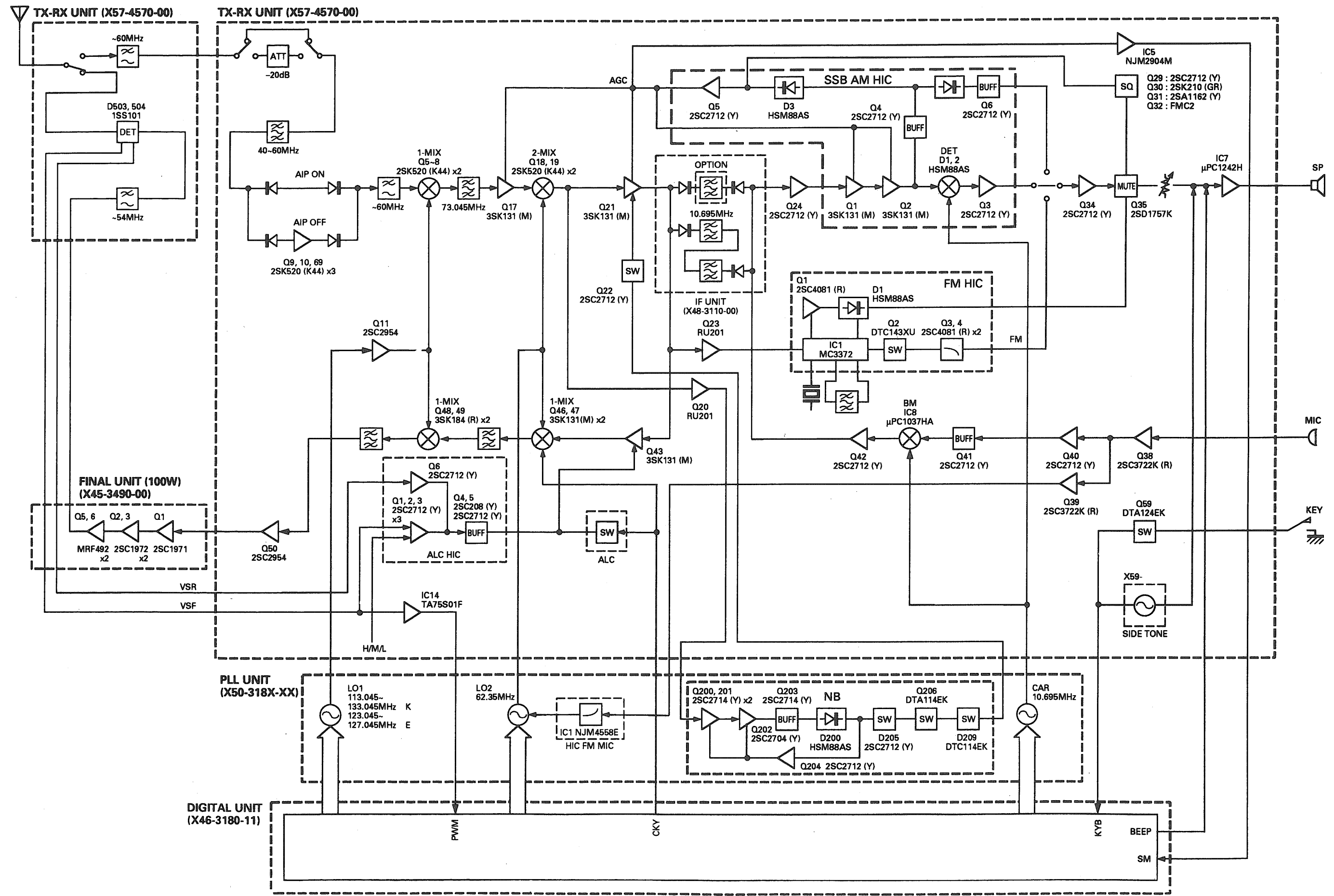
