor                | (BCX71J)   |                | SOT23   |       |           |          |
| Q1105 | PQ211 11/1  | 1   | Transistor                | (BCX70J)   |                | SOT23   |       |           |          |
| Q1107 | PQ211 12/1  | 1   | Transistor                | (BCX71J)   |                | SOT23   |       |           |          |
| Q1108 | PQ231 15/1  | 1   | RF-trans                  | BFP450     |                | SOT343  |       |           |          |
| Q1109 | PQ211 11/1  | 1   | Transistor                | (BCX70J)   |                | SOT23   |       |           |          |
| Q1110 | PQ211 12/1  | 1   | Transistor                | (BCX71J)   |                | SOT23   |       |           |          |

| Product number: K308/4-301 |             | PCB Assembly |             | BSC Board 800MHz/25MHz, Compact repeater |         |         | Revision: PA1  |          |
|----------------------------|-------------|--------------|-------------|--|---------|---------|----------------|----------|
| Pos                        | Part number | Qty          | Description | Value 1                                  | Value 2 | Value 3 | Val 4 Remark 1 | Remark 2 |
| Q1111                      | PQ231 15/1  | 1            | RF-trans    | BFP450                                   |         | SOT343  |                |          |
| Q1115                      | PQ422 01/1  | 1            | MIXER GaAs  | CMY200                                   |         | MW6     |                |          |
| Q1119                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |                |          |
| Q1120                      | PQ432 01/1  | 1            | MMIC, GaAs  | RF2312                                   |         | SO8     |                |          |
| Q1140                      | PQ411 02/1  | 1            | Volt. Reg.  | LT1129-5                                 | +5V     | SO8     |                |          |
| Q1201                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |                |          |
| Q1202                      | PQ231 15/1  | 1            | RF-trans    | BFP450                                   |         | SOT343  |                |          |
| Q1203                      | PQ422 02/1  | 1            | MIXER GaAs  | CMY210                                   |         | MW6     |                |          |
| Q1204                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |                |          |
| Q1210                      | PQ421 03/1  | 1            | PLL         | MB15E05                                  |         | SSOP16  |                |          |
| Q1211                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |                |          |
| Q1212                      | NU          | 1            | Not Used    |  |         |         | Not mounted    |          |
| Q1213                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |                |          |
| Q1214                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |                |          |
| Q1215                      | PQ231 16/1  | 1            | RF-trans    | NE85630                                  |         | SOT323  |                |          |
| Q1216                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |                |          |
| Q1217                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |                |          |
| Q1220                      | PQ411 02/1  | 1            | Volt. Reg.  | LT1129-5                                 | +5V     | SO8     |                |          |
| Q1301                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |                |          |
| Q1302                      | PQ231 15/1  | 1            | RF-trans    | BFP450                                   |         | SOT343  |                |          |
| Q1305                      | PQ422 01/1  | 1            | MIXER GaAs  | CMY200                                   |         | MW6     |                |          |
| Q1308                      | PQ432 01/1  | 1            | MMIC, GaAs  | RF2312                                   |         | SO8     |                |          |
| Q1309                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |                |          |
| Q1315                      | PQ421 03/1  | 1            | PLL         | MB15E05                                  |         | SSOP16  |                |          |
| Q1316                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |                |          |

| Product number: K308/4-301 |             | PCB Assembly |                   | BSC Board 800MHz/25MHz, Compact repeater |         |         | Revision: PA1 |          |             |
|----------------------------|-------------|--------------|-------------------|--|---------|---------|---------------|----------|-------------|
| Pos                        | Part number | Qty          | Description       | Value 1                                  | Value 2 | Value 3 | Val 4         | Remark 1 | Remark 2    |
| Q1317                      | NU          | 1            | Not Used          |  |         |         |               |          | Not mounted |
| Q1318                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1325                      | PQ211 11/1  | 1            | Transistor        | (BCX70J)                                 |         | SOT23   |               |          |             |
| Q1326                      | PQ231 16/1  | 1            | RF-trans          | NE85630                                  |         | SOT323  |               |          |             |
| Q1327                      | PQ431 12/1  | 1            | MMIC, Si          | UPC2709                                  |         | SOP6    |               |          |             |
| Q1328                      | PQ431 12/1  | 1            | MMIC, Si          | UPC2709                                  |         | SOP6    |               |          |             |
| Q1335                      | PQ411 02/1  | 1            | Volt. Reg.        | LT1129-5                                 | +5V     | SO8     |               |          |             |
| Q1401                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1402                      | PQ231 15/1  | 1            | RF-trans          | BFP450                                   |         | SOT343  |               |          |             |
| Q1403                      | PQ211 11/1  | 1            | Transistor        | (BCX70J)                                 |         | SOT23   |               |          |             |
| Q1404                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1405                      | PQ211 11/1  | 1            | Transistor        | (BCX70J)                                 |         | SOT23   |               |          |             |
| Q1406                      | PQ231 15/1  | 1            | RF-trans          | BFP450                                   |         | SOT343  |               |          |             |
| Q1410                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1411                      | PQ231 15/1  | 1            | RF-trans          | BFP450                                   |         | SOT343  |               |          |             |
| Q1412                      | PQ431 12/1  | 1            | MMIC, Si          | UPC2709                                  |         | SOP6    |               |          |             |
| Q1413                      | PQ422 02/1  | 1            | MIXER GaAs        | CMY210                                   |         | MW6     |               |          |             |
| Q1501                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1502                      | PQ231 15/1  | 1            | RF-trans          | BFP450                                   |         | SOT343  |               |          |             |
| Q1503                      | PQ211 11/1  | 1            | Transistor        | (BCX70J)                                 |         | SOT23   |               |          |             |
| Q1504                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1505                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |
| Q1506                      | PQ243 01/1  | 1            | RF pwr trans GaAs | CLY2                                     |         | MW6     |               |          |             |
| Q1510                      | PQ411 02/1  | 1            | Volt. Reg.        | LT1129-5                                 | +5V     | SO8     |               |          |             |
| Q1601                      | PQ211 12/1  | 1            | Transistor        | (BCX71J)                                 |         | SOT23   |               |          |             |

Product number: K308/4-301

PCB Assembly

BSC Board 800MHz/25MHz, Compact repeater

Revision: PA1

| Pos   | Part number | Qty | Description       | Value 1  | Value 2 | Value 3        | Val 4 | Remark 1 | Remark 2 |
|-------|-------------|-----|-------------------|----------|---------|----------------|-------|----------|----------|
| Q1602 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q1603 | PQ243 02/1  | 1   | RF pwr trans GaAs | CLY5     |         | SOT223         |       |          |          |
| Q1610 | PQ211 11/1  | 1   | Transistor        | (BCX70J) |         | SOT23          |       |          |          |
| Q1611 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q1612 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q1613 | PQ243 09/1  | 1   | RF pwr trans GaAs | MGF0915A |         | SMD 4 X 4.2 MM |       |          |          |
| Q2101 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2102 | PQ231 15/1  | 1   | RF-trans          | BFP450   |         | SOT343         |       |          |          |
| Q2103 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2104 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2105 | PQ211 11/1  | 1   | Transistor        | (BCX70J) |         | SOT23          |       |          |          |
| Q2107 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2108 | PQ231 15/1  | 1   | RF-trans          | BFP450   |         | SOT343         |       |          |          |
| Q2109 | PQ211 11/1  | 1   | Transistor        | (BCX70J) |         | SOT23          |       |          |          |
| Q2110 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2111 | PQ231 15/1  | 1   | RF-trans          | BFP450   |         | SOT343         |       |          |          |
| Q2115 | PQ422 01/1  | 1   | MIXER GaAs        | CMY200   |         | MW6            |       |          |          |
| Q2119 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2120 | PQ432 01/1  | 1   | MMIC, GaAs        | RF2312   |         | S08            |       |          |          |
| Q2140 | PQ411 02/1  | 1   | Volt. Reg.        | LT1129-5 | +5V     | S08            |       |          |          |
| Q2201 | PQ211 12/1  | 1   | Transistor        | (BCX71J) |         | SOT23          |       |          |          |
| Q2202 | PQ231 15/1  | 1   | RF-trans          | BFP450   |         | SOT343         |       |          |          |
| Q2203 | PQ422 02/1  | 1   | MIXER GaAs        | CMY210   |         | MW6            |       |          |          |
| Q2204 | PQ431 12/1  | 1   | MMIC, Si          | UPC2709  |         | SOP6           |       |          |          |
| Q2210 | PQ421 03/1  | 1   | PLL               | MB15E05  |         | SSOP16         |       |          |          |

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|----------------------------|-------------|--------------|-------------|--|---------|---------|---------------|-------------|----------|
| Pos                        | Part number | Qty          | Description | Value 1                                  | Value 2 | Value 3 | Val 4         | Remark 1    | Remark 2 |
| Q2211                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |               |             |          |
| Q2212                      | NU          | 1            | Not Used    |  |         |         |               | Not mounted |          |
| Q2213                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |               |             |          |
| Q2214                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |               |             |          |
| Q2215                      | PQ231 16/1  | 1            | RF-trans    | NE85630                                  |         | SOT323  |               |             |          |
| Q2216                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |               |             |          |
| Q2217                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |               |             |          |
| Q2220                      | PQ411 02/1  | 1            | Volt. Reg.  | LT1129-5                                 | +5V     | S08     |               |             |          |
| Q2301                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |               |             |          |
| Q2302                      | PQ231 15/1  | 1            | RF-trans    | BFP450                                   |         | SOT343  |               |             |          |
| Q2305                      | PQ422 01/1  | 1            | MIXER GaAs  | CMY200                                   |         | MW6     |               |             |          |
| Q2308                      | PQ432 01/1  | 1            | MMIC, GaAs  | RF2312                                   |         | S08     |               |             |          |
| Q2309                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |               |             |          |
| Q2315                      | PQ421 03/1  | 1            | PLL         | MB15E05                                  |         | SSOP16  |               |             |          |
| Q2316                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |               |             |          |
| Q2317                      | NU          | 1            | Not Used    |  |         |         |               | Not mounted |          |
| Q2318                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |               |             |          |
| Q2325                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |               |             |          |
| Q2326                      | PQ231 16/1  | 1            | RF-trans    | NE85630                                  |         | SOT323  |               |             |          |
| Q2327                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |               |             |          |
| Q2328                      | PQ431 12/1  | 1            | MMIC, Si    | UPC2709                                  |         | SOP6    |               |             |          |
| Q2335                      | PQ411 02/1  | 1            | Volt. Reg.  | LT1129-5                                 | +5V     | S08     |               |             |          |
| Q2401                      | PQ211 12/1  | 1            | Transistor  | (BCX71J)                                 |         | SOT23   |               |             |          |
| Q2402                      | PQ231 15/1  | 1            | RF-trans    | BFP450                                   |         | SOT343  |               |             |          |
| Q2403                      | PQ211 11/1  | 1            | Transistor  | (BCX70J)                                 |         | SOT23   |               |             |          |

| Product number: K308/4-301 |             | PCB Assembly |                       | BSC Board 800MHz/25MHz, Compact repeater |         |                |       | Revision: PA1 |          |
|----------------------------|-------------|--------------|-----------------------|--|---------|----------------|-------|---------------|----------|
| Pos                        | Part number | Qty          | Description           | Value 1                                  | Value 2 | Value 3        | Val 4 | Remark 1      | Remark 2 |
| Q2404                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2405                      | PQ211 11/1  | 1            | Transistor            | (BCX70J)                                 |         | SOT23          |       |               |          |
| Q2406                      | PQ231 15/1  | 1            | RF-trans              | BFP450                                   |         | SOT343         |       |               |          |
| Q2410                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2411                      | PQ231 15/1  | 1            | RF-trans              | BFP450                                   |         | SOT343         |       |               |          |
| Q2412                      | PQ431 12/1  | 1            | MMIC, Si              | UPC2709                                  |         | SOP6           |       |               |          |
| Q2413                      | PQ422 02/1  | 1            | MIXER GaAs            | CMY210                                   |         | MW6            |       |               |          |
| Q2501                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2502                      | PQ231 15/1  | 1            | RF-trans              | BFP450                                   |         | SOT343         |       |               |          |
| Q2503                      | PQ211 11/1  | 1            | Transistor            | (BCX70J)                                 |         | SOT23          |       |               |          |
| Q2504                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2505                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2506                      | PQ243 01/1  | 1            | RF pwr trans GaAs     | CLY2                                     |         | MW6            |       |               |          |
| Q2510                      | PQ411 02/1  | 1            | Volt. Reg.            | LT1129-5                                 | +5V     | S08            |       |               |          |
| Q2601                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2602                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2603                      | PQ243 02/1  | 1            | RF pwr trans GaAs     | CLY5                                     |         | SOT223         |       |               |          |
| Q2610                      | PQ211 11/1  | 1            | Transistor            | (BCX70J)                                 |         | SOT23          |       |               |          |
| Q2611                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2612                      | PQ211 12/1  | 1            | Transistor            | (BCX71J)                                 |         | SOT23          |       |               |          |
| Q2613                      | PQ243 09/1  | 1            | RF pwr trans GaAs     | MGF0915A                                 |         | SMD 4 X 4.2 MM |       |               |          |
| Q3109                      | PQ454 11/1  | 1            | EEPROM                | 24C128                                   | 16K x 8 | S08            |       |               |          |
| Q3110                      | NU          | 1            | Not Used              |  |         |                |       | Not mounted   |          |
| Q3111                      | PQ452 03/1  | 1            | Clock calender        | PCF8593                                  |         | S08            |       |               |          |
| Q3112                      | PQ443 03/1  | 1            | Single 2-inp AND gate | (74VHC1G08)                              |         | SOT353         |       |               |          |

