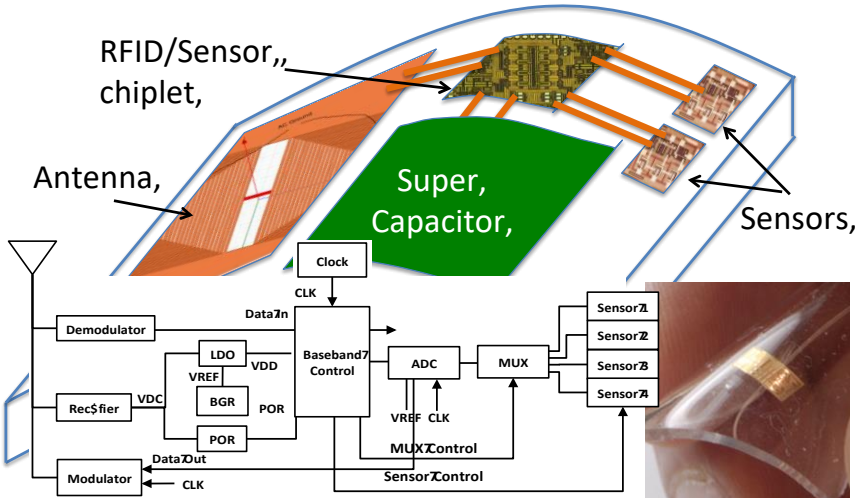
ULTRA FLEXIBLE RFID/SENSOR SYSTEMS FOR INVENTORY MONITORING

Purdue University and Raytheon IDS will develop flexible RFID / sensor tags that can record, store and transmit humidity and temperature data wirelessly for a period of two weeks. Ultra low power CMOS chips will be designed, thinned and integrated with antennas and energy storage elements on a flexible platform using a simple manufacturing process. A reader unit that can power up and communicate with the tags will also be developed. The developed flexible tags will be used for inventory monitoring and will be tested at both Purdue and Raytheon facilities under real environment.