

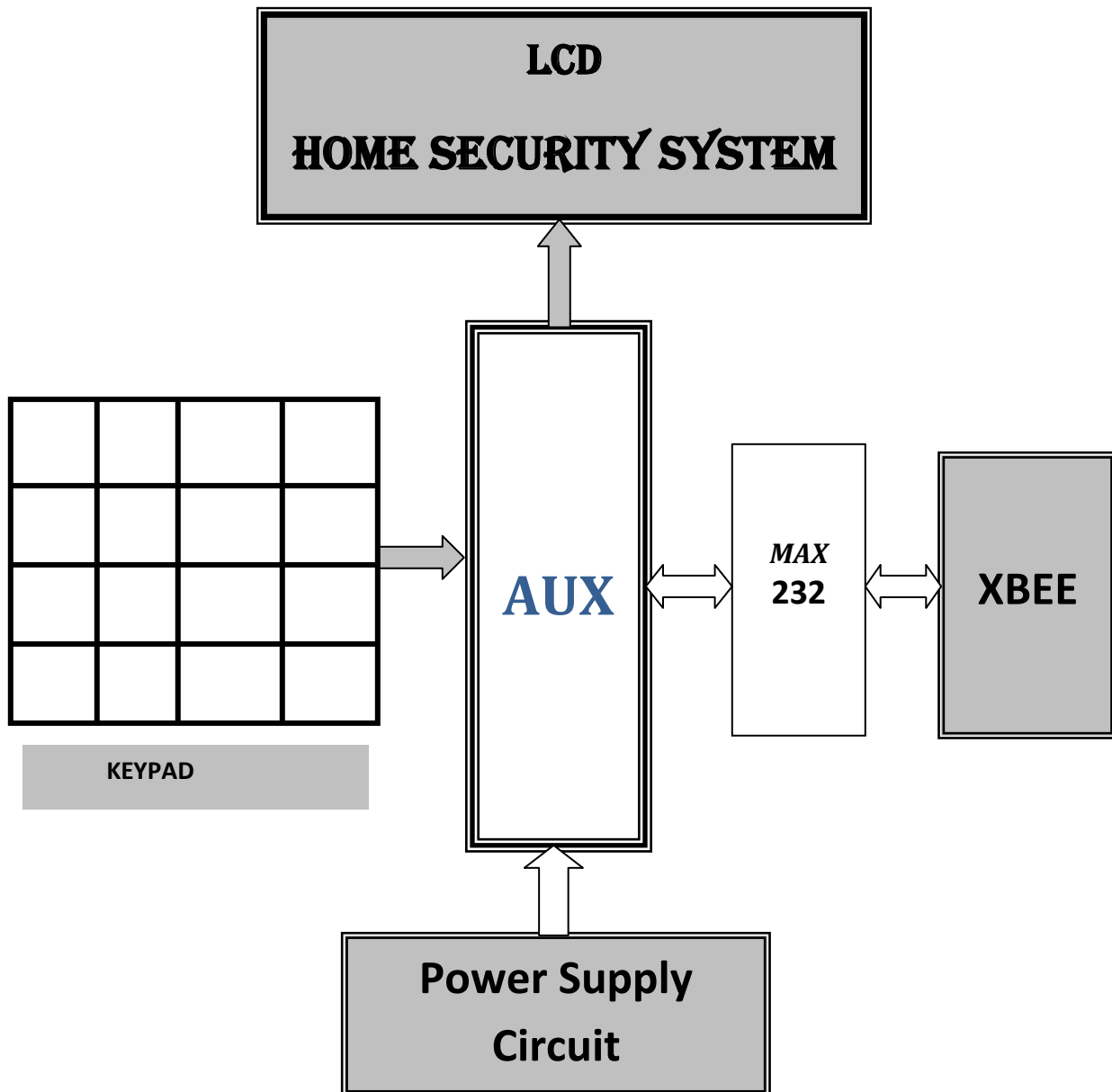
Mobile Embedded Systems for Home Care Applications