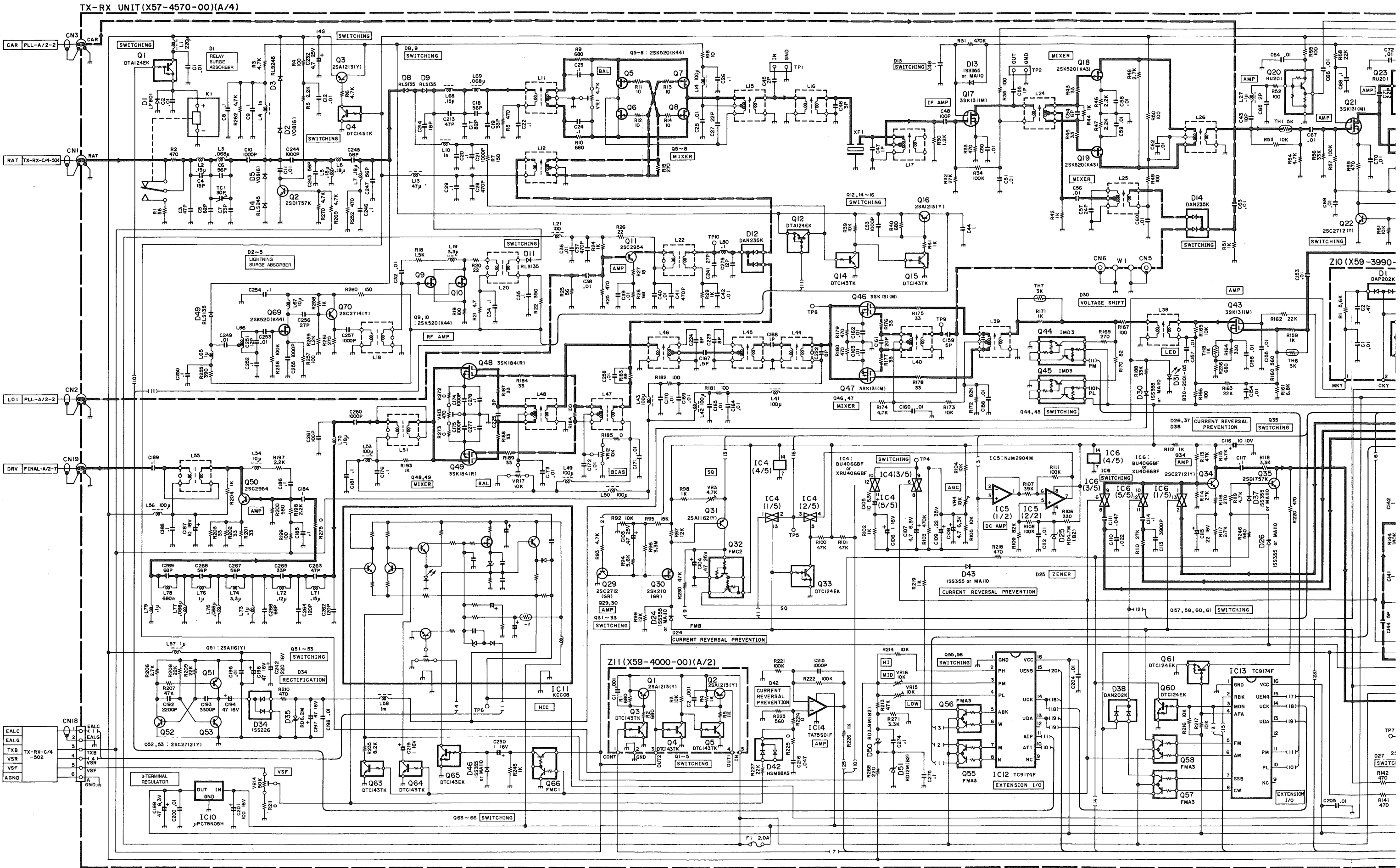