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PCB Assembly

BSC Board 800MHz/25MHz, Compact repeater

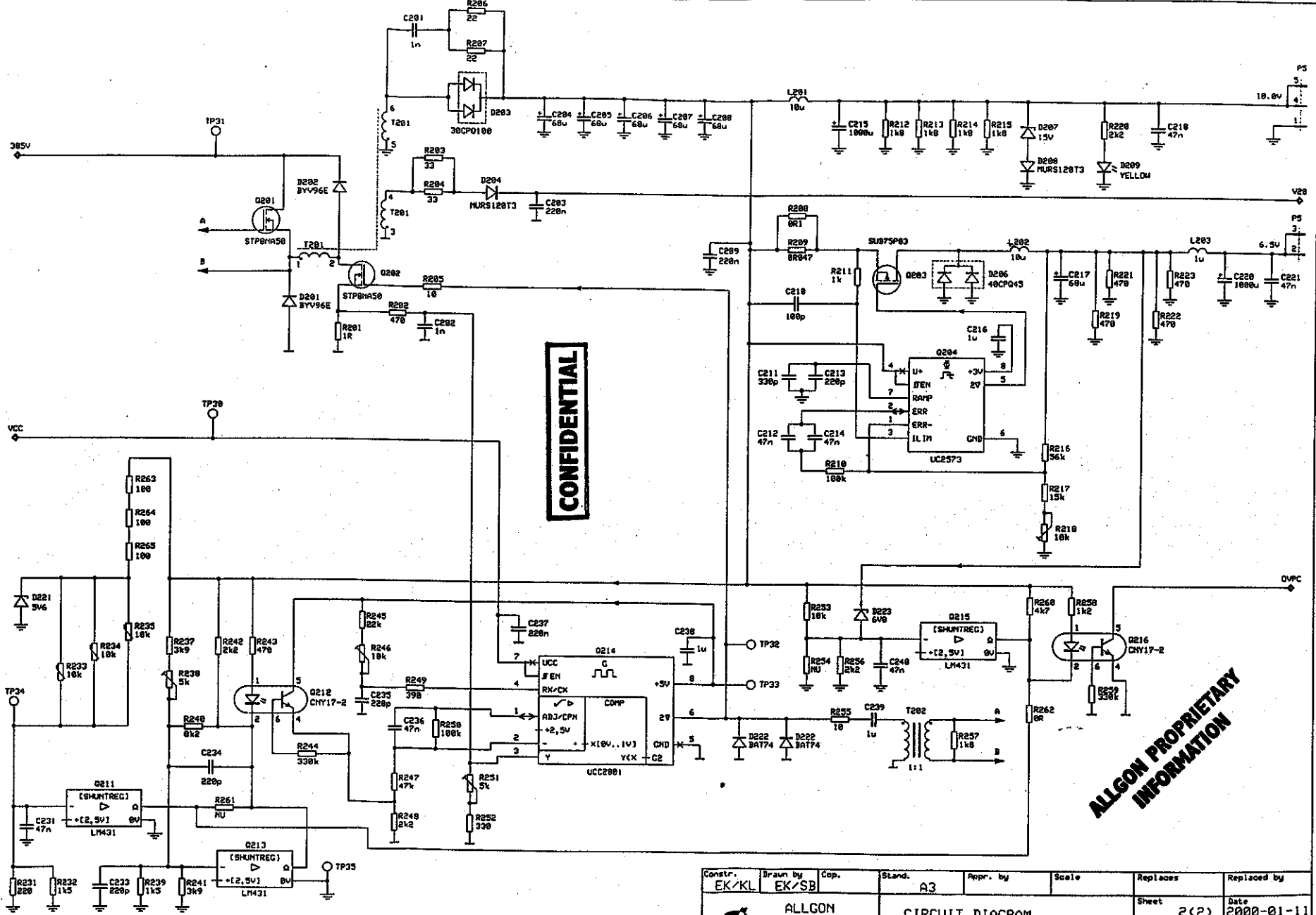
Revision: PA1

| Pos   | Part number | Qty | Description              | Value 1           | Value 2   | Value 3     | Val 4 | Remark 1      | Remark 2 |
|-------|-------------|-----|--------------------------|-------------------|-----------|-------------|-------|---------------|----------|
| Q3113 | PQ451 02/1  | 1   | μ-proc                   | HD6413003         |           | QFP112      |       |               |          |
| Q3116 | PQ454 13/1  | 1   | ROM (Serial No)          | DS2401            | 64-BIT    | TSOC6       |       |               |          |
| Q3117 | PQ455 01/2  | 1   | RS232 Transceiver        | MAX202E           |           | SO16 NARROW |       |               |          |
| Q3118 | PQ211 11/1  | 1   | Transistor               | (BCX70J)          |           | SOT23       |       |               |          |
| Q3119 | PQ211 11/1  | 1   | Transistor               | (BCX70J)          |           | SOT23       |       |               |          |
| Q3201 | PQ454 01/1  | 1   | SRAM                     | (TC5564)          | 8K x 8    | FP28        |       |               |          |
| Q3202 | PQ454 06/1  | 1   | PROM OTP                 | 27C512            | 64K x 8   | PLCC32      |       |               |          |
| Q3203 | PQ454 07/1  | 1   | Flash PROM               | (AM29F040)        | 512K x 8  | PLCC32      |       |               |          |
| Q3204 | PQ454 14/1  | 1   | SRAM                     | (KM6164002BTI-20) | 256K x 16 | 44-TSOP 2   |       |               |          |
| Q3205 | SQ101 16/1  | 1   | Programmed Logik BSC PLD |                   |           |             |       | CUSTOM DESIGN |          |
| Q3206 | PQ443 03/1  | 1   | Single 2-inp AND gate    | (74VHC1G08)       |           | SOT353      |       |               |          |
| Q3209 | PQ441 12/1  | 1   | 8-inp MUX                | 74HC251           |           | SO16        |       |               |          |
| Q3301 | PQ411 02/1  | 1   | Volt. Reg.               | LT1129-5          | +5V       | SO8         |       |               |          |
| Q3302 | PQ211 11/1  | 1   | Transistor               | (BCX70J)          |           | SOT23       |       |               |          |
| Q3303 | PQ452 04/1  | 1   | uP supervisor            | (MAX705)          |           | SO8         |       |               |          |
| Q3304 | PQ441 10/1  | 1   | Analog mux/demux         | 74HC4052          |           | SO16        |       |               |          |
| Q3305 | PQ412 04/1  | 1   | Dual OP                  | (MC33202D)        |           | SO8         |       |               |          |
| Q3401 | PQ455 06/1  | 1   | Quad UART                | (XR16C854)        |           | TQFP64      |       |               |          |
| Q3402 | PQ441 02/1  | 1   | Hex inv schmitttrig.     | 74HC14            |           | SO14        |       |               |          |
| Q3403 | PQ455 03/1  | 1   | RS485 Transceiver        | MAX485            |           | SO8         |       |               |          |
| Q3404 | PQ211 12/1  | 1   | Transistor               | (BCX71J)          |           | SOT23       |       |               |          |
| Q3405 | PQ443 02/1  | 1   | Single 2-inp NOR gate    | (74VHC1G02)       |           | SOT353      |       |               |          |
| Q3406 | PQ443 02/1  | 1   | Single 2-inp NOR gate    | (74VHC1G02)       |           | SOT353      |       |               |          |
| Q3408 | PQ441 13/1  | 1   | 3x 2ch anal MUX          | 74HC4053          |           | SO16        |       |               |          |
| Q3501 | PQ441 15/1  | 1   | Dual 4-inp AND gate      | 74HC21            |           | SO14        |       |               |          |



| Product number: K308/4-301 |              | PCB Assembly |                          | BSC Board 800MHz/25MHz, Compact repeater |         |         | Revision: PA1 |                   |          |
|----------------------------|--------------|--------------|--------------------------|--|---------|---------|---------------|-------------------|----------|
| Pos                        | Part number  | Qty          | Description              | Value 1                                  | Value 2 | Value 3 | Val 4         | Remark 1          | Remark 2 |
| Q3502                      | PQ441 12/1   | 1            | 8-inp MUX                | 74HC251                                  |         | S016    |               |                   |          |
| Q3503                      | PQ453 02/1   | 1            | DAC                      | AD8803                                   |         | S016    |               |                   |          |
| Q3504                      | PQ453 02/1   | 1            | DAC                      | AD8803                                   |         | S016    |               |                   |          |
| Q3505                      | PQ455 08/1   | 1            | RS232 Receiver           | (MAX1489)                                |         | S014    |               |                   |          |
| Q3506                      | PQ211 12/1   | 1            | Transistor               | (BCX71J)                                 |         | SOT23   |               |                   |          |
| Q3601                      | PQ411 01/1   | 1            | Volt. Reg.               | LP2951                                   |         | S08     |               |                   |          |
| Q3602                      | PQ429 04/1   | 1            | Volt. converter          | LTC1261                                  |         | S08     |               |                   |          |
| Q3603                      | PQ221 07/1   | 1            | Transistor, MOSFET, P-ch | (Si9424ADY)                              |         | S08     |               |                   |          |
| Q3604                      | PQ211 11/1   | 1            | Transistor               | (BCX70J)                                 |         | SOT23   |               |                   |          |
| Q3606                      | PQ221 07/1   | 1            | Transistor, MOSFET, P-ch | (Si9424ADY)                              |         | S08     |               |                   |          |
| Q3610                      | PQ412 02/1   | 1            | Dual OP                  | LMC662                                   |         | S08     |               |                   |          |
| Q3701                      | PQ411 01/1   | 1            | Volt. Reg.               | LP2951                                   |         | S08     |               |                   |          |
| Q3702                      | PQ429 04/1   | 1            | Volt. converter          | LTC1261                                  |         | S08     |               |                   |          |
| Q3703                      | PQ221 07/1   | 1            | Transistor, MOSFET, P-ch | (Si9424ADY)                              |         | S08     |               |                   |          |
| Q3704                      | PQ211 11/1   | 1            | Transistor               | (BCX70J)                                 |         | SOT23   |               |                   |          |
| Q3706                      | PQ221 07/1   | 1            | Transistor, MOSFET, P-ch | (Si9424ADY)                              |         | S08     |               |                   |          |
| Q3710                      | PQ412 02/1   | 1            | Dual OP                  | LMC662                                   |         | S08     |               |                   |          |
| R1101                      | PR603 00/FS  | 1            | Resistor                 | FS                                       |         | 0603    |               | Factory Set value |          |
| R1102                      | PR603 12/2K2 | 1            | Resistor                 | 2.2k                                     | ±1%     | 0603    |               |                   |          |
| R1103                      | PR603 12/1K5 | 1            | Resistor                 | 1.5k                                     | ±1%     | 0603    |               |                   |          |
| R1104                      | PR603 00/0   | 1            | Resistor                 | 0  |         | 0603    |               |                   |          |
| R1105                      | PR603 12/1K5 | 1            | Resistor                 | 1.5k                                     | ±1%     | 0603    |               |                   |          |
| R1106                      | NU           | 1            | Not Used                 |  |         |         |               | Not mounted       |          |
| R1107                      | PR603 12/100 | 1            | Resistor                 | 100                                      | ±1%     | 0603    |               |                   |          |
| R1108                      | NU           | 1            | Not Used                 |  |         |         |               | Not mounted       |          |

**CONFIDENTIAL**

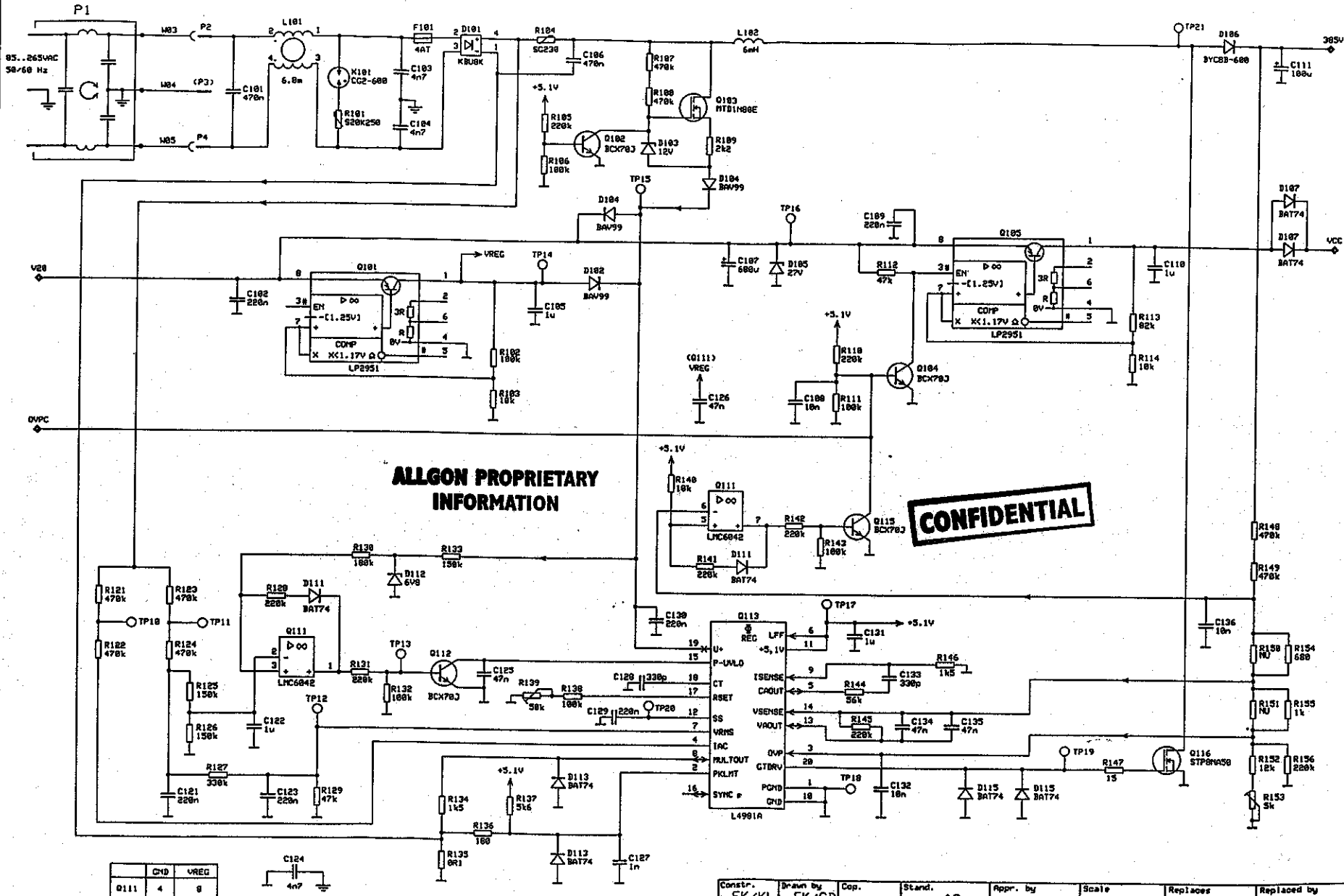


**ALLGON PROPRIETARY INFORMATION**

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

|  |          |      |        |          |       |            |             |
|--|----------|------|--------|----------|-------|------------|-------------|
| Constr.                                    | Drawn by | Dep. | Stand. | Appr. by | Scale | Replaces   | Replaced by |
| EK/KL                                      | EK/SB    |      | A3     |          |       |            |             |
|  |          |      |        |          |       | Sheet      | Date        |
|  |          |      |        |          |       | 2(2)       | 2000-01-11  |
| <b>CIRCUIT DIAGRAM</b><br><b>PSM BOARD</b> |          |      |        |          |       | Doc. No.   | Rev.        |
|  |          |      |        |          |       | K305/1-411 | PA5         |

