8. SMPS TEST

8-1. Check Precedure

STEP 1.

Check whether the appearance is OK or not.

If there are any small or large patterns on the surface by burning, those parts should be checked intensively.

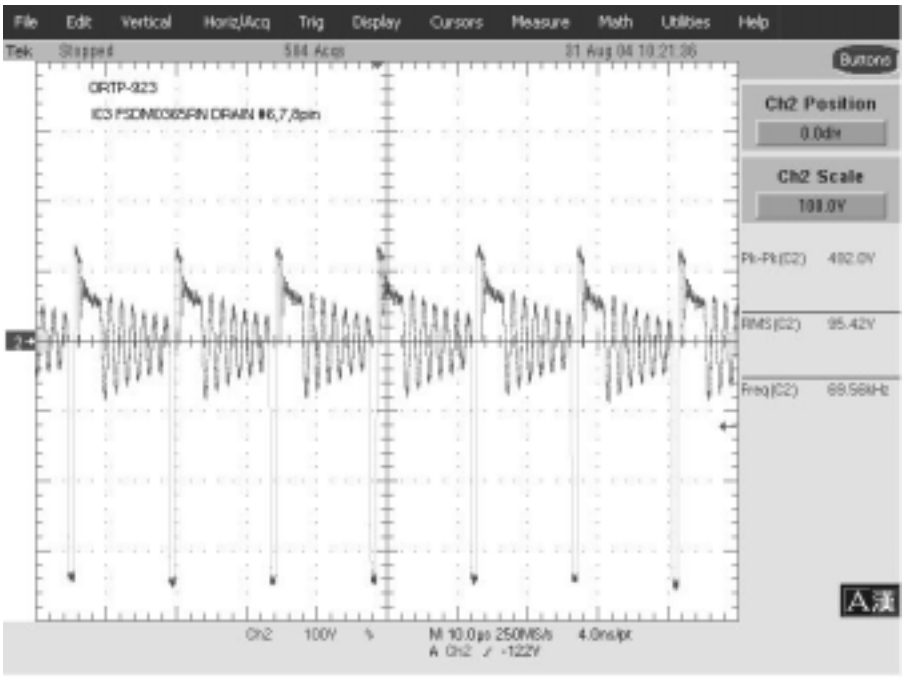
STEP 2.

For 120Vac, When over voltage authorized, VR1 10D221 will be burned and F1 FUSE short.

So, you have to check with the tester.

STEP 3-1.

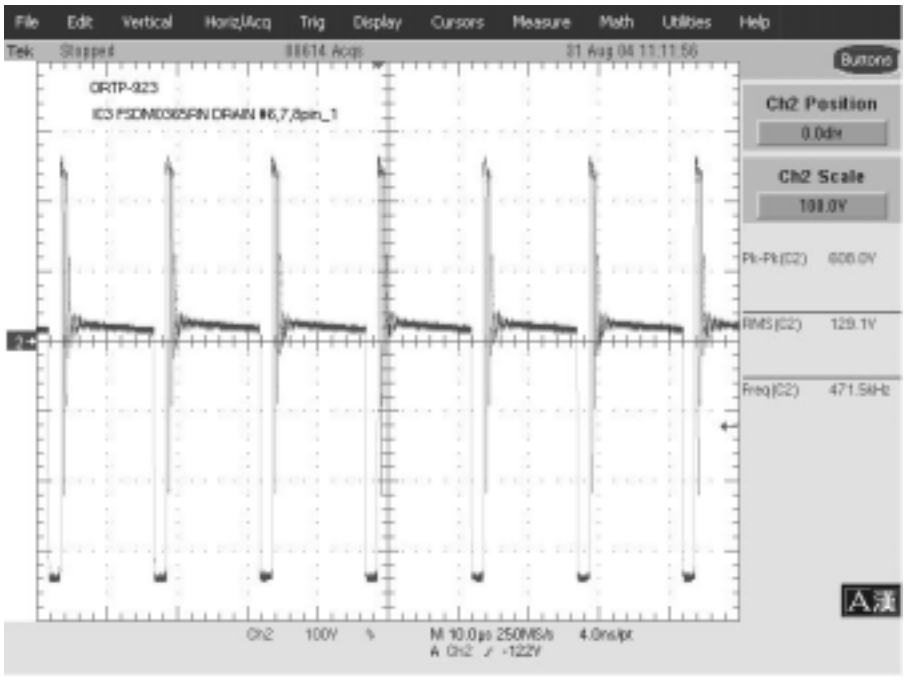
After power-on, when sub parts do not work, please check whether F1 fuse is off or not. If it works properly, please check the wave of #6,7,8 pins of IC3 FSDM0365RN.