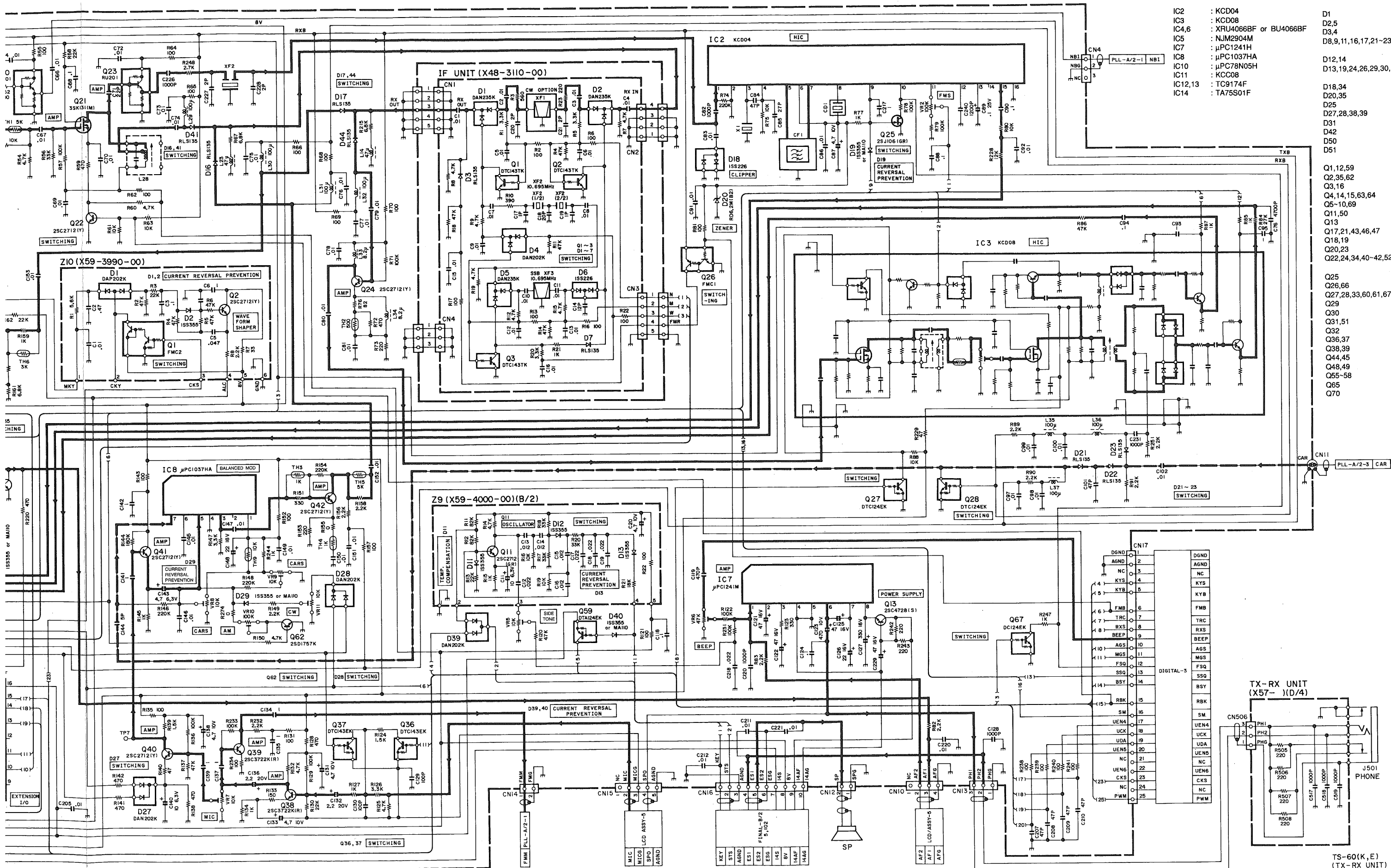