CADint F45SPAS



**ALLGON PROPRIETARY  
INFORMATION**

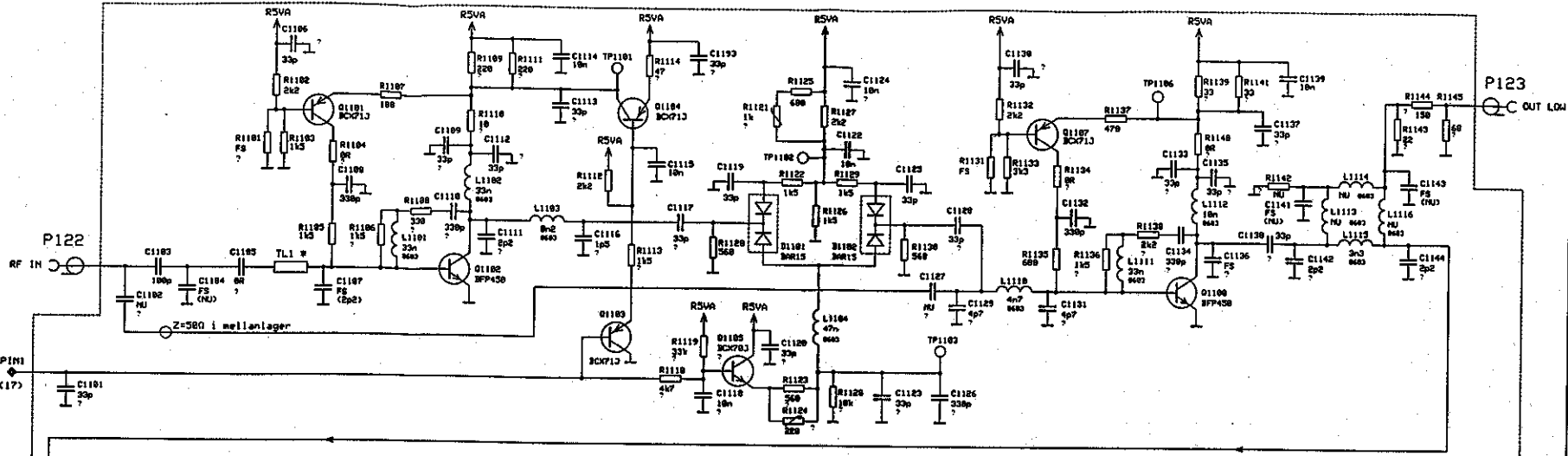
**CONFIDENTIAL**

| Q111 | QND | VREG |
|------|-----|------|
| 4    |     | 8    |

COMPONENT VALUES MAY BE REVISED. FOR CURRENT VALUES - REFER TO THE PART LIST.  
 NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

|                          |                   |                           |              |          |       |                        |                    |
|--------------------------|-------------------|---------------------------|--------------|----------|-------|------------------------|--------------------|
| Constr.<br>EK/KL         | Drawn by<br>EK/SB | Cop.                      | Stand.<br>A3 | Appr. by | Scale | Replaces               | Replaced by        |
| ALLGON INNOVATION SWEDEN |                   | CIRCUIT DIAGRAM PSM BOARD |              |          |       | Sheet<br>1(2)          | Date<br>2000-01-11 |
|                          |                   |                           |              |          |       | Doc. No.<br>K305/1-411 | Rev.<br>PA5        |

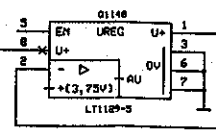
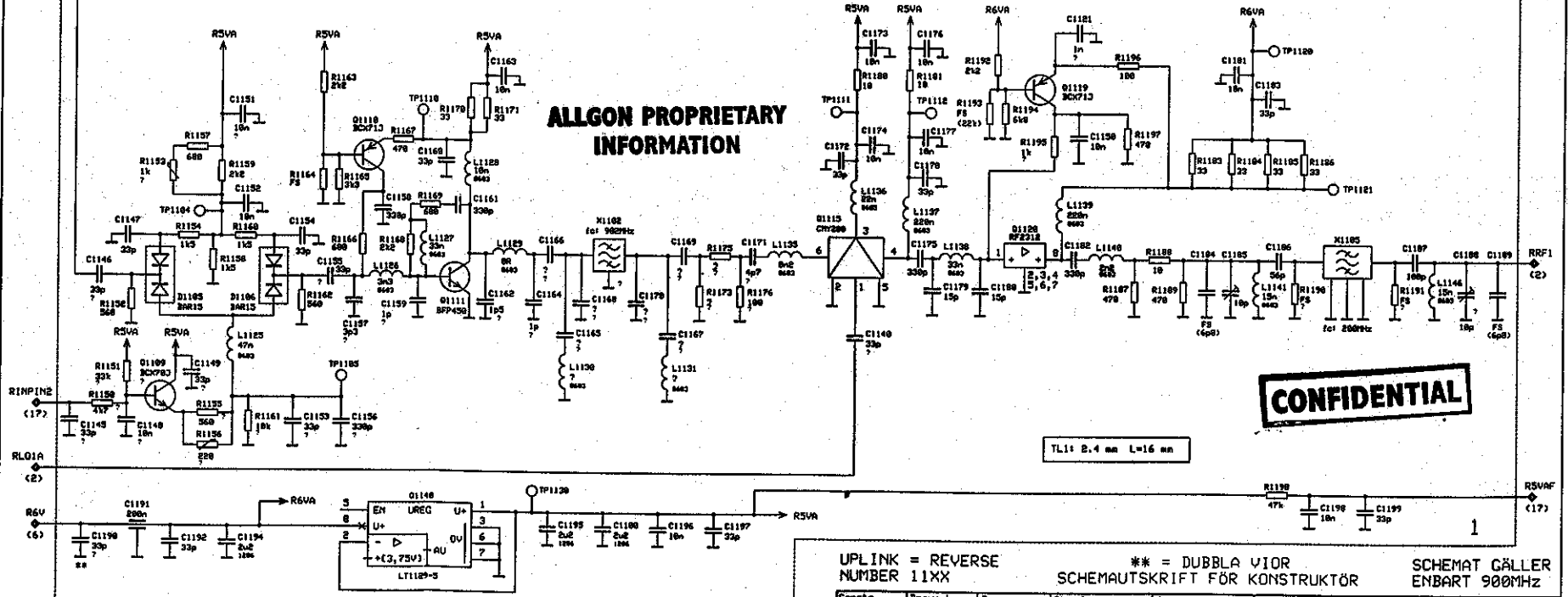
CADINT F45SPAS



**ALLGON PROPRIETARY INFORMATION**

**CONFIDENTIAL**

TL1: 2.4 mm L=16 mm



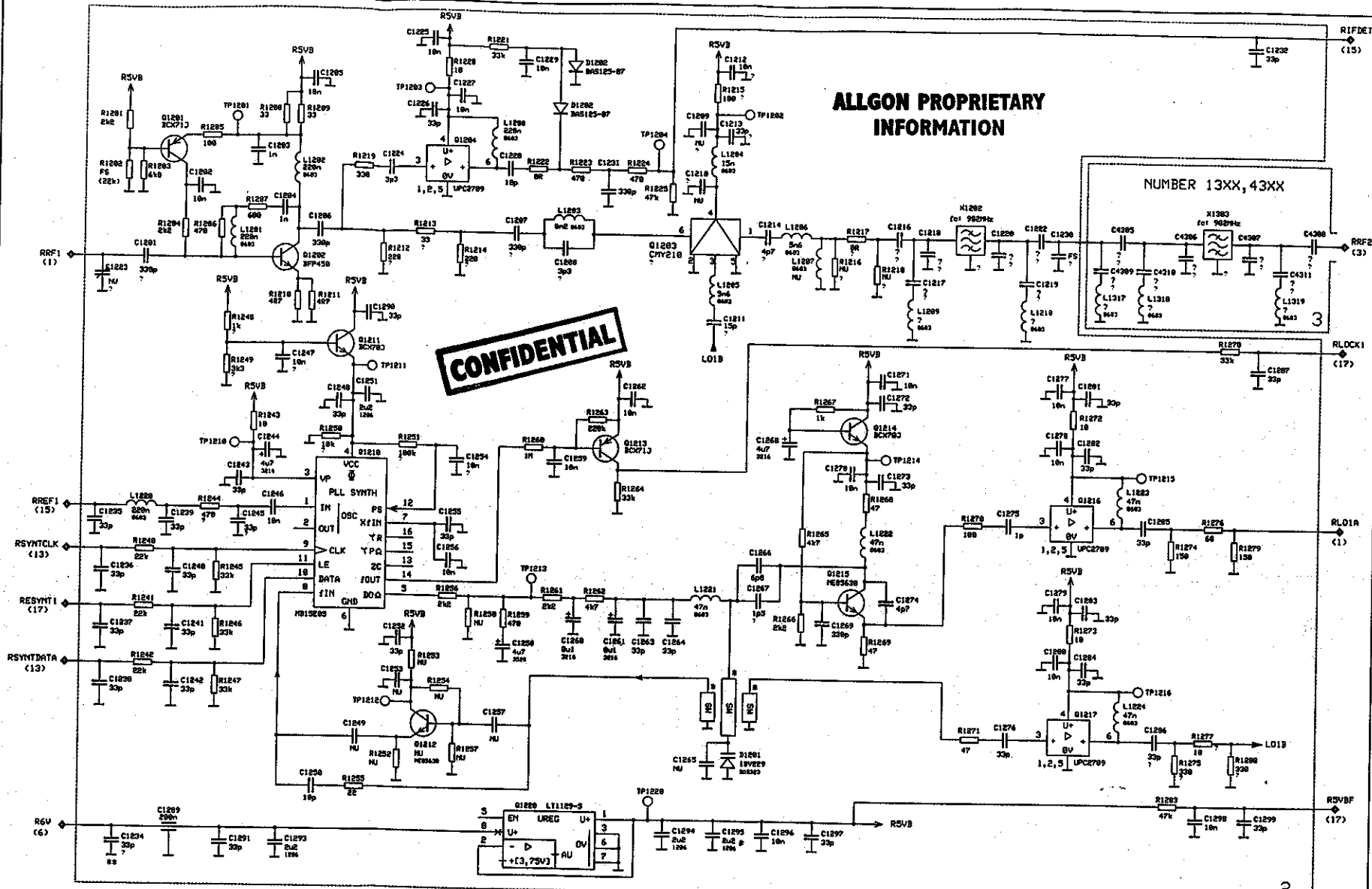
COMPONENT VALUES MAY BE REVISED. FOR CURRENT VALUES - REFER TO THE PART LIST.  
VALUES IN BRACKETS ( ) MAY VARY FOR DIFFERENT VARIANTS, SEE TABLE.

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

UPLINK = REVERSE NUMBER 11XX      \*\* = DUBBLA VIOR      SCHEMAUTSKRIFT FÖR KONSTRUKTÖR      SCHEMAT 900MHZ ENBART 900MHZ

| Constr.                  | Drawn by | Cap. | Stand.                        | Appr. by | Scale | Replaces            | Replaced by     |
|--------------------------|----------|------|-------------------------------|----------|-------|---------------------|-----------------|
| AP                       | EK/SB    |      | A3                            |          |       |                     |                 |
| ALLGON INNOVATION SWEDEN |          |      | CIRCUIT DIAGRAM BSC 8/9 BOARD |          |       | Sheet 1 (17)        | Date 2000-04-11 |
|                          |          |      |                               |          |       | Doc. No. K308/1-411 | Rev. PA10       |

