SAA5968-03 sensor PCB used on MXT-1900, MXD-1900, MXT-2000 and MXD-2000 panels

This board contain an RFID transceiver chip TRF7970A manufactured by Texas Instruments and is designed to operate at a distance of a few centimeters. The block diagram of the chip, as found in the data sheet by TI, is shown below:

System Block Diagram

Figure 6-2 shows a block diagram of the TRF7970A.

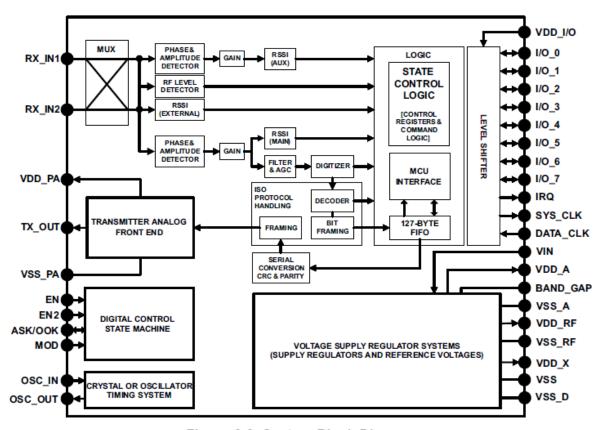
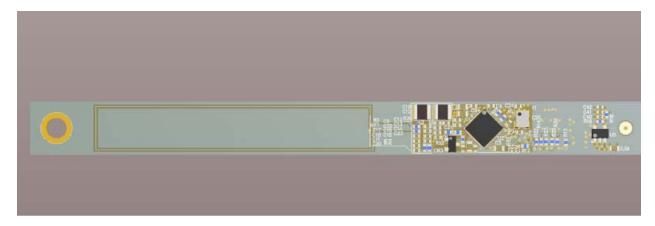


Figure 6-2. System Block Diagram

List of Antennas to be used on transmitter:

• The antenna system consists of a PCB loop antenna. The design was provided by Texas Instruments to work with the transceiver chip TRF7970A. See picture below for details:



U2 is the TRF7970A transceiver chip. To the right of the chip is a 13.56 MHz crystal oscillator (Y1) driving TRF7970A. The loop antenna occupies the left hand side of the PCB. Since this antenna is neither removable nor replaceable, it complies with FCC 15.203.