BLOCK DIAGRAM



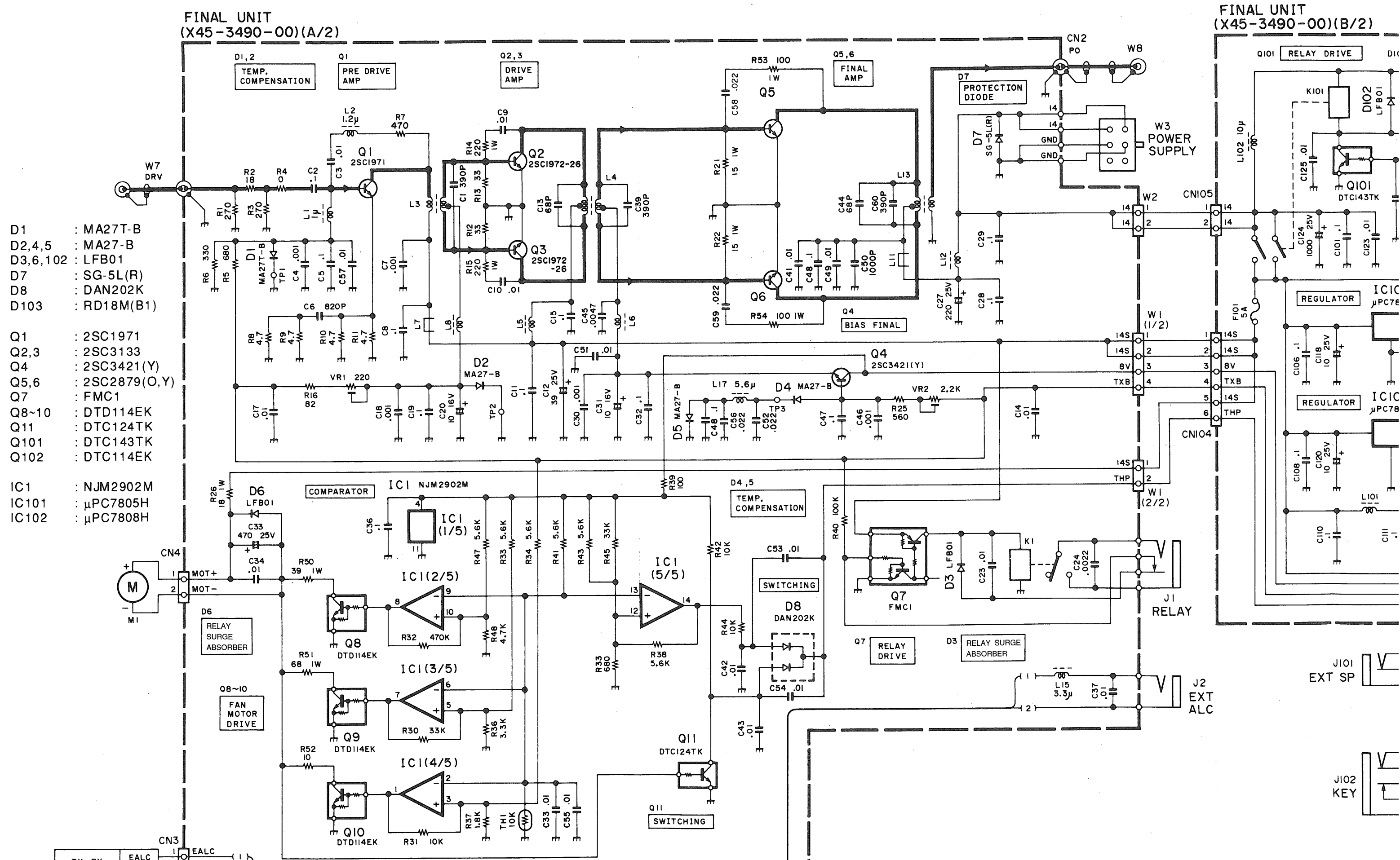
SCHEMATIC DIAGRAM 1/3





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|-------------------------------|--|
| IC2 : KCD04 | D1 : LFB01 |
| IC3 : KCD08 | D2,5 : V08(G) |
| IC4,6 : XRU4066BF or BU4066BF | D3,4 : RLS245 |
| IC5 : NJM2904M | D8,9,11,16,17,21-23,41,44,49 : RLS135 |
| IC7 : PC1241H | D12,14 : DAN235K |
| IC8 : PC1037HA | D13,19,24,26,29,30,37,40,43,46 : 1SS355 or MA110 |
| IC10 : PC78N05H | D18,34 : 1SS226 |
| IC11 : KCC08 | D20,35 : RD6.2M(B2) |
| IC12,13 : TC9174F | D25 : RD4.7M(B2) |
| IC14 : TA75S01F | D27,28,38,39 : DAN202K |
| | D31 : B30-2001-05 |
| | D42 : HSM88AS |
| | D50 : RD3.9M(B2) |
| | D51 : RD12M(B2) |
| | Q1,12,59 : DTA124EK |
| | Q2,35,62 : 2SD1757K |
| | Q3,16 : 2SA1213(Y) |
| | Q4,14,15,63,64 : DTC143TK |
| | Q5-10,69 : 2SK520(K44) |
| | Q11,50 : 2SC2954 |
| | Q13 : 2SC4728(S) |
| | Q17,21,43,46,47 : 3SK131(M) |
| | Q18,19 : 2SK520(K43) |
| | Q20,23 : RU201 |
| | Q22,24,34,40-42,52,53 : 2SC2712(Y) |
| | Q25 : 2SJ106(GR) |
| | Q26,66 : FMC1 |
| | Q27,28,33,60,61,67 : DTC124EK |
| | Q29 : 2SC2712(GR) |
| | Q30 : 2SK210(GR) |
| | Q31,51 : 2SA1162(Y) |
| | Q32 : FMC2 |
| | Q36,37 : DTC143EK |
| | Q38,39 : 2SC3722K(R) |
| | Q44,45 : IMD3 |
| | Q48,49 : 3SK184(R) |
| | Q55-58 : FMA3 |
| | Q65 : DTC114EK |
| | Q70 : 2SC2714(Y) |

SCHEMATIC DIAGRAM 2/3



The schematic diagram illustrates the TX-RX C-4-503 circuit, divided into three main functional areas: RELAY DRIVE, PROTECTION DIODE, and ZENER DIODE.