CADint: FO3SPR10



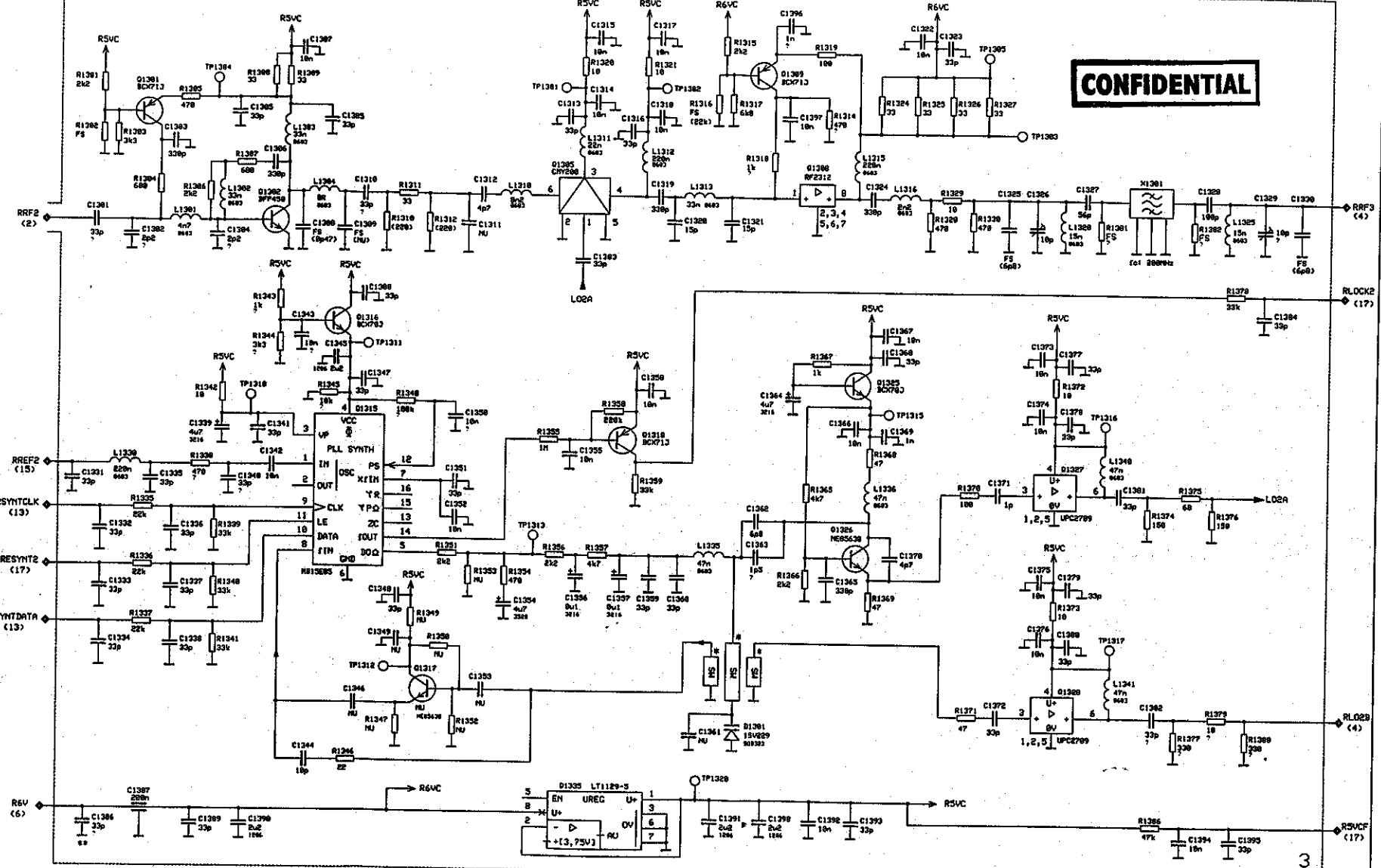
UPLINK = REVERSE NUMBER 12XX

\*\* = DUBBLA VIOR SCHEMATSKRIFT FÖR KONSTRUKTÖR

SCHEMAT GÄLLER ENBART 900MHz

|  |          |      |        |          |       |            |             |
|--|----------|------|--------|----------|-------|------------|-------------|
| Constr.  | Drawn by | Dep. | Stand. | Appr. by | Scale | Replaces   | Replaced by |
| AP   | EK/SB    |      | A3     |          |       | Sheet      | Date        |
| ALLGON INNOVATION SWEDEN<br>CIRCUIT DIAGRAM<br>BSC 8/9 BOARD |          |      |        |          |       | 2 (17)     | 2000-04-11  |
|  |          |      |        |          |       | Doc. No.   | Rev.        |
|  |          |      |        |          |       | K308/1-411 | PA10        |


**CONFIDENTIAL**



**ALLGON PROPRIETARY INFORMATION**

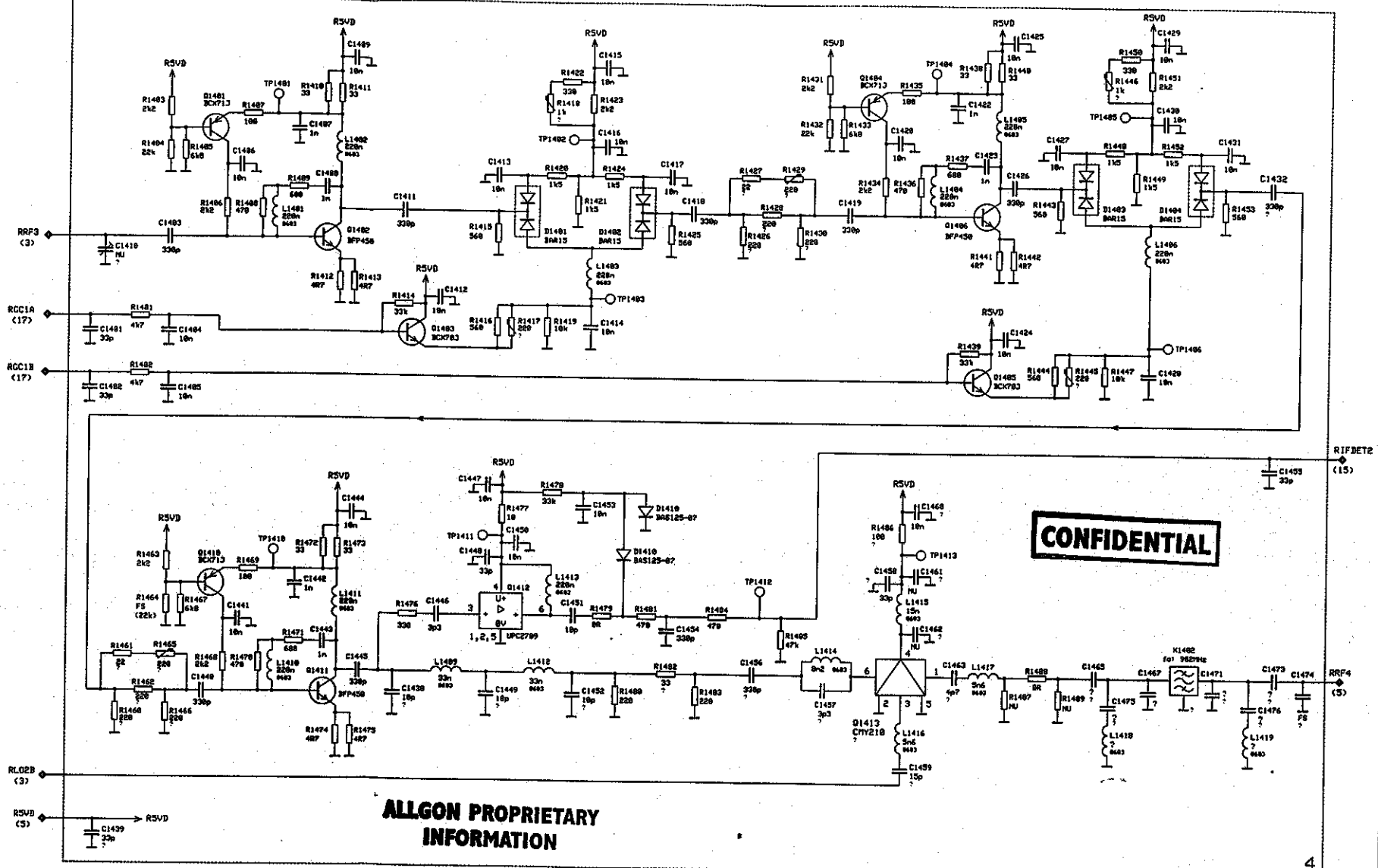
UPLINK = REVERSE NUMBER 13XX      \*\* = DUBBLA VIOR

SCHEMATSKRIFT FÖR KONSTRUKTÖR      SCHEMAT GÄLLER ENBART 900MHZ

| Constr.   | Drawn by | Cop. | Stand. | Appr. by | Scale | Replaces                                       | Replaced by |
|---|----------|------|--------|----------|-------|--|-------------|
| AP  | EK/SB    |      | A3     |          |       |  |             |
|  <b>ALLGON INNOVATION SWEDEN</b> |          |      |        |          |       | <b>CIRCUIT DIAGRAM</b><br><b>BSC 8/9 BOARD</b> |             |
|   |          |      |        |          |       | Sheet  | Date        |
|   |          |      |        |          |       | 3 (17)   | 2000-04-11  |
|   |          |      |        |          |       | Doc. No.                                       | Rev.        |
|   |          |      |        |          |       | K308/1-411                                     | PA10        |

CADint F03SP10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE



**ALLGON PROPRIETARY  
INFORMATION**

**CONFIDENTIAL**

UPLINK = REVERSE  
NUMBER 14XX

SCHMAUSKRIFT FÖR KONSTRUKTÖR

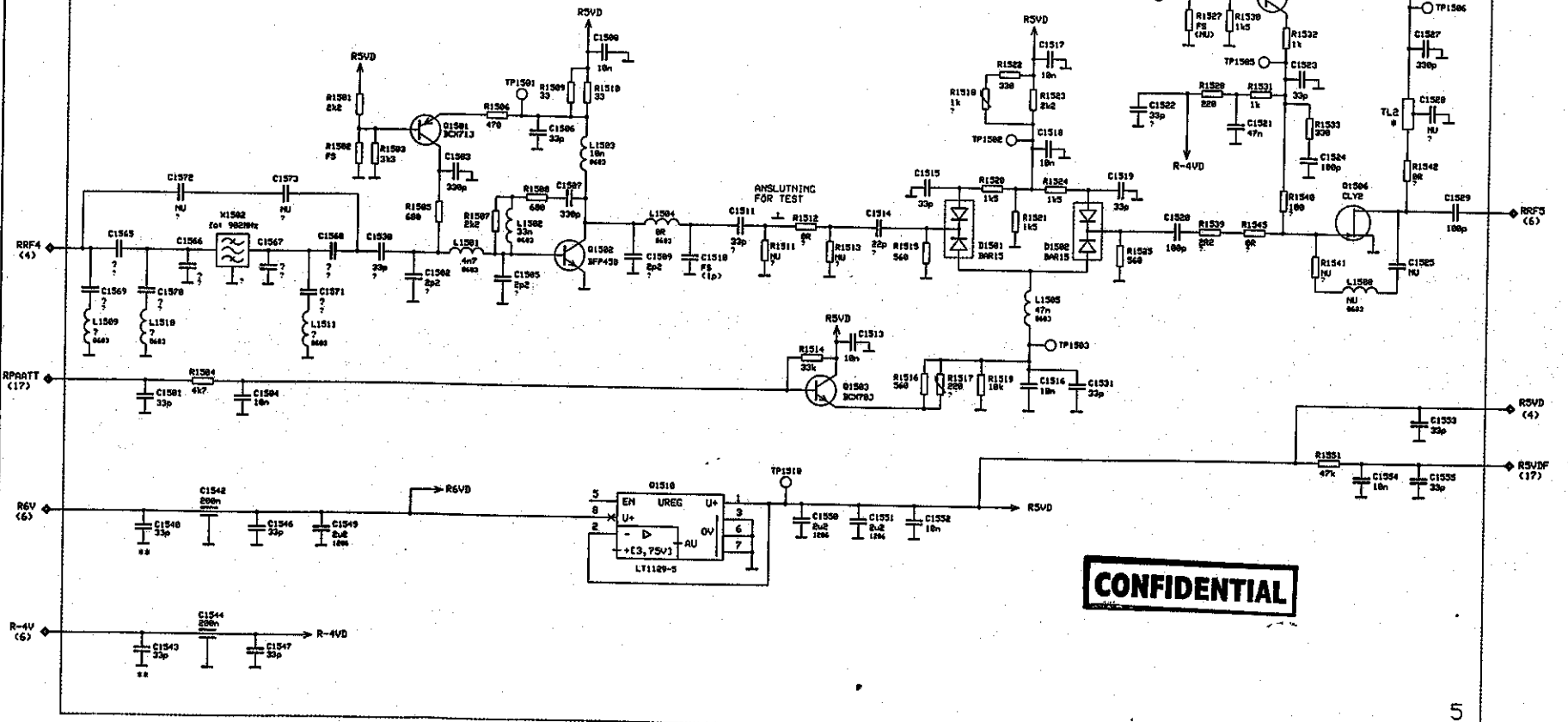
SCHEMAT GÄLLER  
ENBART 900MHz

| Constr.                  | Drawn by | Cop. | Stand.                           | Appr. by | Scale   | Replaces | Replaced by |
|--------------------------|----------|------|----------------------------------|----------|---|----------|-------------|
| AP                       | EK/SB    |      | A3                               |          |   |          |             |
| ALLGON INNOVATION SWEDEN |          |      | CIRCUIT DIAGRAM<br>BSC 8/9 BOARD |          | Sheet 4 (17) Date 2000-04-11<br>Doc. No. K308/1-411 Rev. PA10 |          |             |

CADint F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

# ALLGON PROPRIETARY INFORMATION



**CONFIDENTIAL**

TL2: 0.5 mm L=20 mm

UPLINK = REVERSE  
NUMBER 15XX

\*\* = DUBBLA VIOR  
SCHEMATSKRIFT FÖR KONSTRUKTÖR

SCHEMAT GÄLLER  
ENBART 900MHZ

| Constr.                        | Drawn by | Cop.                             | Stand. | Appr. by | Scale | Replaces   | Replaced by |
|--------------------------------|----------|----------------------------------|--------|----------|-------|------------|-------------|
| AP                             | EK/SB    |                                  | A3     |          |       |            |             |
| ALLGON<br>INNOVATION<br>SWEDEN |          | CIRCUIT DIAGRAM<br>BSC 8/9 BOARD |        |          |       | Sheet      | Date        |
|                                |          |                                  |        |          |       | 5 (17)     | 2000-04-11  |
|                                |          |                                  |        |          |       | Doc. No.   | Rev.        |
|                                |          |                                  |        |          |       | K308/1-411 | PA10        |