(wave # 1)

STEP 3-2.

If the wave#2 found not wave#1, please check whether R47 10ohm, ZD11 1N5247B is OK or not.



STEP 3-3.

If it is not checked as wave#2, please check whether Q10 KSC2383Y, ZD8, ZD9, ZD10 is OK or not.

STEP 3-4.

If there is no problem with step 3-3, please check whether IC3 FSDM0365RN is OK or not. (please set the tester range as diode first. If you listen to the beep sound on checking #6,7,8 pins and #1 pin, there are some problems in IC.)

STEP 3-5.

1) When +5.6V is high or low, please check whether #1 pin of U2 FAN431 is +2.5V or not.

2)Please check whether #1&2 pins of PC1's voltage is about +1.05V or not.

STEP 4.

How to check when power does not work

1)On/off signal is authorized through Q7(ksp2222), please check.

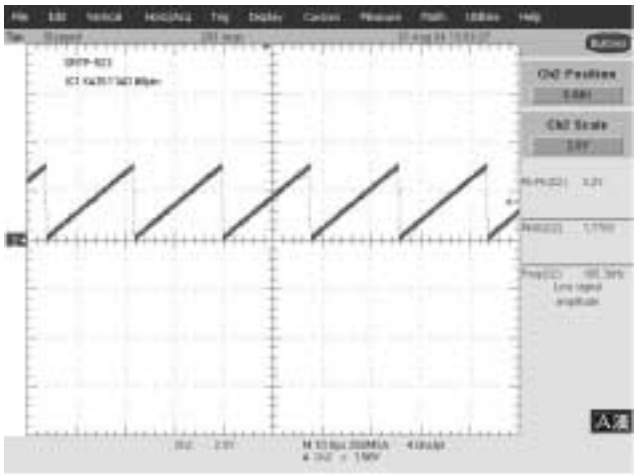
2)When there is no reaction with on/off signals, please check IC1 KA3511AS is working properly.

*How to check IC1 KA3511AD

①Vcc check. Please check #1 pin is authorized with +12V.
(If you do not check +12V, please check Q6,7.)

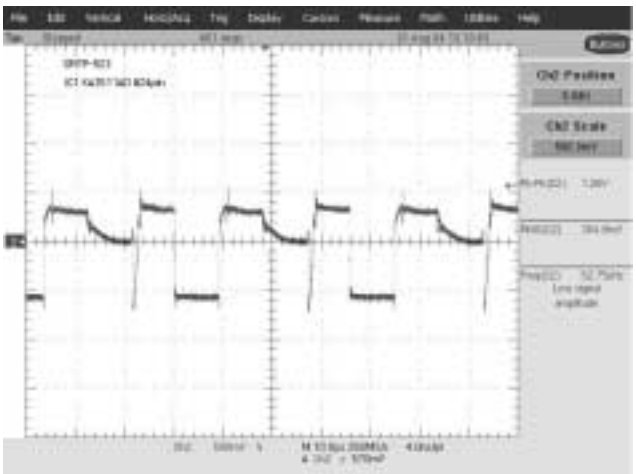
②Please check #8 pin is with switching wave (triangle).

(wave 3)



③Please check whether #22&24 pins are with switching oval square-shaped wave or not.