RELAY DRIVE: This section includes a relay (K101) and two transistors (Q101, Q102) for switching. It features a network of resistors (R101, 4.7K) and capacitors (C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C115, C116) for timing and signal conditioning. A 1000 25V capacitor (C124) is also present.

PROTECTION DIODE: This section includes a protection diode (D102, LFB01) and a zener diode (D103, RD18M(B1)).

ZENER DIODE: This section includes a zener diode (D103, RD18M(B1)).

REGULATOR: Two regulators (IC101, IC102) are used to provide stable power. IC101 is a μ PC7805H and IC102 is a μ PC7808H. They are accompanied by various capacitors (C106, C108, C118, C119, C120, C121, C122) and a resistor (R101, 4.7K).

SWITCHING: A switching section is shown, featuring a transistor (Q102, DTC114TK) and a resistor (R101, 4.7K).

TX-RX C-4-503: The central component is the TX-RX C-4-503, which has multiple pins for AGND, 14S, 14S, 14S, 14S, DGND, 5V, PSC, 8V, TXB, and THP. It is connected to a 6-pin connector (CN101, W6).

TX-RX A/4-16: A 16-pin connector (CN102, W5) is shown, with pins for 14AG, 14AF, 8V, 14S, ESG, ES2, ES1, AGND, STS, and KEY. It is connected to a 6-pin connector (CN103, W6).

EXT SP: An external speaker (J101) is connected to the circuit.

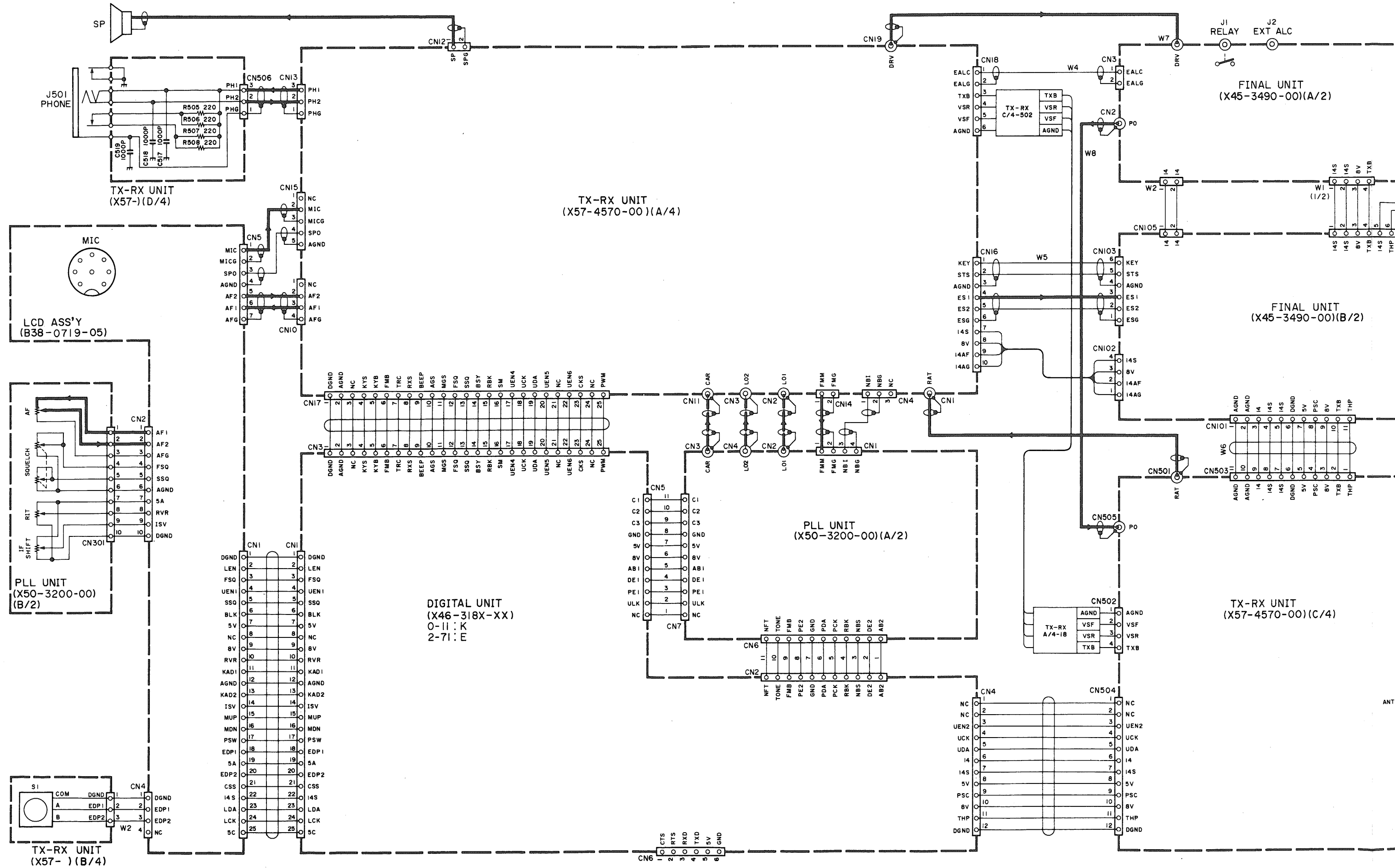
KEY: A key (J102) is connected to the circuit.