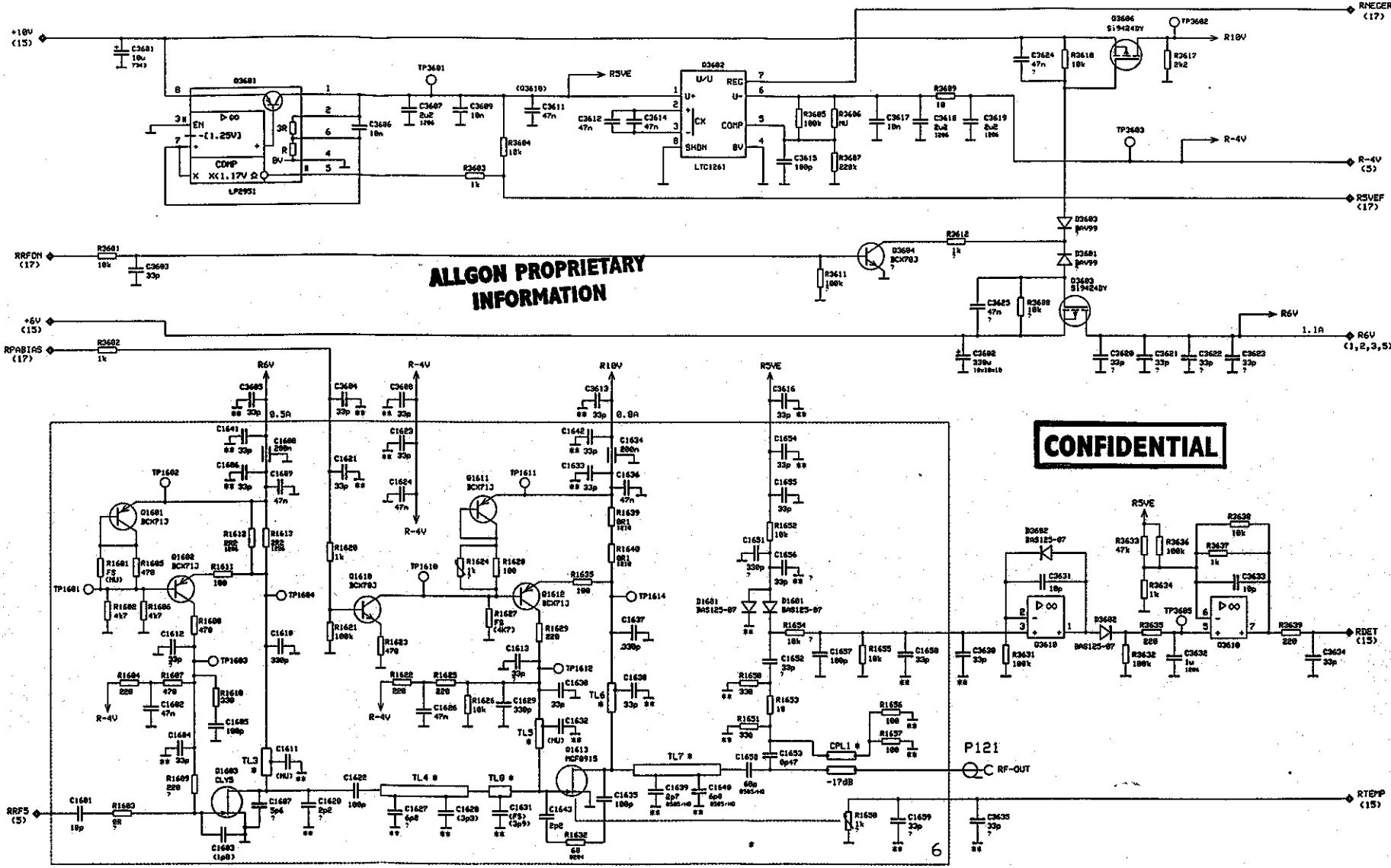
CADint F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE



**ALLGON PROPRIETARY INFORMATION**

**CONFIDENTIAL**



TL LAYER 1: 50 OHM 0.94 mm  
 TL LAYER 3: 50 OHM 0.42 mm

TL3: 0.5 mm L=17 mm  
 TL4: 1.2 mm L=11 mm  
 TL5: 0.5 mm L=14 mm  
 TL6: 1.0 mm L=27 mm  
 TL7: 1.0 mm L=23 mm  
 TL8: 1.7 mm L=1.8 mm

|       |        |      |     |
|-------|--------|------|-----|
| D3610 | LMC662 | RSVE | GND |
|       |        | 8    | 4   |

UPLINK = REVERSE NUMBER 16XX AND 36XX

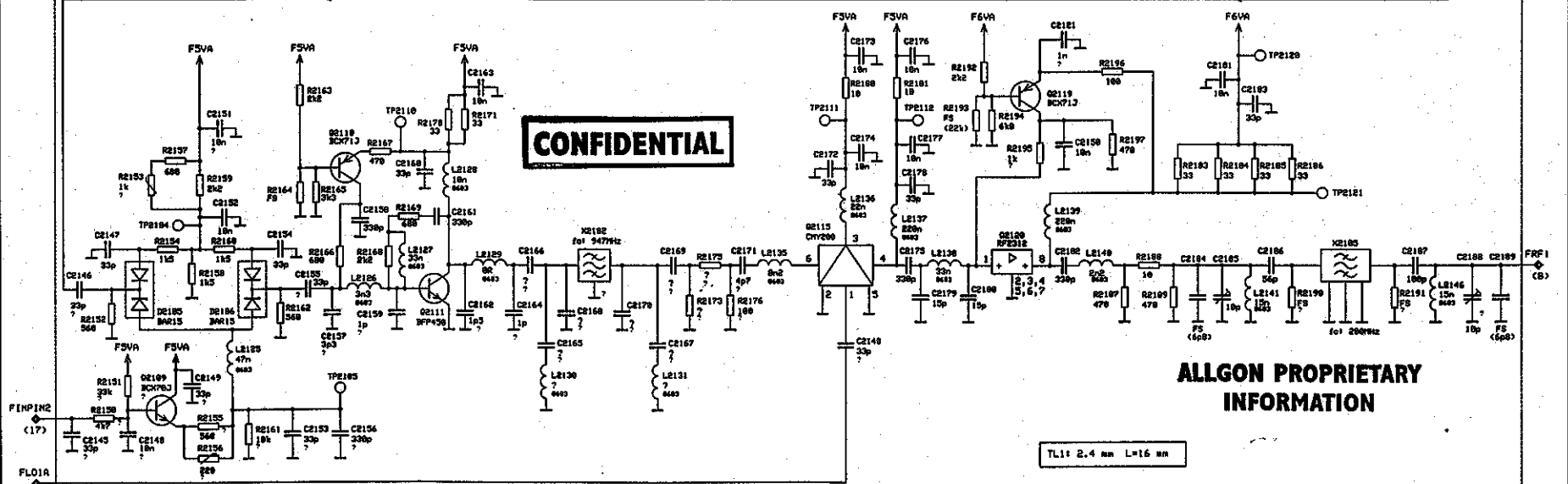
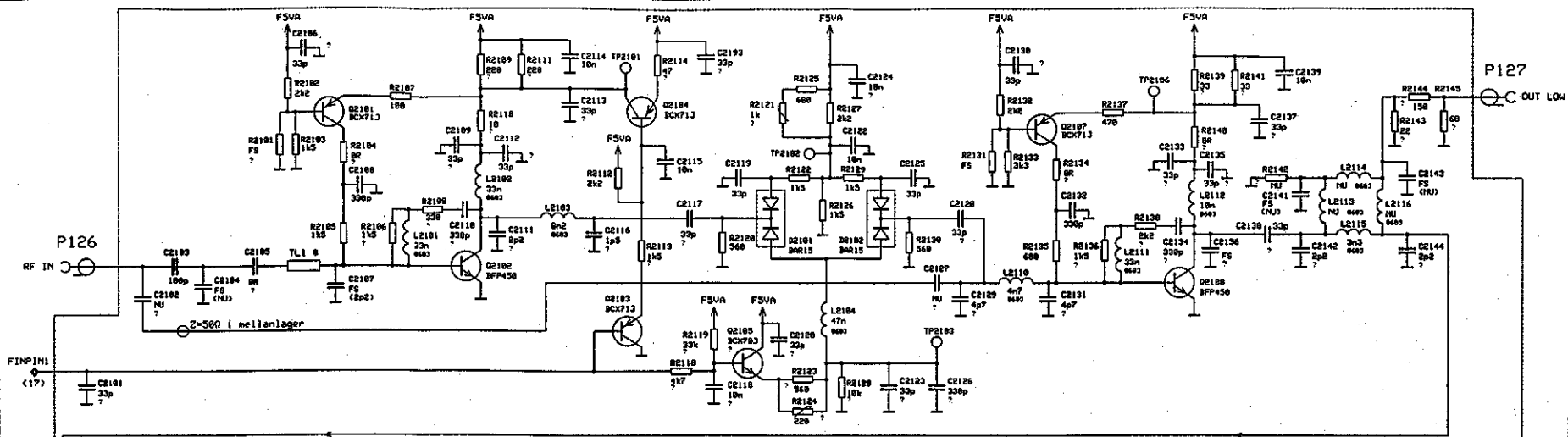
\*\* = DUBBLA VIOR SCHEMAUTSKRIFT FÖR KONSTRUKTÖR

SCHEMAT GÄLLER ENBART 900MHz

|                          |    |          |       |      |  |        |    |          |  |                               |  |          |        |             |            |
|--------------------------|----|----------|-------|------|--|--------|----|----------|--|-------------------------------|--|----------|--------|-------------|------------|
| Constr.                  | AP | Drawn by | EK/SB | Cop. |  | Stand. | A3 | Appr. by |  | Scale                         |  | Replaces |        | Replaced by |            |
| ALLGON INNOVATION SWEDEN |    |          |       |      |  |        |    |          |  | CIRCUIT DIAGRAM BSC 8/9 BOARD |  | Sheet    | 6 (17) | Date        | 2000-04-11 |
|                          |    |          |       |      |  |        |    |          |  | Doc. No.                      |  | Rev.     |        |             |            |
|                          |    |          |       |      |  |        |    |          |  | K308/1-411 PA10               |  |          |        |             |            |

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

CADint F03SPA10



**CONFIDENTIAL**

**ALLGON PROPRIETARY INFORMATION**

TL1: 2.4 mm L=16 mm

DOWNLINK = FORWARD NUMBER 21XX      \*\* = DUBBLA VIOR SCHEMAUTSKRIFT FÖR KONSTRUKTÖR      SCHEMAT GÄLLER ENBART 900MHZ

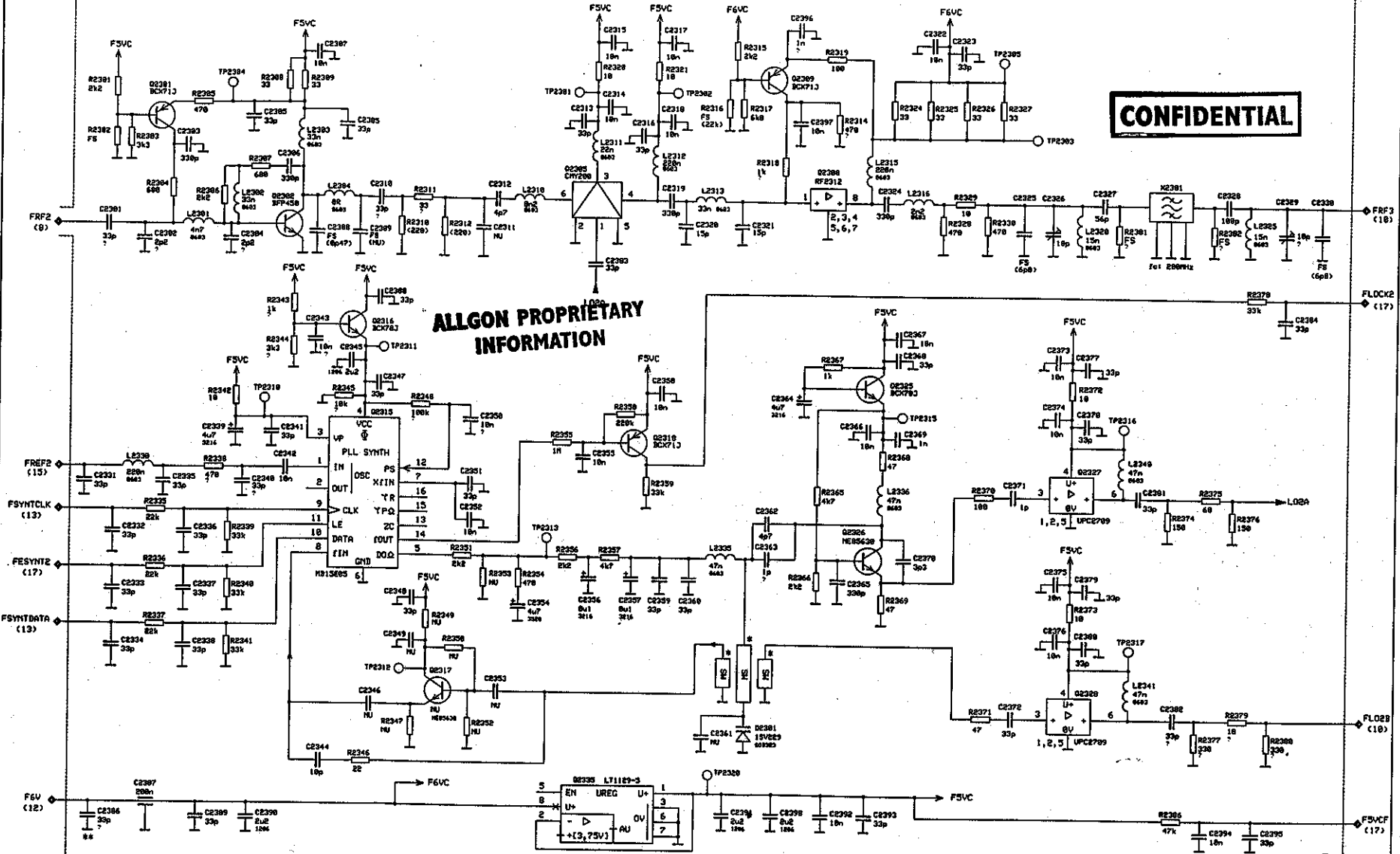
| Constr.                  | Drawn by | Cop.                          | Stand. | Appr. by | Scale | Replaces            | Replaced by     |
|--------------------------|----------|-------------------------------|--------|----------|-------|---------------------|-----------------|
| AP                       | EK/SB    |                               | A3     |          |       | Sheet 7 (17)        | Date 2000-04-11 |
| ALLGON INNOVATION SWEDEN |          | CIRCUIT DIAGRAM BSC 8/9 BOARD |        |          |       | Doc. No. K308/1-411 | Rev. PA10       |