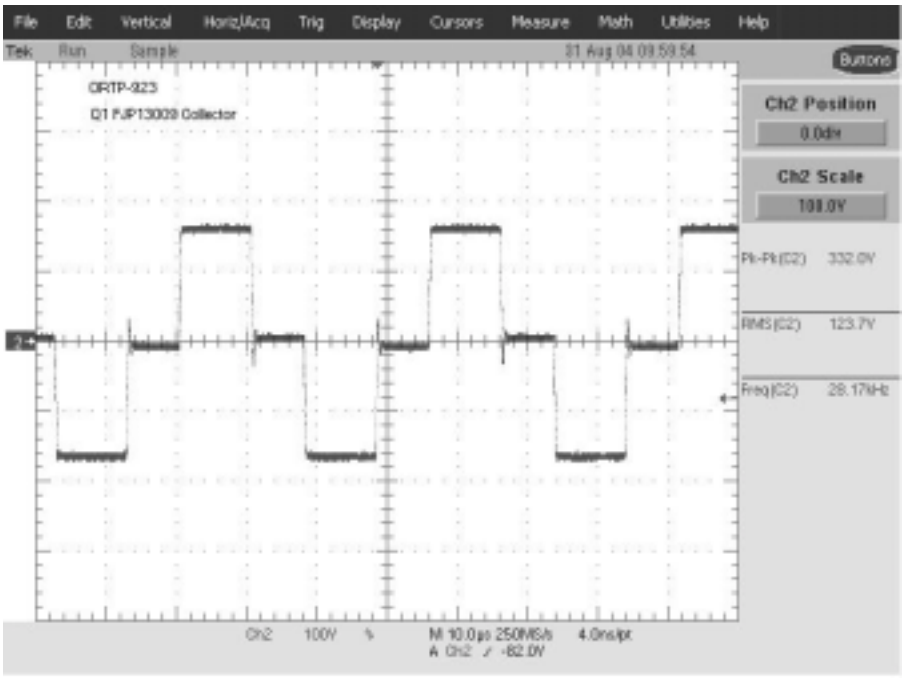
(wave 4)



STEP 5.

How to check when IC KA3511AD does not work properly.

When it works properly, the wave is like below. (wave 5)