TX-RX UNIT
(X57-4570-00) (C/4)

Q501 : FMC2
D501 : DSA301LA
D502 : LFB01
D503,504 : 1SS101

TS-60 (K,E)

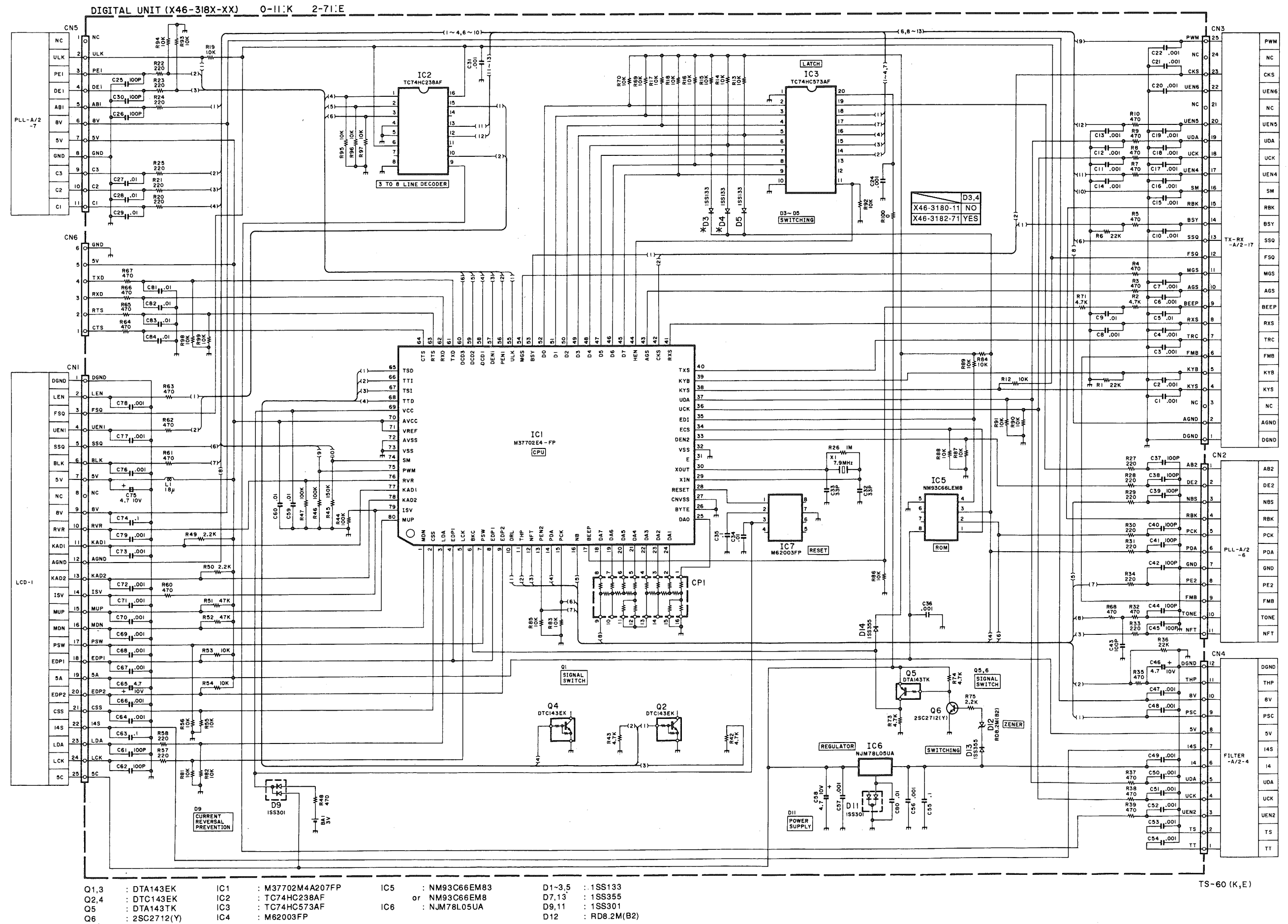
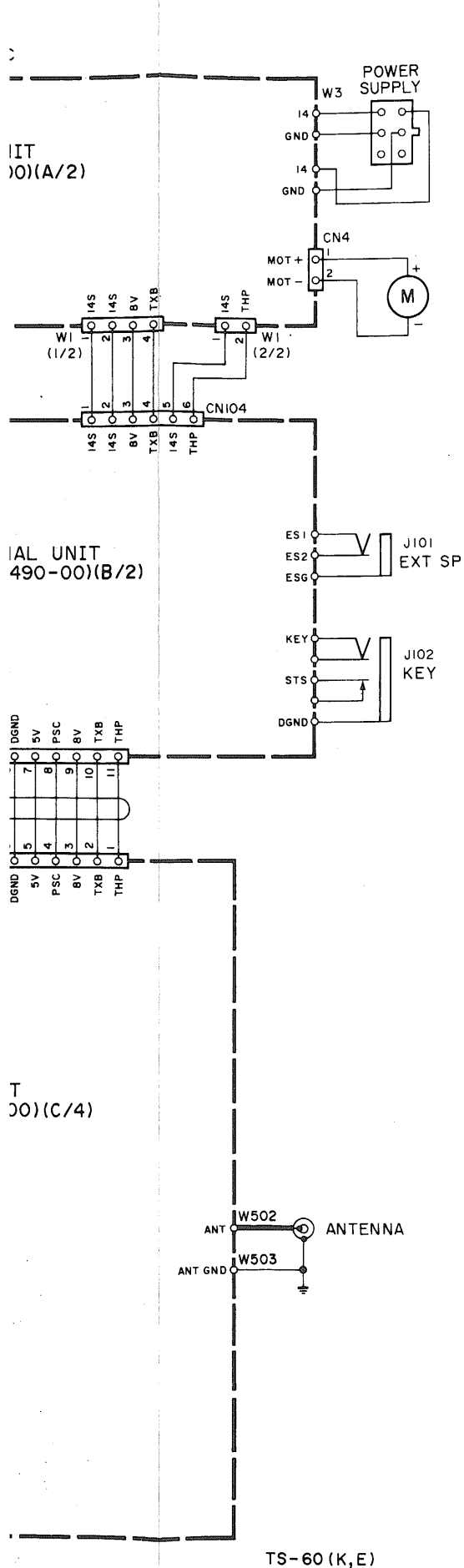
SCHEMATIC DIAGRAM 3/3



IT
(A/2)

IAL UNIT
490-00(B/2)

T
(C/4)



- | | | | |
|-----------------|----------------------|-------------------|------------------|
| Q1,3 : DTA143EK | IC1 : M37702M4A207FP | IC5 : NM93C66EM83 | D1~3,5 : 1SS133 |
| Q2,4 : DTC143EK | IC2 : TC74HC238AF | or NM93C66EM8 | D7,13 : 1SS355 |
| Q5 : DTA143TK | IC3 : TC74HC573AF | IC6 : NJM78L05UA | D9,11 : 1SS301 |
| Q6 : 2SC2712(Y) | IC4 : M62003FP | | D12 : RD8.2M(B2) |

TS-60 (K,E)