CADint F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

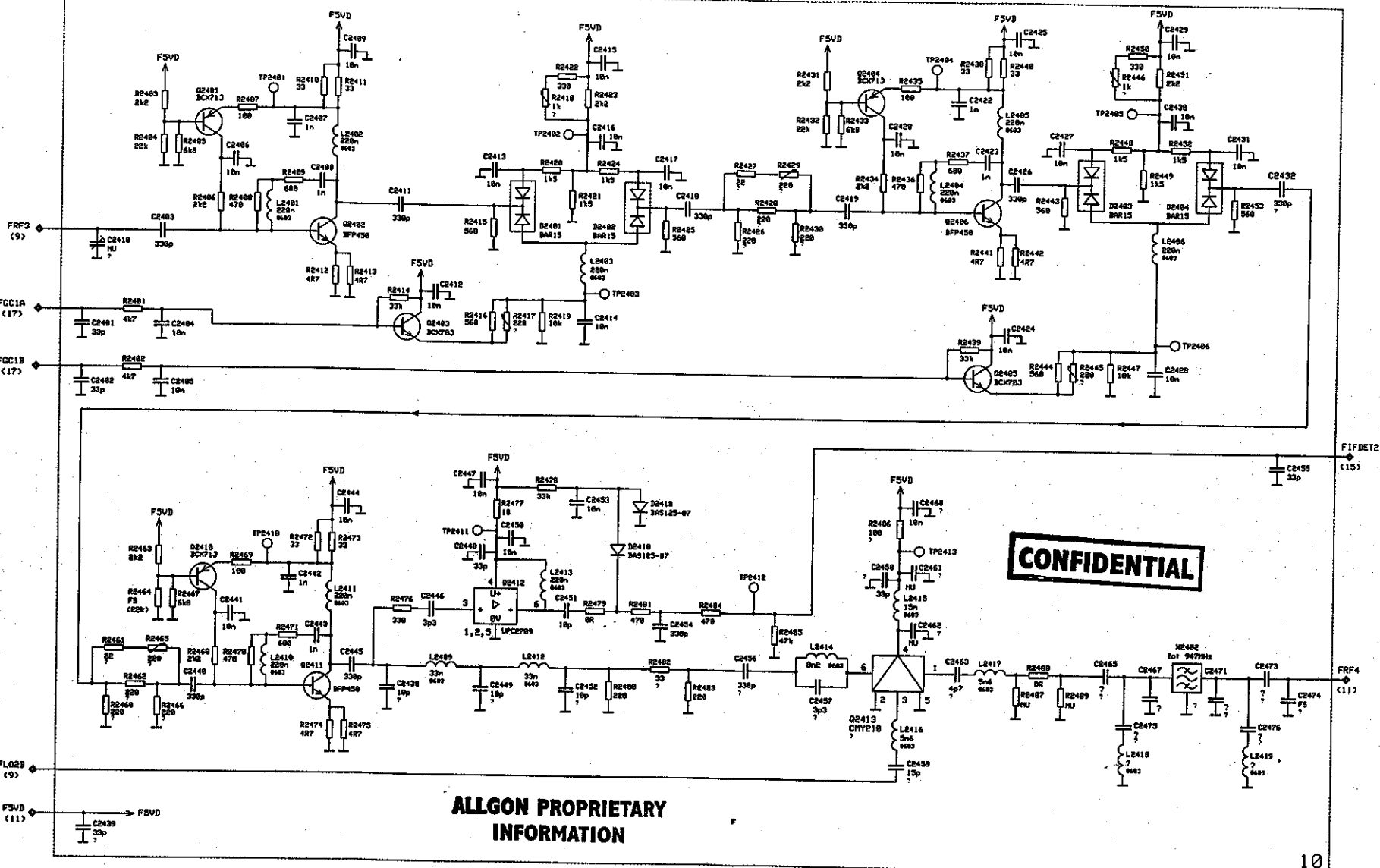
**CONFIDENTIAL**

**ALLGON PROPRIETARY INFORMATION**



DOWNLINK = FORWARD NUMBER 23XX      \*\* = DUBBLA VIOR SCHEMAUTSKRIFT FÖR KONSTRUKTÖR      SCHEMAT GÄLLER ENBART 900MHZ

|                          |          |      |                               |          |       |                     |                 |
|--------------------------|----------|------|-------------------------------|----------|-------|---------------------|-----------------|
| Constr.                  | Drawn by | Cop. | Stand.                        | Appr. by | Scale | Replaces            | Replaced by     |
| AP                       | EK/SB    |      | A3                            |          |       |                     |                 |
| ALLGON INNOVATION SWEDEN |          |      | CIRCUIT DIAGRAM BSC 8/9 BOARD |          |       | Sheet 9 (17)        | Date 2000-04-11 |
|                          |          |      |                               |          |       | Doc. No. K308/1-411 | Rev. PA10       |



**ALLGON PROPRIETARY  
INFORMATION**

**CONFIDENTIAL**

DOWNLINK = FORWARD  
NUMBER 24XX

SCHEMANSKRIFT FÖR KONSTRUKTÖR

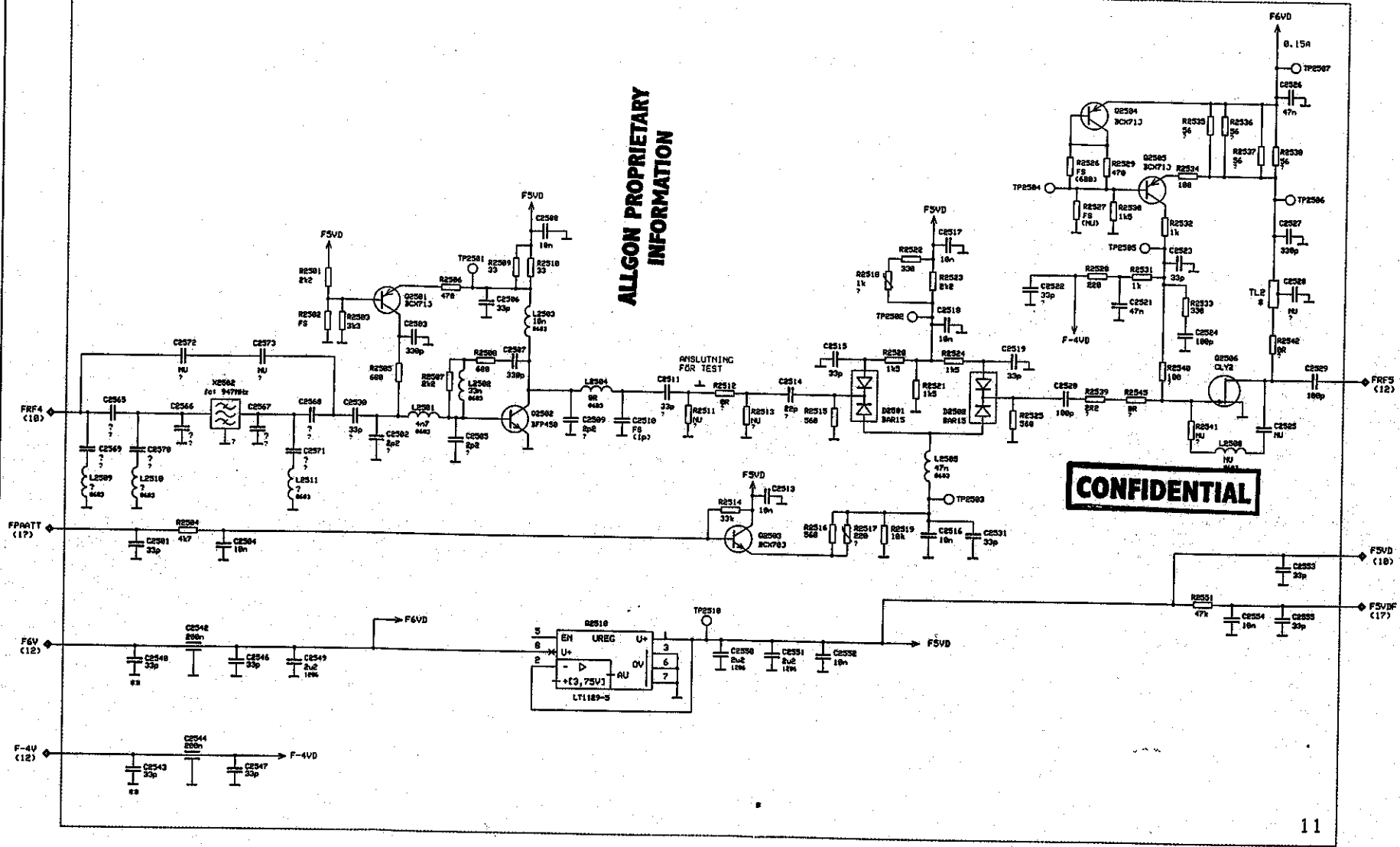
SCHEMAT GÄLLER  
ENBART 900MHZ

|         |          |      |                 |          |                          |          |             |
|---------|----------|------|-----------------|----------|--------------------------|----------|-------------|
| Constr. | Drawn by | Cop. | Stand.          | Appr. by | Scale                    | Replaces | Replaced by |
| AP      | EK/SB    |      | A3              |          |                          |          |             |
|         |          |      | CIRCUIT DIAGRAM |          | Sheet 10 (17)            |          |             |
|         |          |      |                 |          | Date 2000-04-11          |          |             |
|         |          |      | BSC 8/9 BOARD   |          | Doc. No. K308/1-411 PA10 |          |             |
|         |          |      |                 |          | Rev.                     |          |             |

CADint F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

ALLGON PROPRIETARY INFORMATION



CONFIDENTIAL

CADint. F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

TL2: 0.5 mm L=20 mm

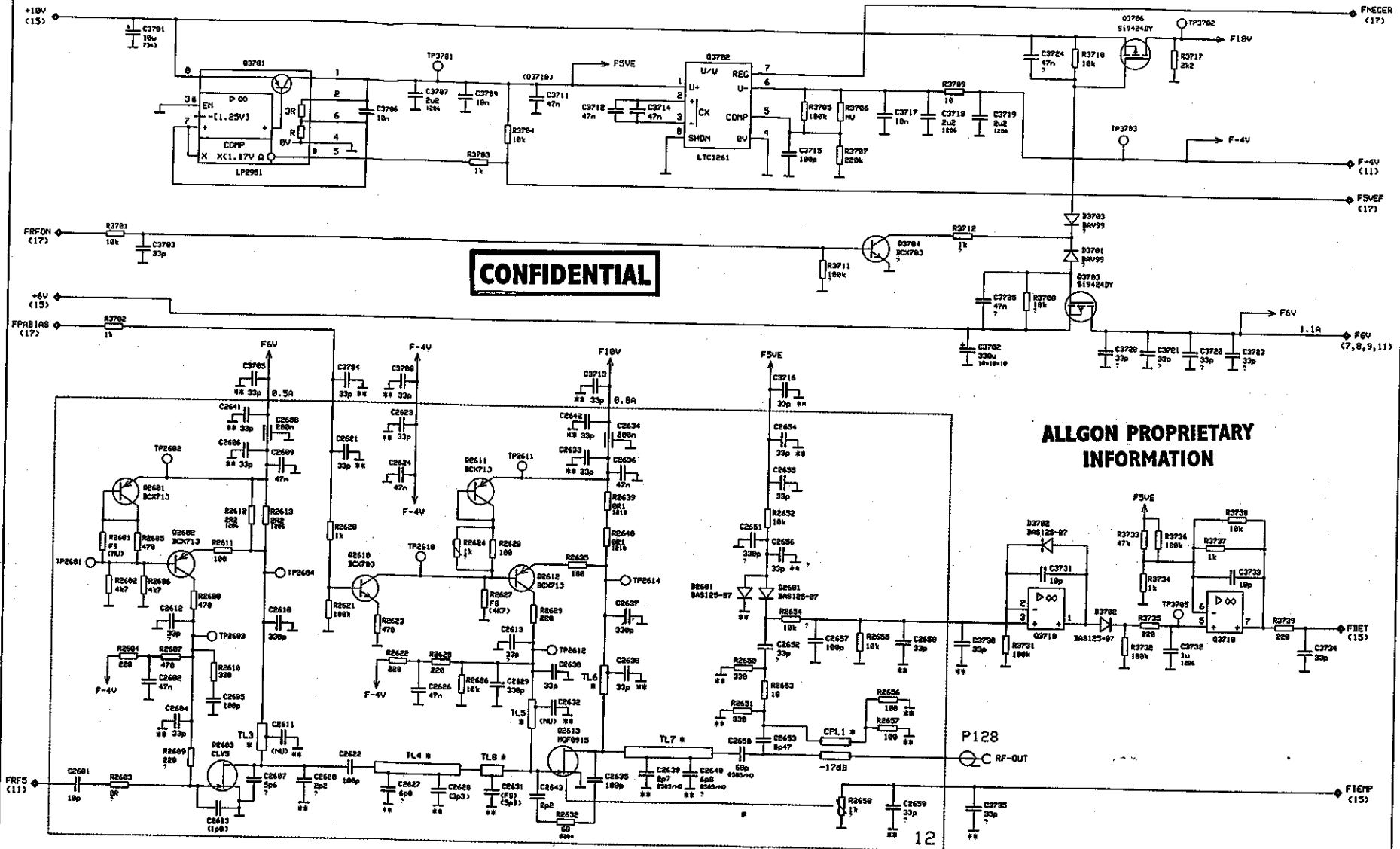
DOWNLINK = FORWARD NUMBER 25XX

\*\* = DUBBLA VIOR SCHEMATSKRIFT FÖR KONSTRUKTÖR

SCHEMAT GÄLLER ENBART 900MHZ

| Constr.                  | Drawn by | Cop.            | Stand. | Appr. by      | Scale | Replaces   | Replaced by |
|--------------------------|----------|-----------------|--------|---------------|-------|------------|-------------|
| AP                       | EK/SB    |                 | A3     |               |       |            |             |
| ALLGON INNOVATION SWEDEN |          | CIRCUIT DIAGRAM |        | BSC 8/9 BOARD |       | Sheet      | Date        |
|                          |          |                 |        |               |       | 11 (17)    | 2000-04-11  |
|                          |          |                 |        |               |       | Doc. No.   | Rev.        |
|                          |          |                 |        |               |       | K308/1-411 | PA10        |

