Main Loop Algorithm:

- void loop() Begin
- Read Sensors
- Store into Sensor Data Structure
- Data Waiting from Remote? — Yes / No
- New Automation? — Yes / No
- Store to EEPROM *Set Flag True*
- Update Automation Struct
- BT Active (STS)? — Yes / No
- Poll Freq. Delay
- Test EEPROM Flag — False / True
- Load EEPROM() *Set Flag True*
- Automation Set? — Yes / No
- Upload Data
- flush serial()
- Automation? — Yes / No
- Do Automation

For Power Usage

Poll Freq. Could be set to 0 via ISR set to monitor STS and PIR pins.

(attach interrupt to STS and PIR)

BluDaq Firmware V1.0b Block Diagram

Nov. 6th 2016