## SAA5968-05 sensor PCB used on MXT-700, MXD-700, MXT-1000 and MXD-1000 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.

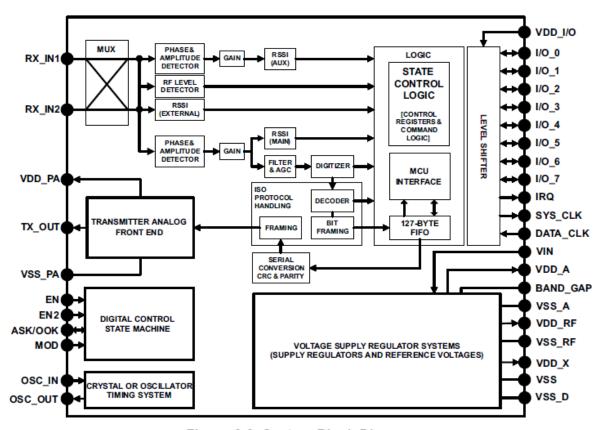
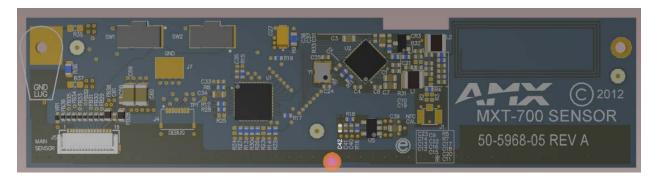


Figure 6-2. System Block Diagram

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 left of the chip is a 13.56 MHz crystal oscillator (Y1) driving TRF7970A. The loop antenna occupies the upper right hand corner of the PCB, just to the right of L2. Since this antenna is neither removable nor replaceable, it complies with FCC 15.203.