CADint F03SPAI0



**CONFIDENTIAL**

**ALLGON PROPRIETARY INFORMATION**

TL LAYER 1: 50 OHM 0.94 mm  
 TL LAYER 3: 50 OHM 0.42 mm

TL3: 0.3 mm L=17 mm  
 TL4: 1.2 mm L=11 mm  
 TL5: 0.5 mm L=14 mm  
 TL6: 1.0 mm L=27 mm  
 TL7: 1.0 mm L=23 mm  
 TL8: 1.7 mm L=1.0 mm

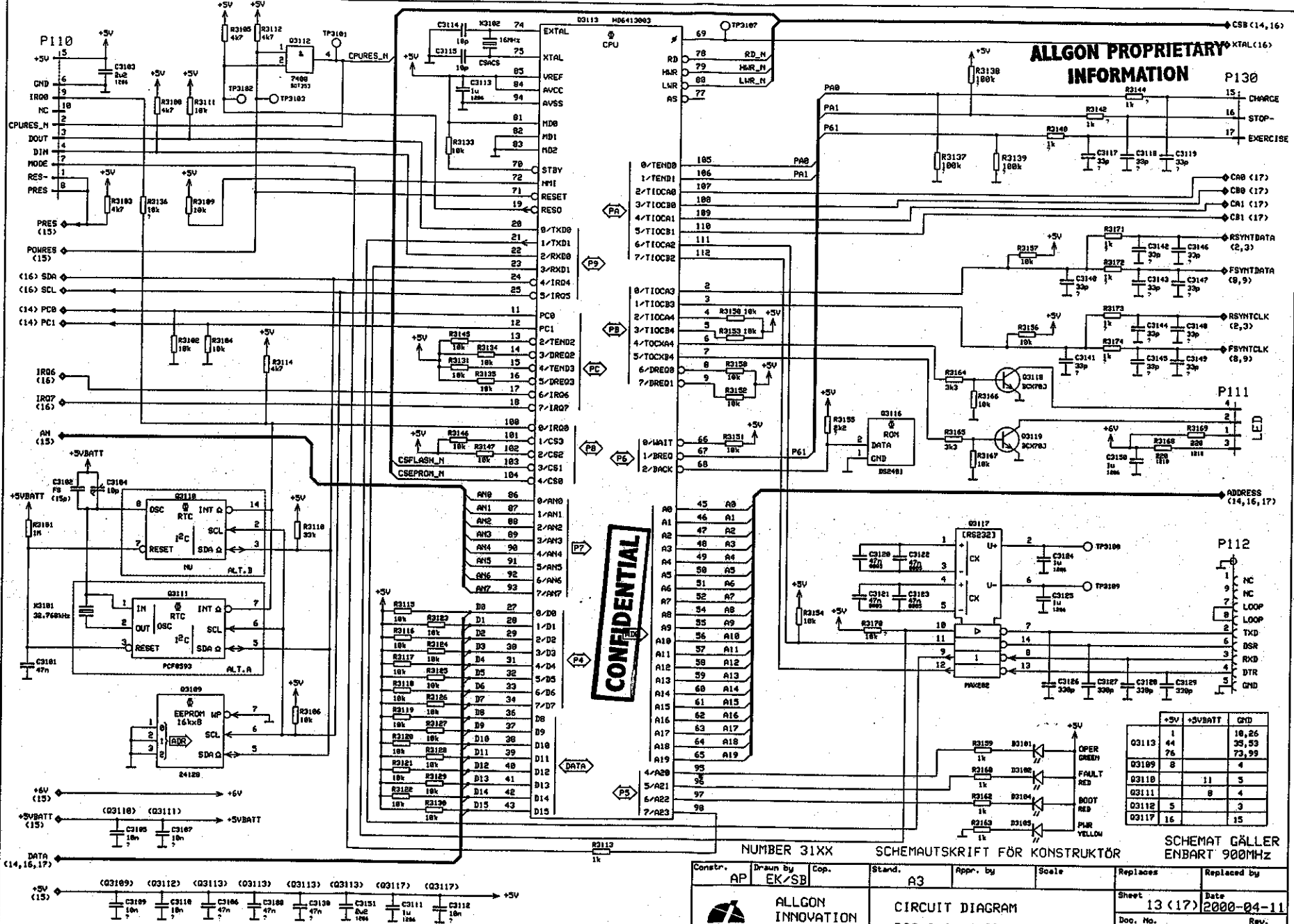
|       |        |      |     |
|-------|--------|------|-----|
| Q3710 | LNC662 | FSVE | GND |
|       |        | 8    | 4   |

DOWNLINK = FORWARD NUMBER 26XX AND 37XX \*\* = DUBBLA VIOR SCHEMAUTSKRIFT FÖR KONSTRUKTÖR SCHEMAT GÄLLER ENBART 900MHz

|                          |          |                               |        |          |       |               |             |
|--------------------------|----------|-------------------------------|--------|----------|-------|---------------|-------------|
| Constr.                  | Drawn by | Cop.                          | Stand. | Appr. by | Scale | Replaces      | Replaced by |
| AP                       | EK/SB    |                               | A3     |          |       | Sheet 12 (17) | 2000-04-11  |
| ALLGON INNOVATION SWEDEN |          | CIRCUIT DIAGRAM BSC 8/9 BOARD |        |          |       | Boo. No.      | Rev.        |
|                          |          |                               |        |          |       | K308/1-411    | PA10        |

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

# ALLGON PROPRIETARY INFORMATION



NUMBER 31XX SCHEMATSKRIFT FÖR KONSTRUKTÖR SCHEMAT GÄLLER ENBART 900MHZ

| Constr. | Dragna by | Cop. | Stand. | Appr. by | Soele | Replaces | Replaced by |
|---------|-----------|------|--------|----------|-------|----------|-------------|
| AP      | EK/SB     |      | A3     |          |       |          |             |

| Sheet   | Date       |
|---------|------------|
| 13 (17) | 2000-04-11 |

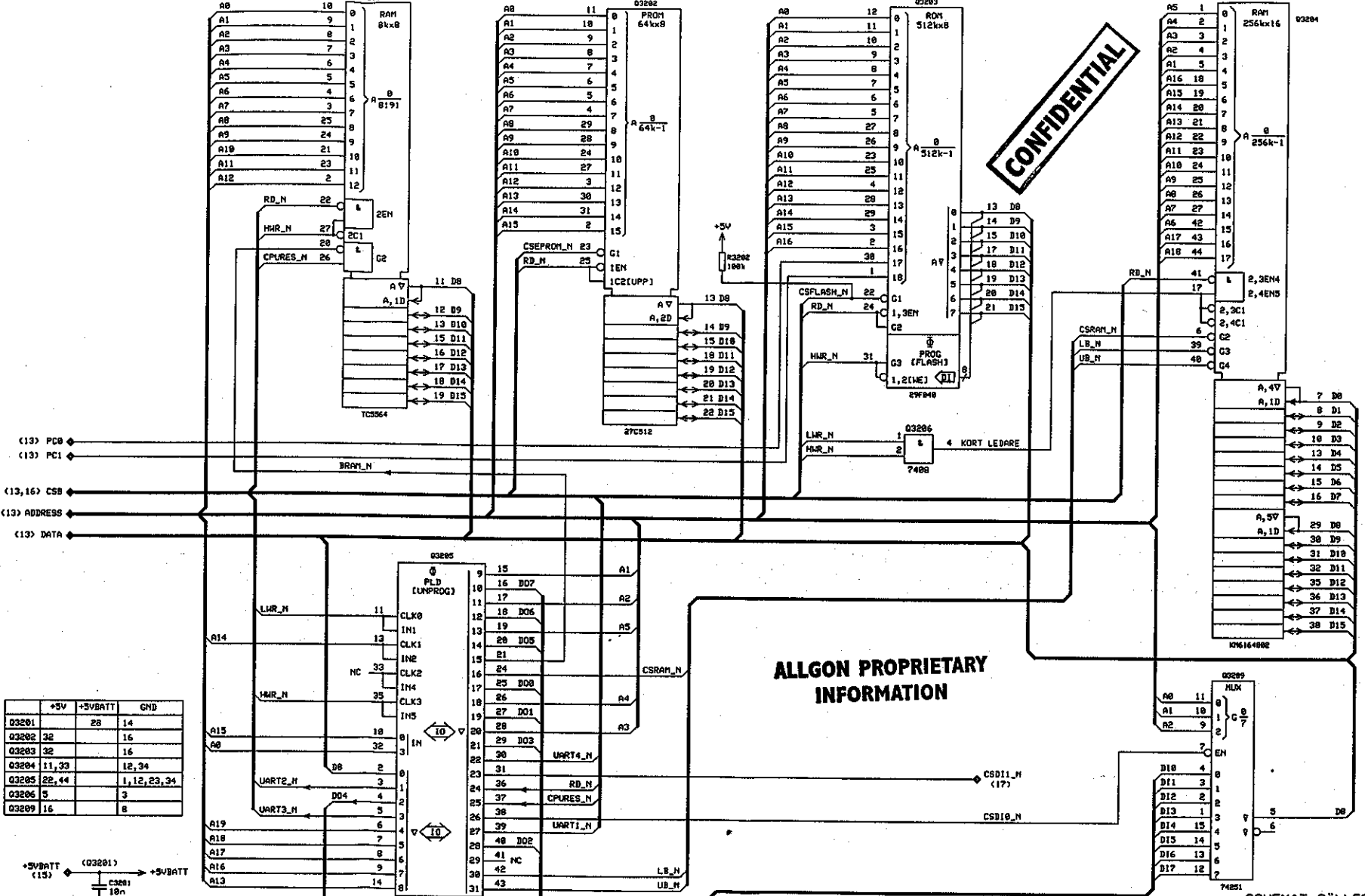
| Doc. No.   | Rev. |
|------------|------|
| K308/1-411 | PA10 |

|       | +5V | +5VBATT | GND                    |
|-------|-----|---------|------------------------|
| G3113 | 44  | 75      | 16, 26, 35, 53, 73, 99 |
| G3109 | 8   |         | 4                      |
| G3110 |     | 11      | 5                      |
| G3111 |     | 8       | 4                      |
| G3112 | 5   |         | 3                      |
| G3117 | 16  |         | 15                     |

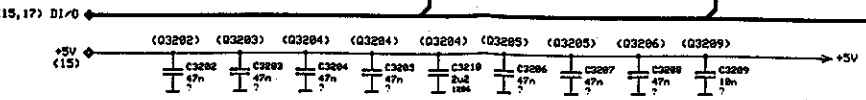
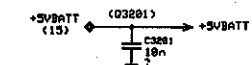
CAD:INT F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

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|       | +5V    | +5VBATT       | GND |
|-------|--------|---------------|-----|
| 03201 | 28     | 14            |     |
| 03202 | 32     | 16            |     |
| 03203 | 32     | 16            |     |
| 03204 | 11, 33 | 12, 34        |     |
| 03205 | 22, 44 | 1, 12, 23, 34 |     |
| 03206 | 5      | 3             |     |
| 03209 | 16     | 8             |     |



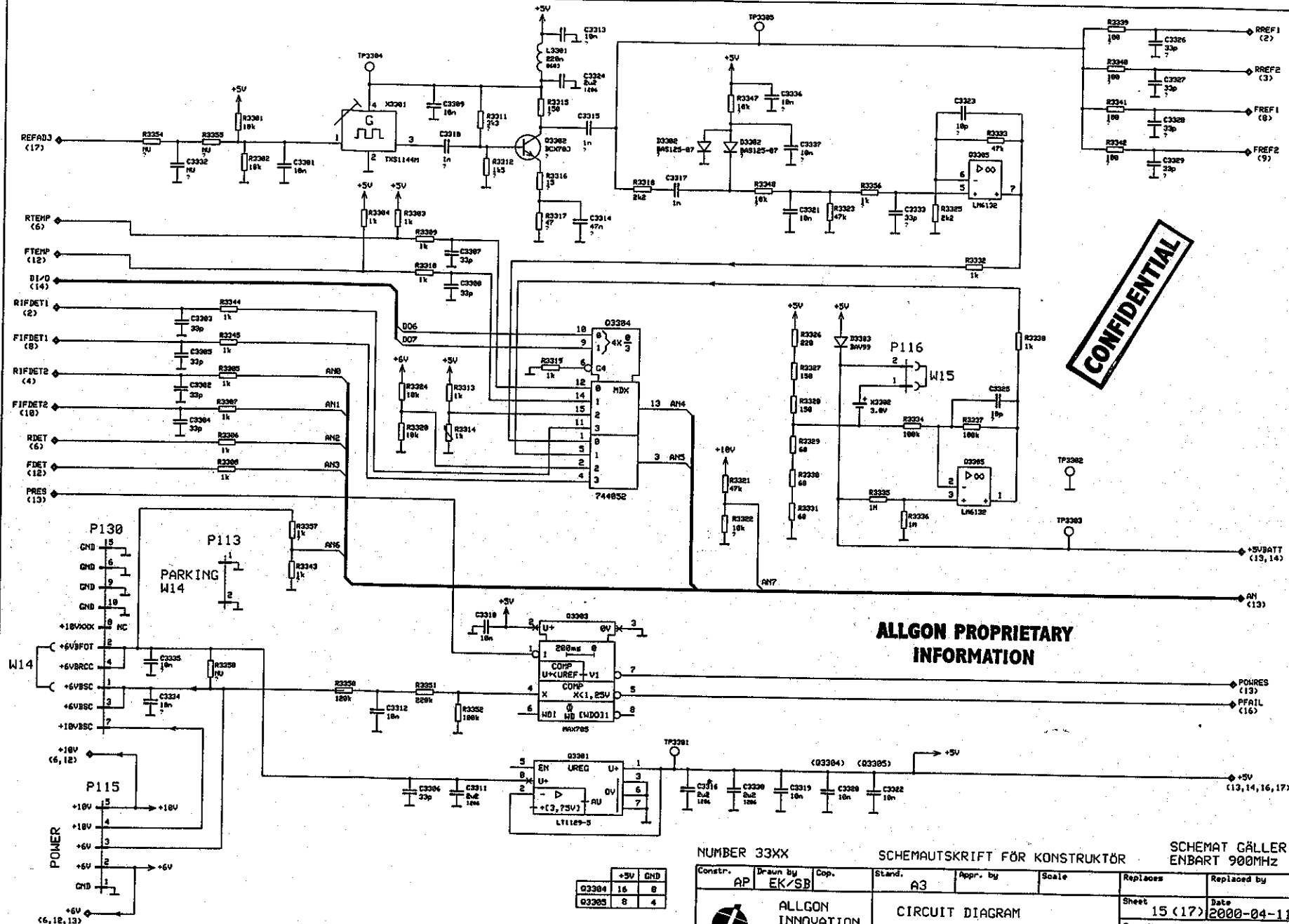
**ALLGON PROPRIETARY INFORMATION**

|                          |                |                               |                               |                              |                 |
|--------------------------|----------------|-------------------------------|-------------------------------|------------------------------|-----------------|
| NUMBER 32XX              |                | SCHEMATSKRIFT FÖR KONSTRUKTÖR |                               | SCHEMAT GÄLLER ENBART 900MHz |                 |
| Constr. AP               | Drawn by EK/SB | Stand. A3                     | Appr. by                      | Scale                        | Replaces        |
| ALLGON INNOVATION SWEDEN |                |                               | CIRCUIT DIAGRAM BSC 8/9 BOARD |                              | Replaced by     |
|                          |                |                               |                               | Sheet 14 (17)                | Date 2000-04-11 |
|                          |                |                               |                               | Doc. No. K308/1-411          | Rev. PA10       |