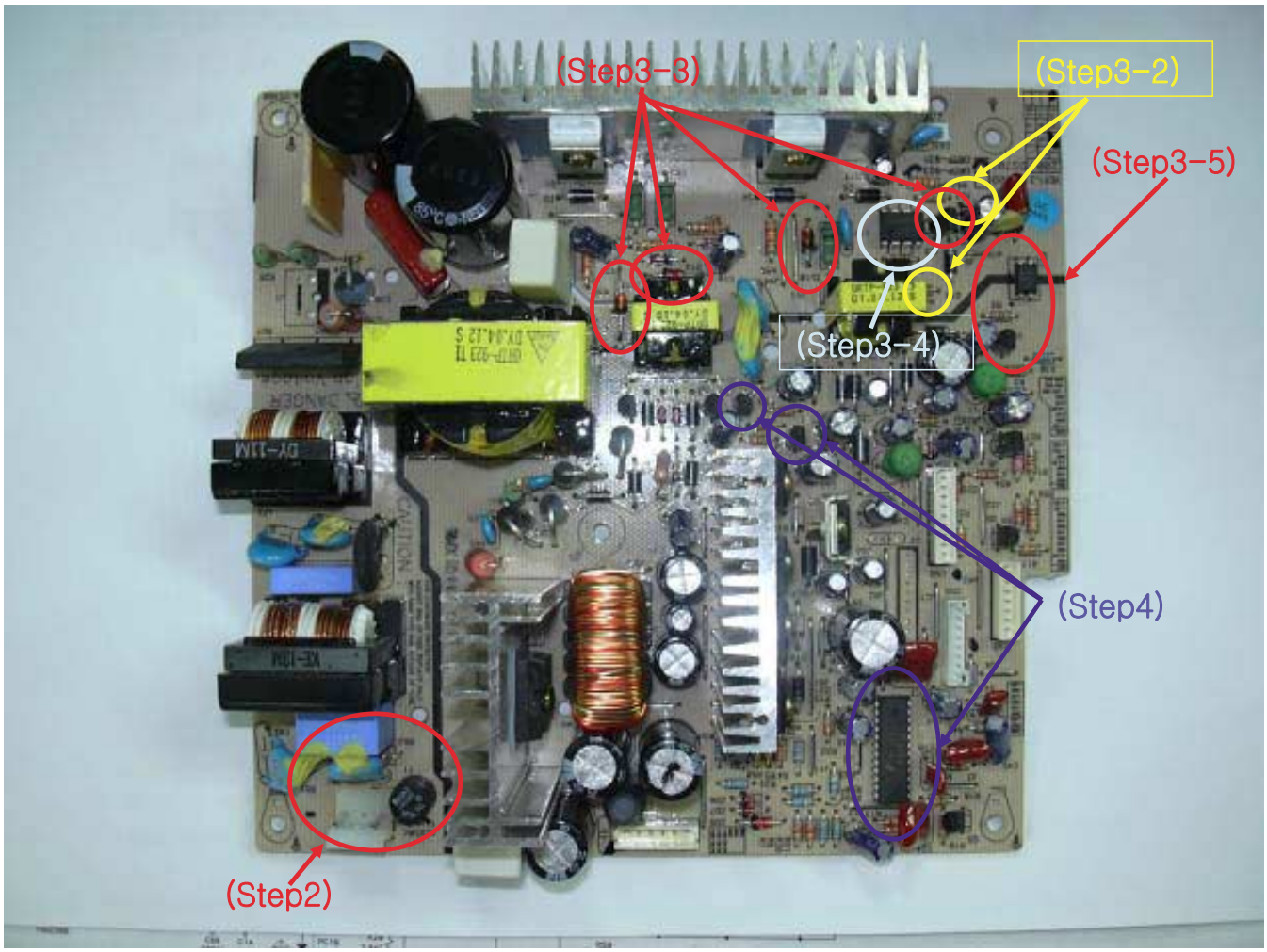


(wave 5)

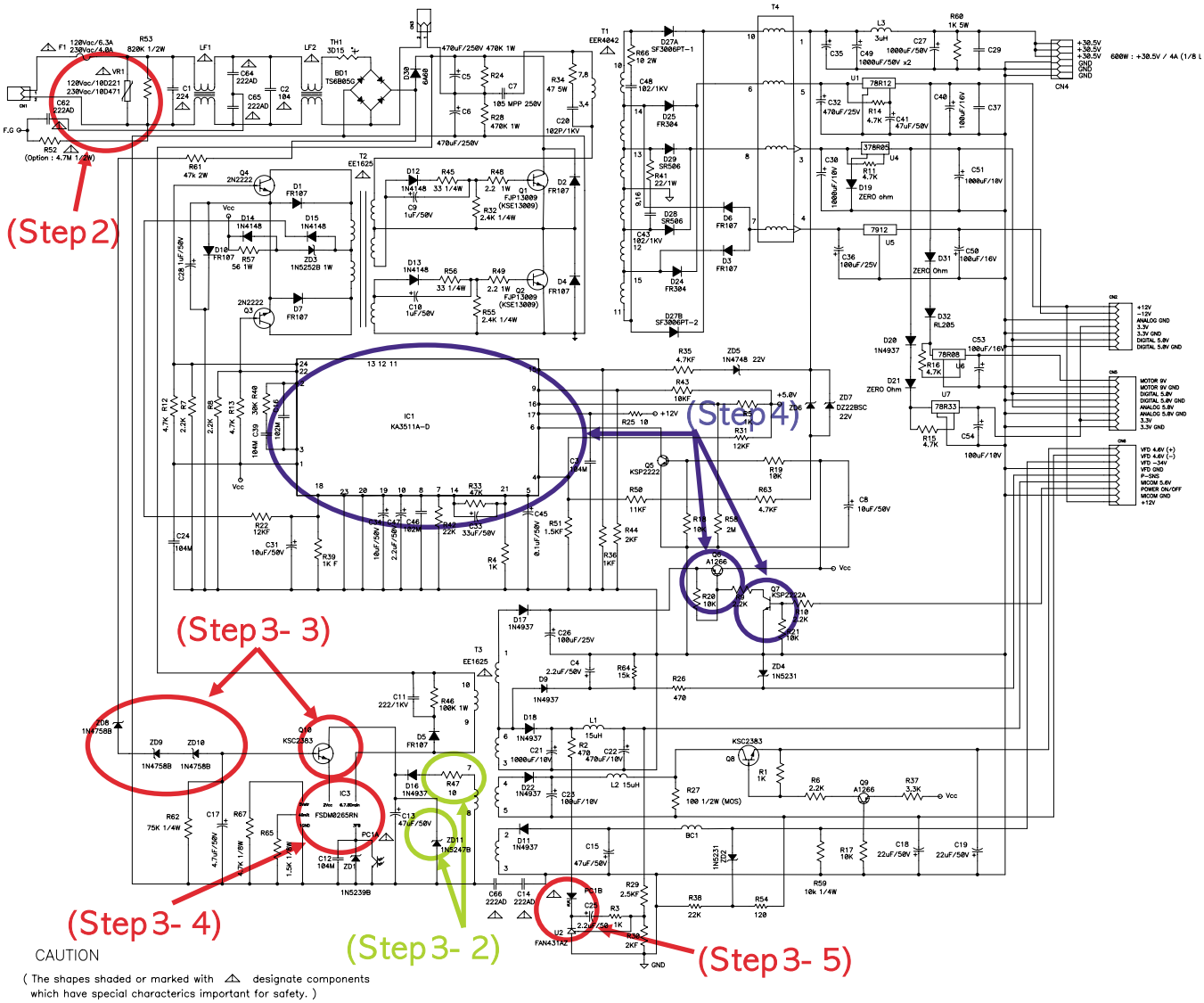
STEP 5-1.

