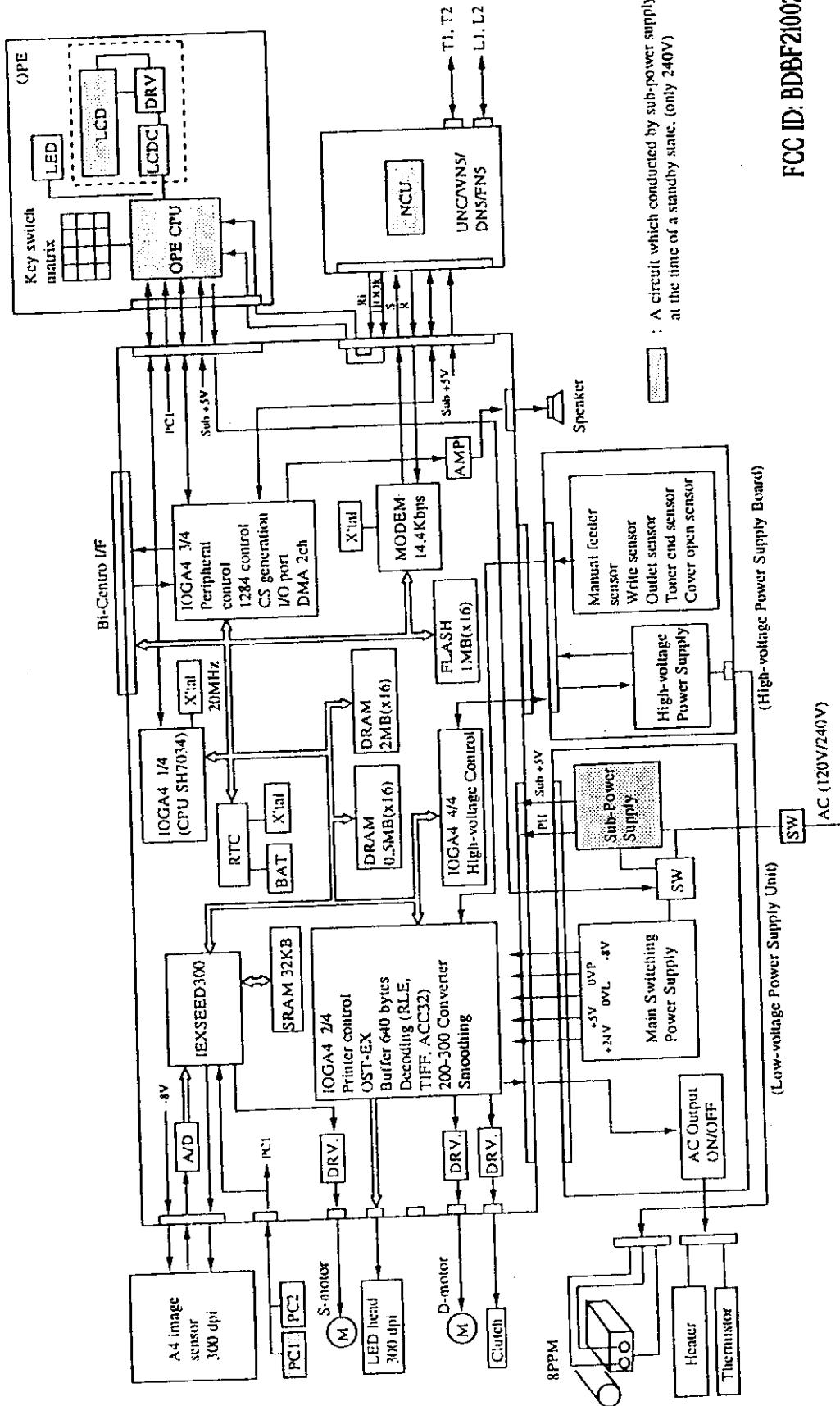


1.1. F21002A Block Diagram



FCC ID: BDBBF21002A

FX-051 Block Diagram

Description on the NCU Block Diagram

UNC circuit diagram

① Lightning arresters (AR1, 2)

The nominal operating voltage is 350 V.

When connecting the ground of the arrestor to the chassis, tighten ARG on the PCB with a screw. At this time, the PCB is grounded through the power cable.

The TB1 arrestor ground terminal can also be used to connect to the earth directly.

② DC circuits (R10, R11, C4)

These circuits provide DC characteristics according to the line requirements using the primary DC resistor in the line transformer T1 and the R10 and R11 resistors. The capacitor C4 bypasses AC signals.

③ Impedance matching network (R523, R536, C503, ...)

This circuit matches the impedance between the line and equipment to reduce reflection of transmitted signals.

④ Receiving sensitivity (R534 to R504)

The receiving sensitivity at line hunting is determined by R574 and the MF tone receiving sensitivity at parallel pickup is determined by R504.

⑤ CML (RL1)

This circuit selectively switches the line between the telephone or facsimile.

⑥ SR (RL2)

This circuit connects the line with the telephone. During facsimile transmission, it disconnects the telephone.

⑦ PP (RL6)

If this circuit detects MF or CNG tones instead of hunting a line, it sets a proper receiving sensitivity.

⑧ DP (RL3)

This circuit generates pulse dials.

If the circuit detects MF or CNG tones instead of hunting a line, it opens to increase the impedance.

⑬ Pickup RC (R5, C31)

These circuits insert a high-impedance resistor and capacitor serially to prevent the line impedance from dropping by the line transformer T1.

⑭ Ring detectors (IC1)

These circuits detect a ring signal arriving to the line. If the input ring signal exceeds a specific voltage, the circuits output a signal having the same frequency as the input signal as RI.

⑮ Line transformer (T1)

This circuit processes send/receive signals required for facsimile transmission, dial tone receive signals required for automatic dialing, and MF tone send and remote receive signals. It separates the DC current between the line and equipment and also keeps a balance between the line and the ground.

⑯ Off-hook detector (IC2)

This circuit detects the off-hook state of the telephone connected to the TEL1, TEL2, or LINE terminals.