CADint F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE





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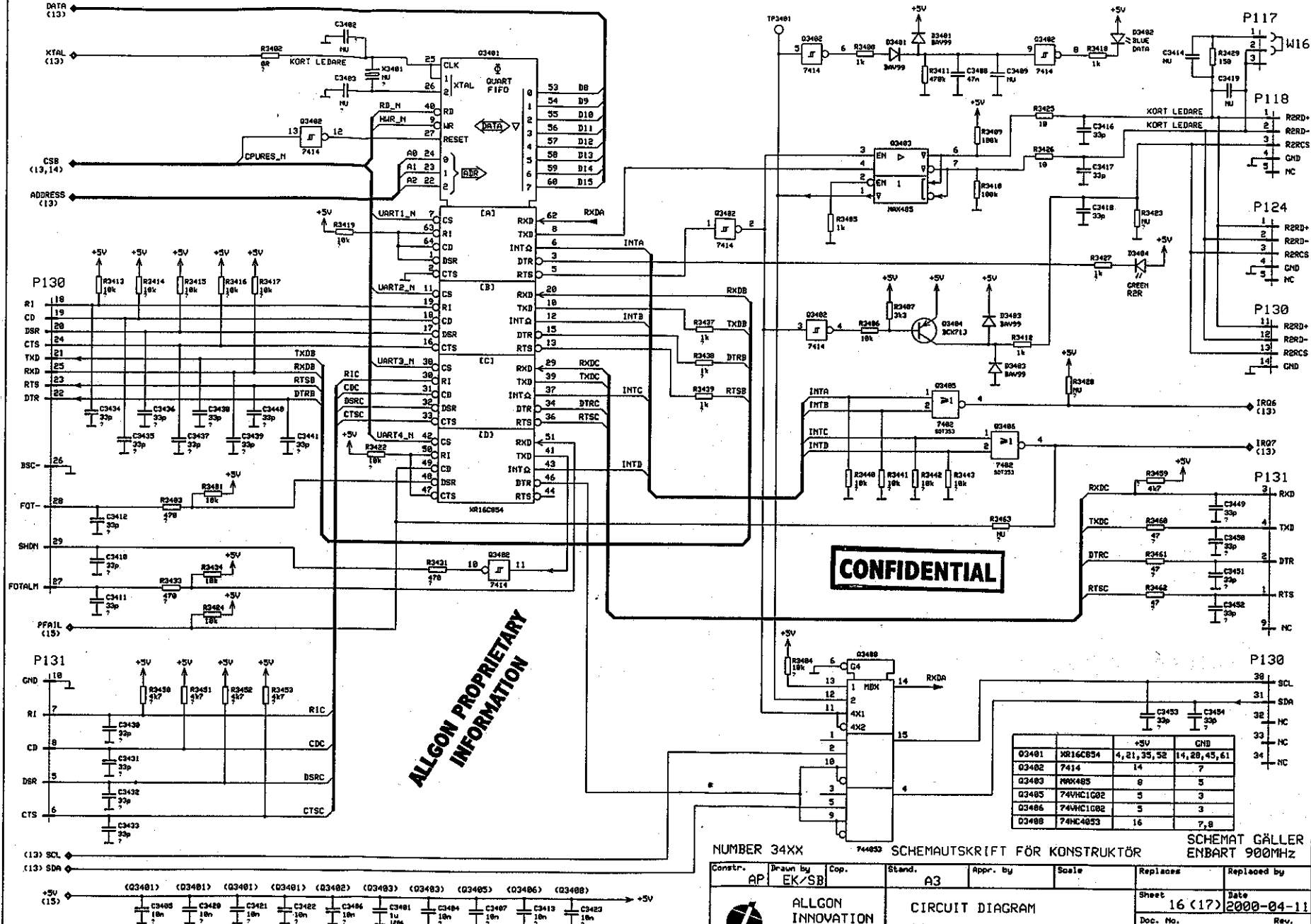
**ALLGON PROPRIETARY INFORMATION**

|       |      |
|-------|------|
| +5V   | GND  |
| 03304 | 16 8 |
| 03305 | 8 4  |

|                          |          |                               |                               |          |                              |                 |
|--------------------------|----------|-------------------------------|-------------------------------|----------|------------------------------|-----------------|
| NUMBER 33XX              |          | SCHEMATSKRIFT FÖR KONSTRUKTÖR |                               |          | SCHEMAT GÄLLER ENBART 900MHZ |                 |
| Constr.                  | Drawn by | Cop.                          | Stand.                        | Appr. by | Scale                        | Replaces        |
| AP                       | EK/SB    |                               | A3                            |          |                              |                 |
| ALLGON INNOVATION SWEDEN |          |                               | CIRCUIT DIAGRAM BSC 8/9 BOARD |          |                              | Sheet           |
|                          |          |                               |                               |          |                              | 15 (17)         |
|                          |          |                               |                               |          |                              | Date            |
|                          |          |                               |                               |          |                              | 2000-04-11      |
|                          |          |                               |                               |          |                              | Rev.            |
|                          |          |                               |                               |          |                              | K308/1-411 PA10 |

CADint F03SPA10

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE



**ALLGON PROPRIETARY INFORMATION**

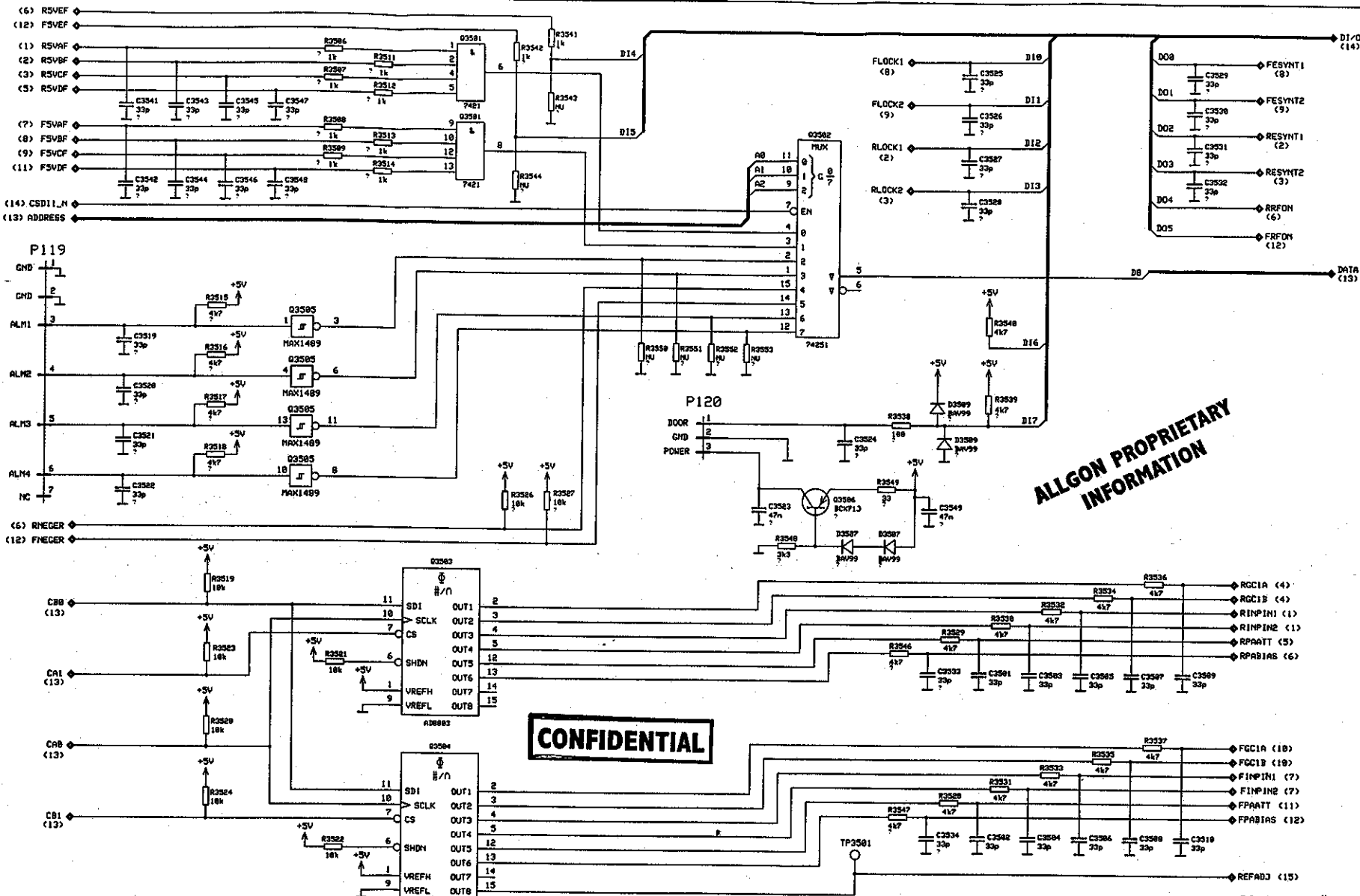
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| Part No. | Value     | +5V           | GND            |
|----------|-----------|---------------|----------------|
| Q3401    | XR16C854  | 4, 21, 35, 52 | 14, 28, 45, 61 |
| Q3402    | 7414      | 14            | 7              |
| Q3403    | NRX485    | 8             | 5              |
| Q3405    | 74VHC1G02 | 5             | 3              |
| Q3406    | 74VHC1G02 | 5             | 3              |
| Q3408    | 74HC4853  | 16            | 7, 8           |

|                          |  |                                |          |                     |          |
|--------------------------|--|--------------------------------|----------|---------------------|----------|
| NUMBER 34XX              |  | SCHEMAUTSKRIFT FÖR KONSTRUKTÖR |          | SCHAT GÄLLER        |          |
| Constr. AP EK/SB         |  | Stand. A3                      | Appr. by | Scale               | Replaces |
| ALLGON INNOVATION SWEDEN |  | CIRCUIT DIAGRAM                |          | BSC 8/9 BOARD       |          |
| Sheet 16 (17)            |  | Date 2000-04-11                |          | Doc. No. K308/1-411 |          |
| Rev.                     |  | PA10                           |          |                     |          |

CADint F03SFA10

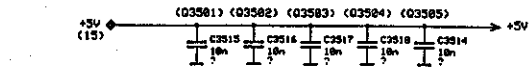
NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE



**ALLGON PROPRIETARY INFORMATION**

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CADint F03SPA10



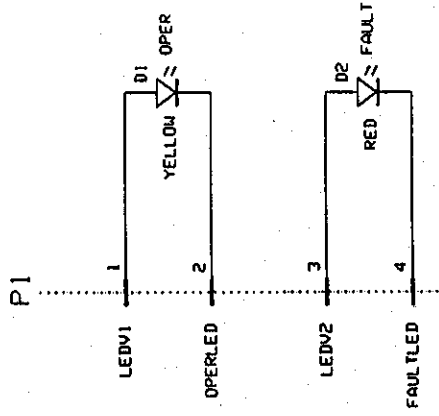
NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

|       | +5V | GND |
|-------|-----|-----|
| 03501 | 14  | 7   |
| 03502 | 16  | 8   |
| 03503 | 16  | 8   |
| 03504 | 16  | 8   |
| 03505 | 14  | 7   |

NUMBER 35XX SCHEMATSKRIFT FÖR KONSTRUKTÖR SCHEMAT GÄLLER ENBART 900MHZ

|                          |                |                               |           |                               |       |                               |             |
|--------------------------|----------------|-------------------------------|-----------|-------------------------------|-------|-------------------------------|-------------|
| Constr. AP               | Drawn by EK/SB | Cop.                          | Stand. A3 | Appr. by                      | Scale | Replaces                      | Replaced by |
| ALLGON INNOVATION SWEDEN |                | CIRCUIT DIAGRAM BSC 8/9 BOARD |           | Sheet 17 (17) Date 2000-04-11 |       | Doc. No. Rev. K308/1-411 PA10 |             |

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**ALLGON PROPRIETARY  
INFORMATION**

NOTE: COMPONENT VALUES MAY BE REVISED.

FOR CURRENT VALUES - REFER TO THE PART LIST.

NU = NOT USED \* = PRINTED ON PC BOARD FS = FACTORY SET VALUE

|         |    |          |       |      |  |        |    |          |  |       |  |          |      |             |            |
|---------|----|----------|-------|------|--|--------|----|----------|--|-------|--|----------|------|-------------|------------|
| Constr. | 0B | Drawn by | EK/LK | Cop. |  | Stand. | A4 | Appr. by |  | Scale |  | Replaces |      | Replaced by |            |
|         |    |          |       |      |  |        |    |          |  |       |  | Sheet    | 1(1) | Date        | 1999-11-12 |

ALLGON  
INNOVATION

CIRCUIT DIAGRAM