1) Since it is organized to form a main Feedback on B+30V outpower,
2) Please check short and open of D27 SF3006PT and B+30V.
4) Please check short and open of +5.0V, +12.0V, and -12.0V.
5) Please check IC1 KA3511AD's authorized voltage.
   - ① #15pin 1.5V
   - ② #9pin 0.8V
   - ③ #4pin 1.25V

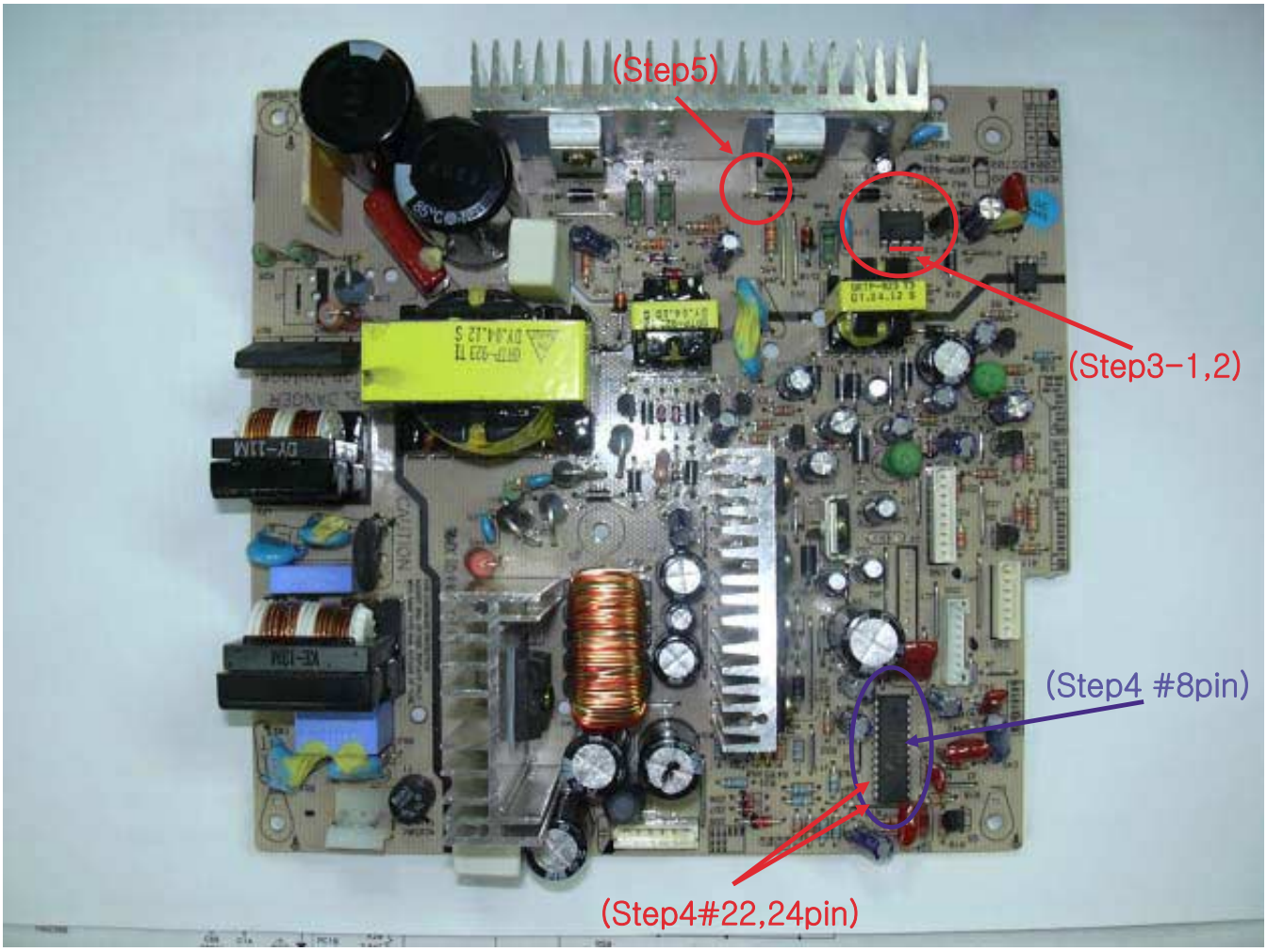
You must use OSC on checking.



