SAA5968-06 interface PCB and SAA5968-07 Sensor PCB used on MXD-430 panel

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.

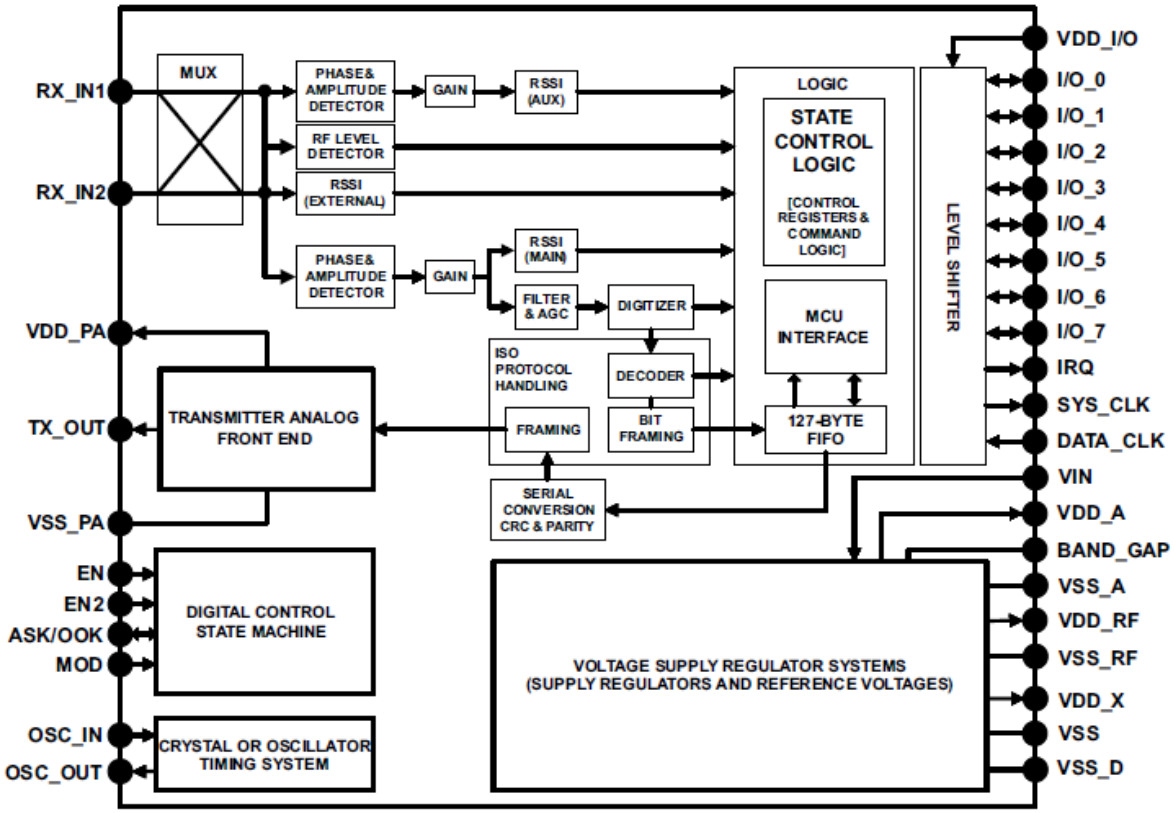
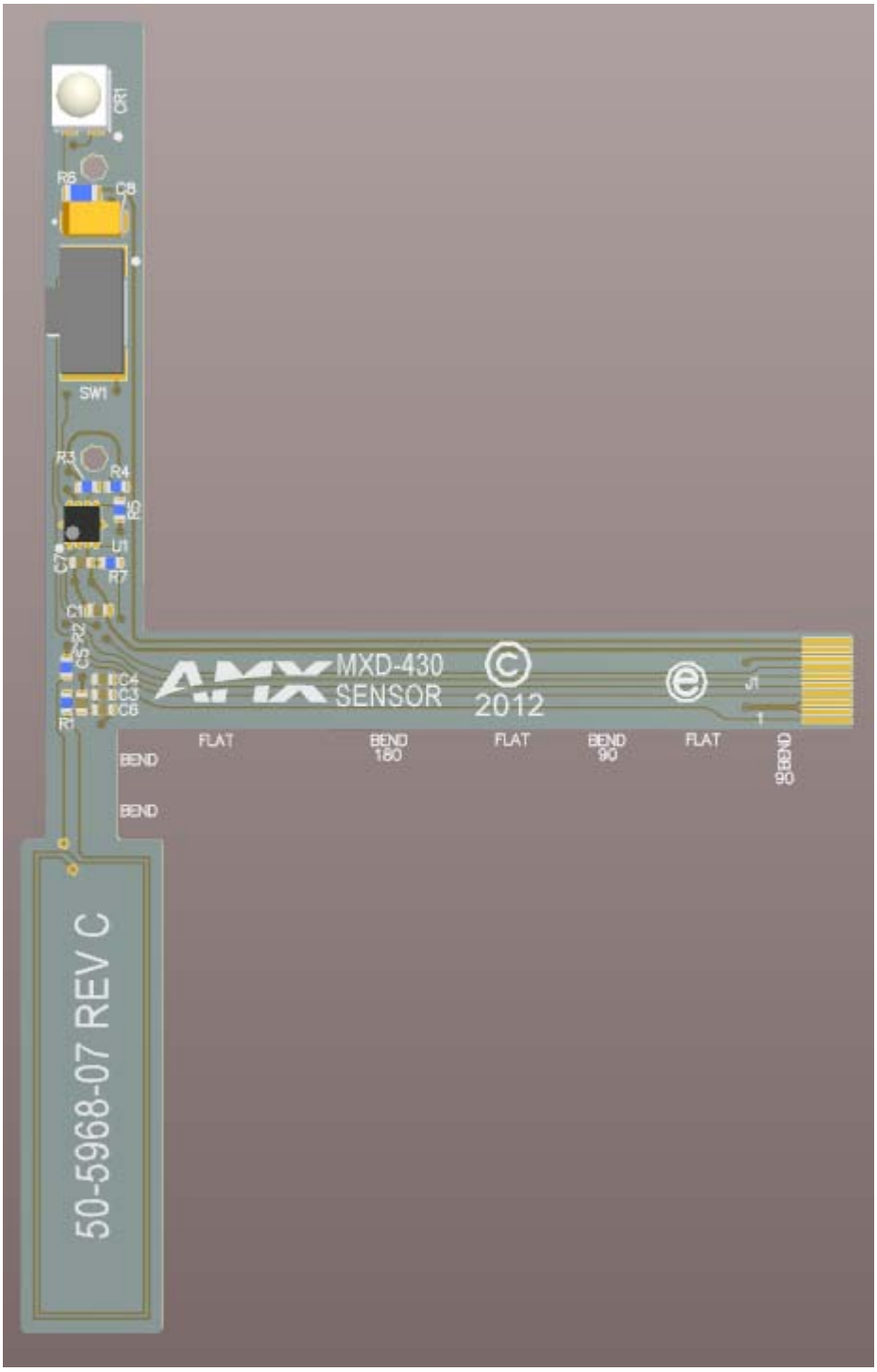


