

10.2.4 Interface Circuit

The interface circuit handles the handshaking needed for communication with a I/F Adaptor (RP-K100). The RP-K100 allows interfacing with a host computer.

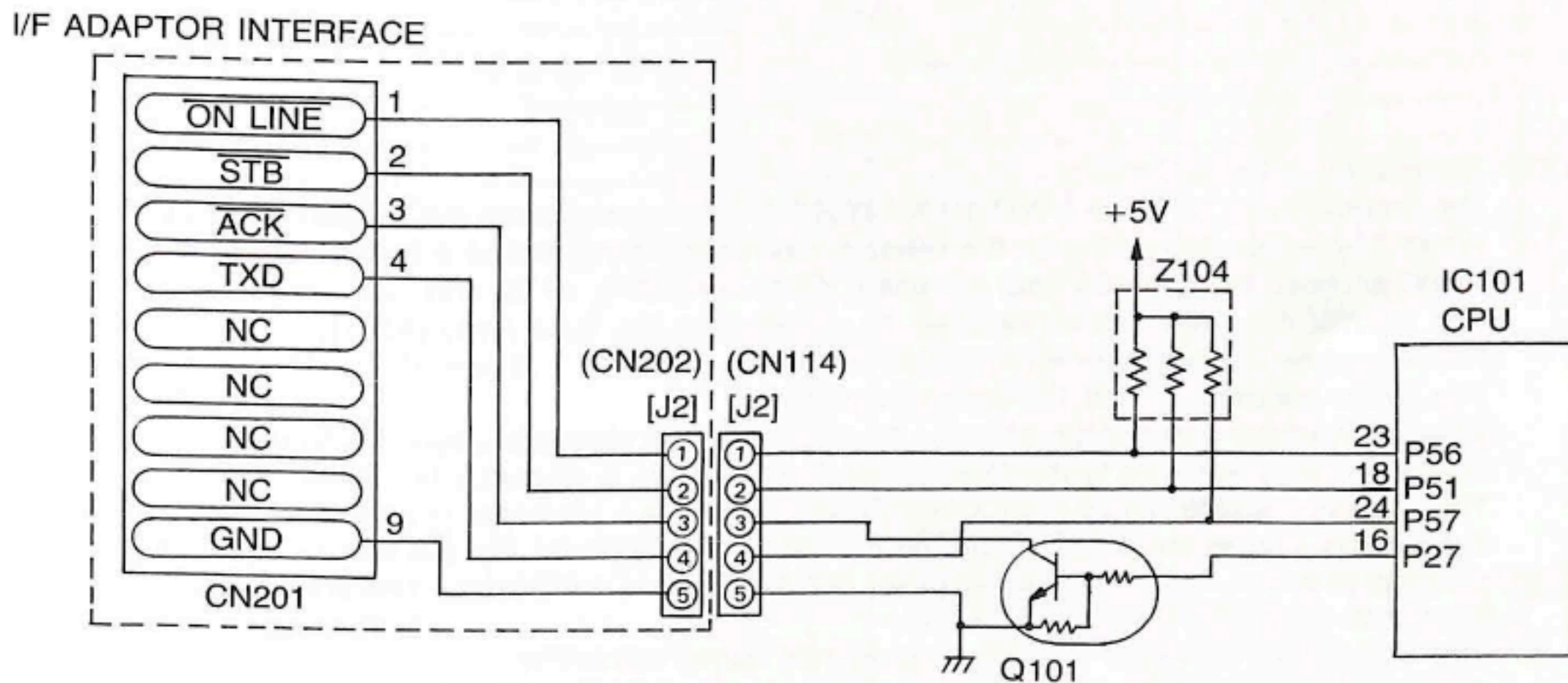
The handshake method is described in the following steps.

Process;

- (1) The RP-K100 changes the $\overline{\text{ON LINE}}$ signal from H to L indicating that data transmission has started. This $\overline{\text{ON LINE}}$ signal remains Low during the transmission of 1 byte.
- (2) The RP-K100 first sends the LSB (D0) of a transmitted byte to the TXD line and changes the $\overline{\text{STB}}$ signal from H to L. This $\overline{\text{STB}}$ signal is sent to P51 of the CPU which is the interruption.
- (3) In the interruption state, the CPU receives a TXD signal and changes the $\overline{\text{ACK}}$ signal from L to H. This $\overline{\text{ACK}}$ signal is sent to the RP-K100.
- (4) After the RP-K100 has received the $\overline{\text{ACK}}$ signal (L level), the $\overline{\text{STB}}$ signal changes from L to H.
- (5) When the STB signal (High) is sent from the RP-K100, the thermalwriter sends the $\overline{\text{ACK}}$ signal (High) to the RP-K100.
- (6) When the ACK signal is High, the RP-K100 starts to send the next bit of data.
- (7) Once the RP-K100 sends 1 byte of data (8 bits) to the CPU, the $\overline{\text{ON LINE}}$ signal changes from L to H.

From KX-W50TH/KX-W60TH Service Manual

Circuit Diagram



Timing Chart

TXD from RP-K100



$\overline{\text{ON LINE}}$ from RP-K100



$\overline{\text{STB}}$ from RP-K100



$\overline{\text{ACK}}$ to RP-K100



() = KX-W50TH
[] = KX-W60TH