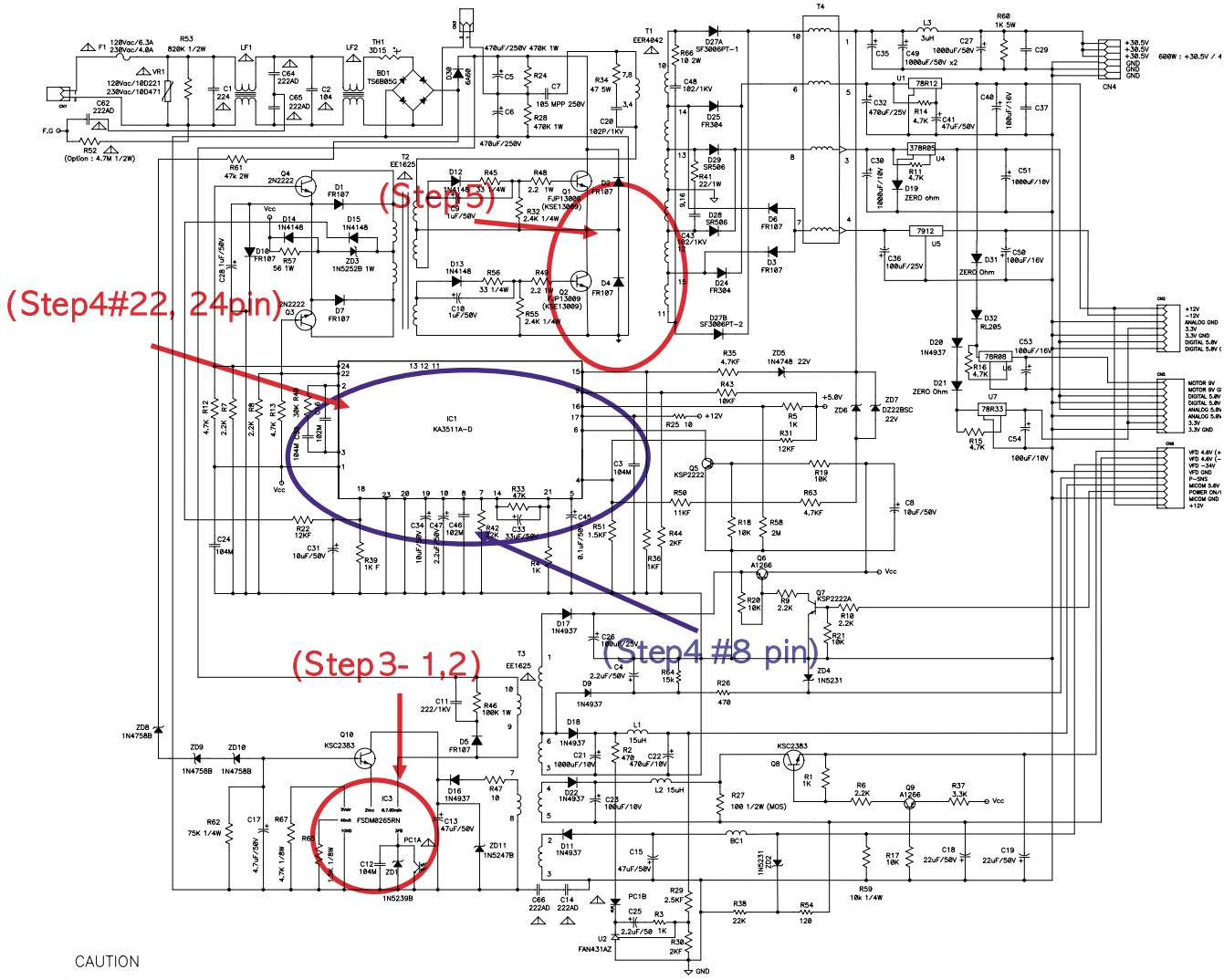
(Step Check Point)



(Step Check Point)



(wave form Check Point)



(Waveform Check Point)