Abstract—

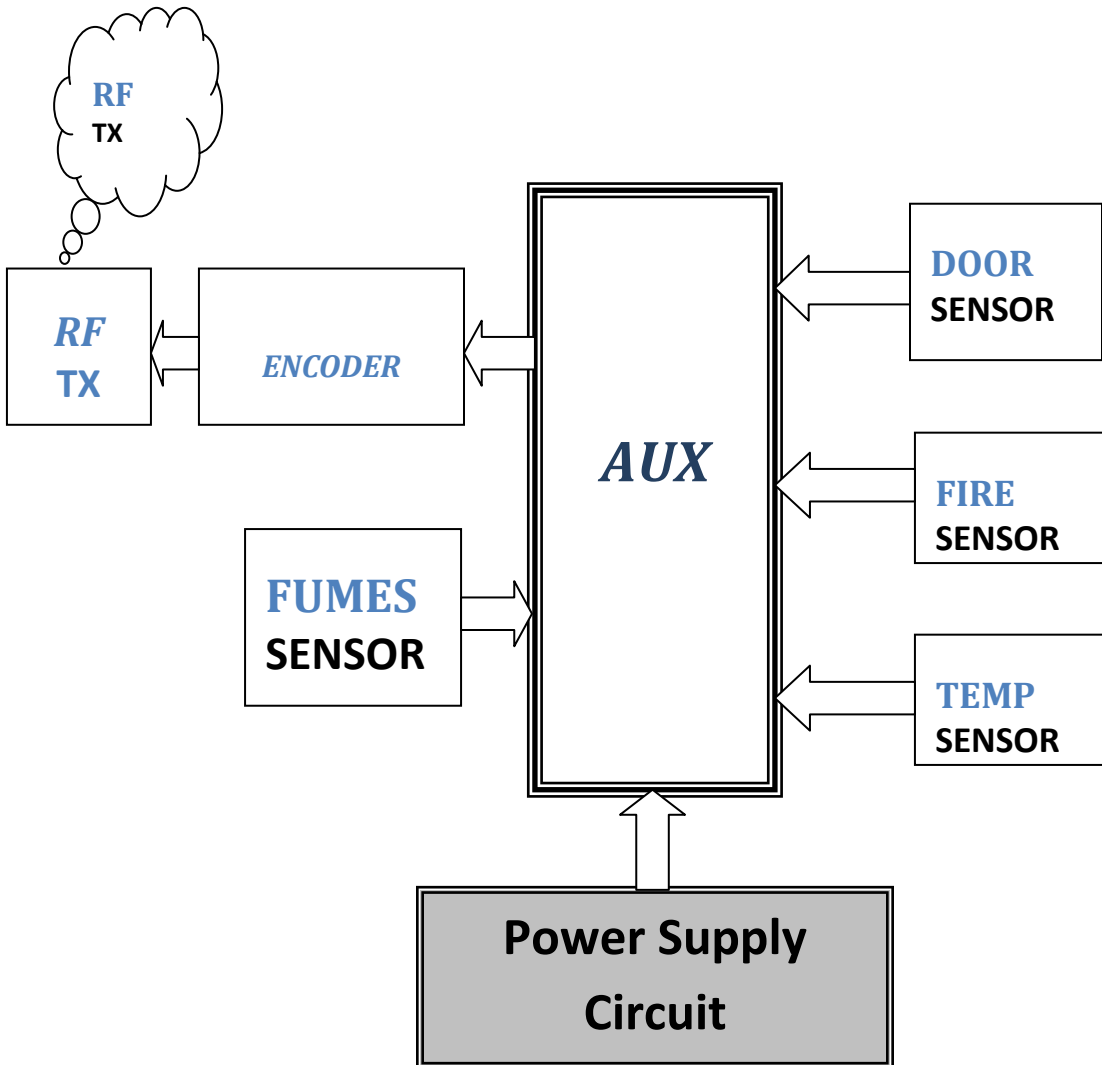
Applied telemetry is of growing importance in today's world. Specificity of Telemetric data put special requirements on real telemetric system. This project describes some of conclusions acquired in development of real telemetric System using off the shelf embedded hardware technology, namely Microcontrollers, FRAM memory and dedicated ZigBee chipsets. Described Telemetric system is partitioned into logical parts that communicate using Custom data protocols. Devices participating in telemetric system use ZigBee Networks as underlying structure for data communication.

The wireless security system is used to detect motion, Fire, Gas, doors and windows of home systems using wireless based communication. Sensors that detect intrusion, smoke, Fire and even the sound of a tornado can be integrated into alarm and home systems to provide a complete picture of what is going on inside and outside a home. Mobile communication and notification devices can be added to most security systems to ensure that everyone who should know there is a problem can be found and notified. Many systems can call several locations until the homeowner is found and enters a security code. More advanced systems offer the homeowner the ability get status through sms. what is happening inside the house in real time.

Master



Sensing unit



Appliance Control Circuit