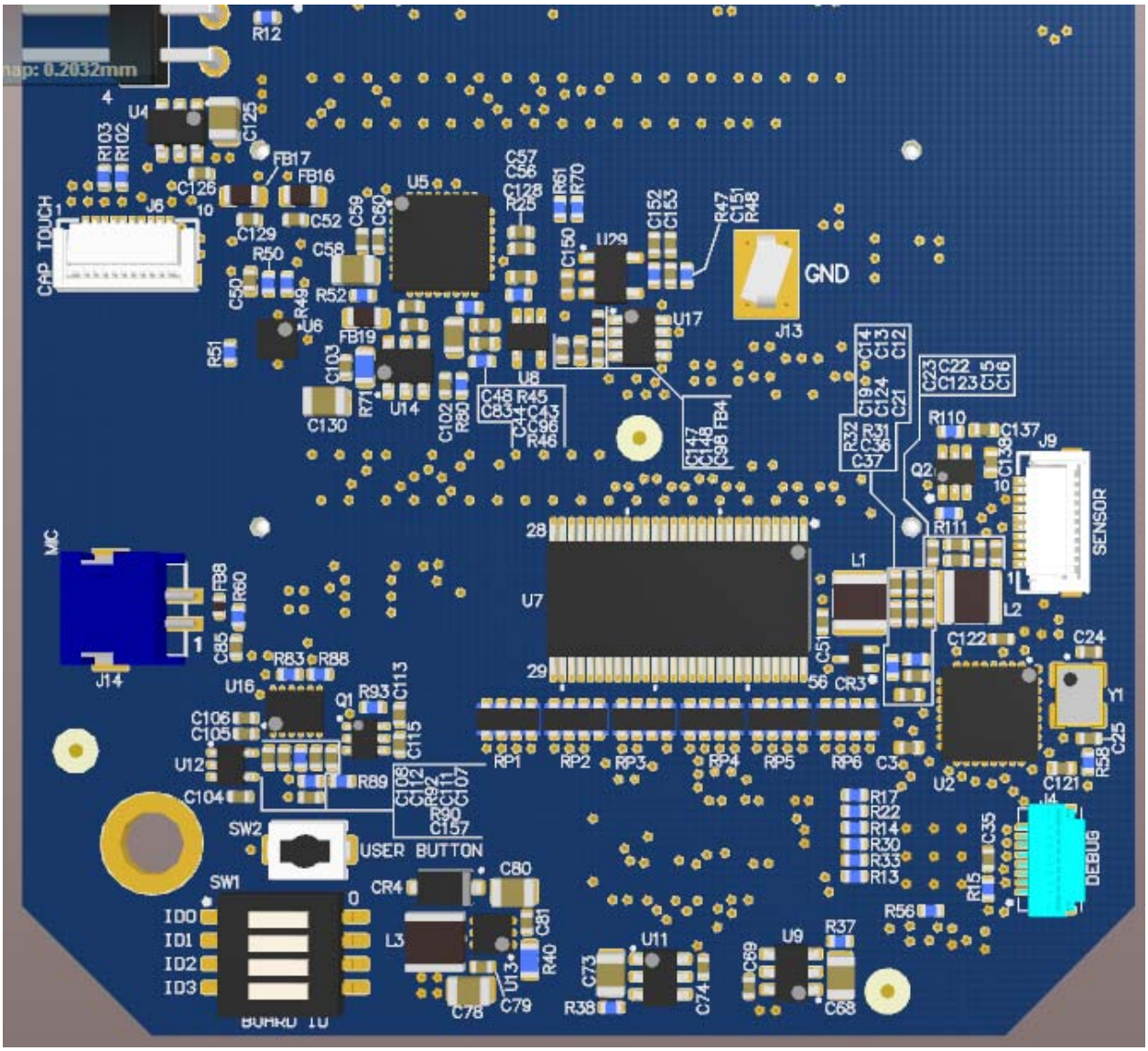
Figure 6-2. System Block Diagram

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:



The loop antenna occupies the lower part of the PCB. This flat flex circuit board connects to the interface board shown below via a 10 pin flat flex cable connector J9.



Below J9 is the transceiver chip TRF7970A (U2). To the right of the transceiver chip is the 13.56 MHz crystal oscillator (Y1) which drives U2. The antenna uses a non-standard flat flex connection and includes a matching network and filter in order to properly couple to the interface board. For this reason, the antenna is not user changeable and complies with FCC 15.203.