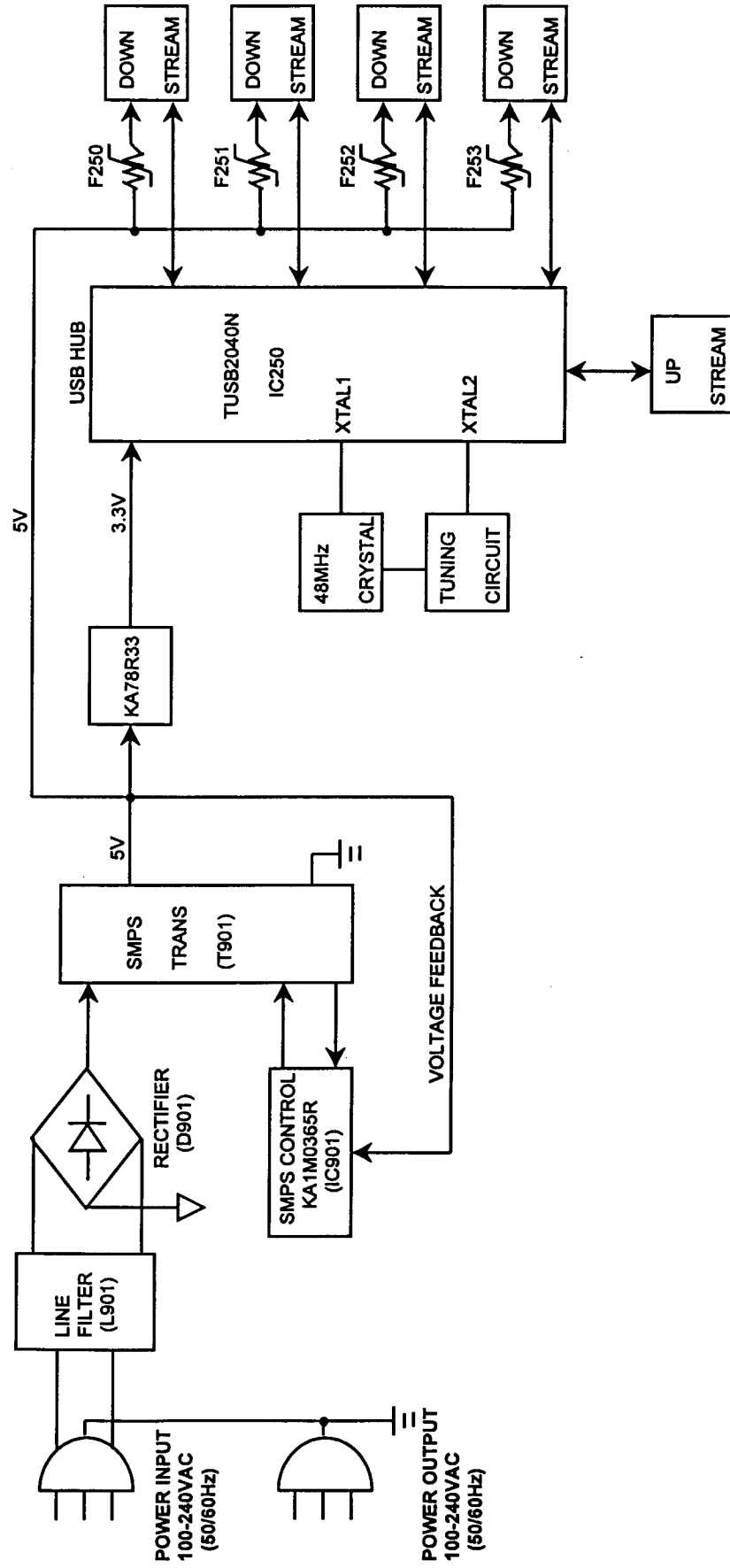


BLOCK DIAGRAM (PCXUV-BA, 100U_i)



DESCRIPTION OF BLOCK DIAGRAM

1. Line Filter & Associated Circuit.

This is used for suppressing noise of power input line.

2. SMPS(Switching Mode Power Supply).

The operation procedure is as follows:

- 1) AC input voltage is rectified and smoothed by the bridge diode(D901) and the capacitor(C902).
- 2) The rectified voltage(DC) is applied to the primary coil of the transformer(T901).
- 3) The control IC(IC901) generates switching pulse to turn on and off the primary coil of the transformer (T901) repeatedly.
- 4) Depending on turn ratio of the transformer, the secondary voltage appear at the secondary coil of the transformer(T901).
- 5) This secondary voltage is rectified by diode(D905) and operate other circuit.

3. Over Voltage Protection Circuit.

This circuit consists of photo-coupler(IC902) and SMPS controller(IC901). If the secondary voltage exceeds the specified voltage, the current of the photo-coupler LED flows excessively.

Then, collector current of the photo-coupler flows excessively and stops the oscillation of the control IC(IC901). Consequently, the secondary voltage drops to zero volt.

4. USB(Universal Serial Bus) Circuit.

This circuit consists of hub IC(IC250), one up stream port and four down stream port.

Every down stream port supports both full speed and low speed connection by automatically setting the slew rate according to the speed of the device attached to the port.

5. Over Current Protection Circuit.

This circuit consists of poly switch(F250, F251, F252, F253). If the external devices current exceeds the specified current, the resistance of the poly switch increases with temperature. The hub IC(IC250) pin1, pin3, pin19, pin26 detect overcurrent.

Then, hub IC(IC250) and power line of the external devices will be shut down.