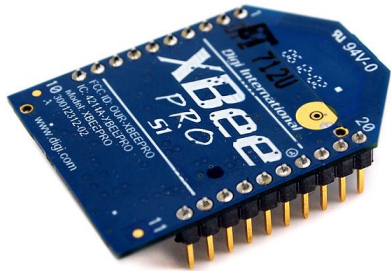


Networking

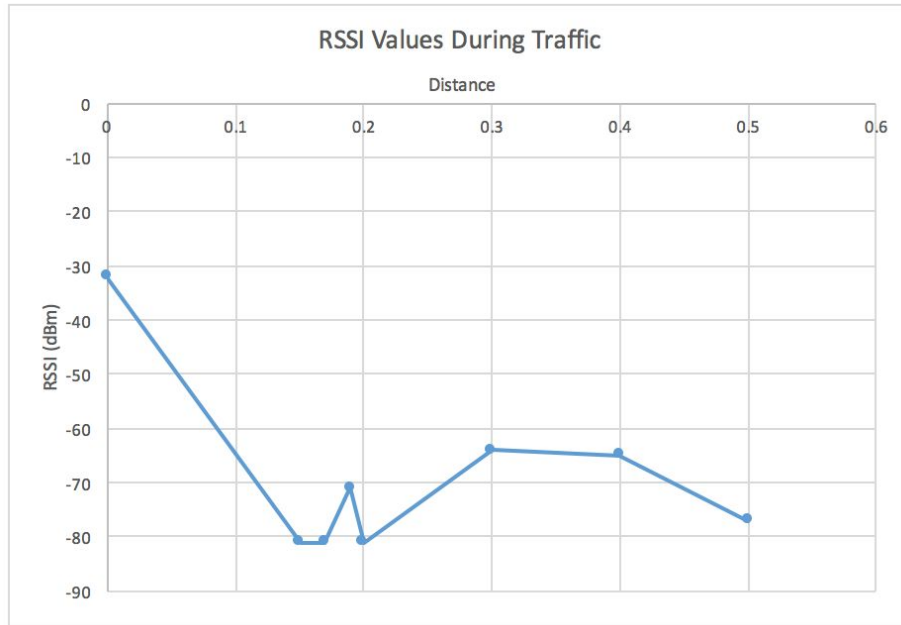
Critical Design Review



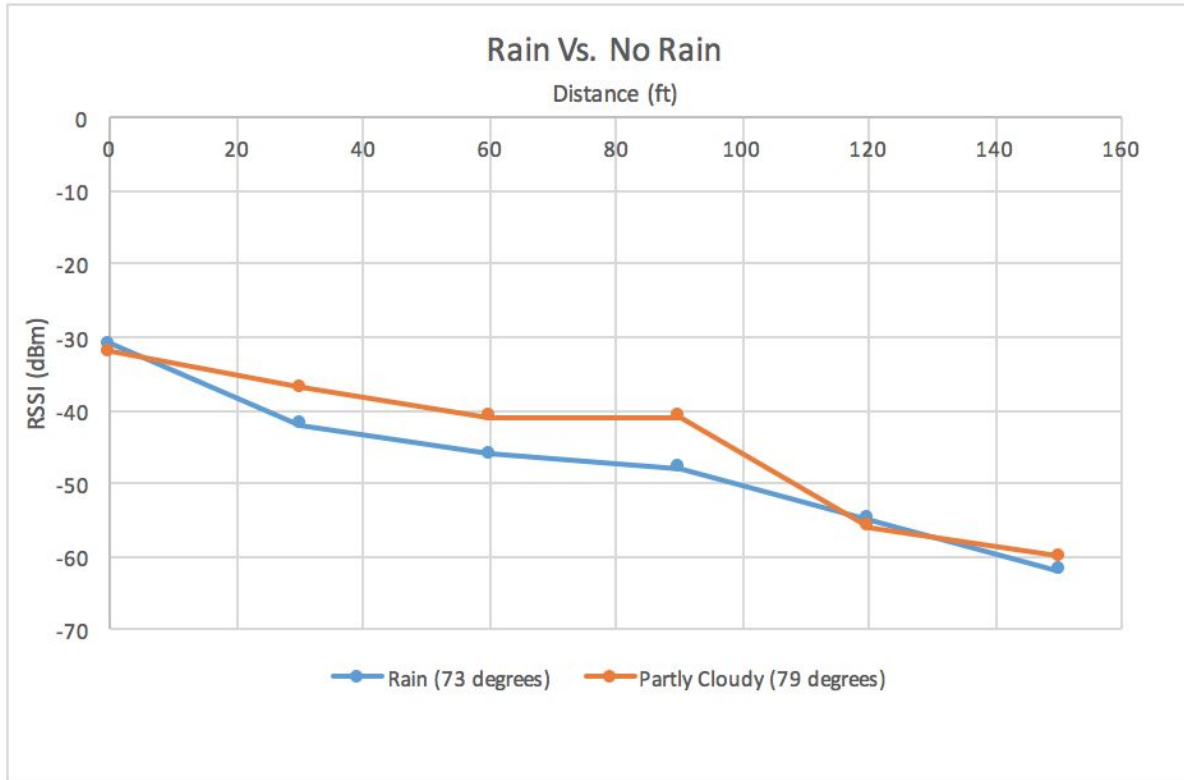
Ernesto Lorenzo
Demosthenes Kaeo Villa

Updates

- Typical RF Cell edge of a data WLAN (wireless local area network): -75 dBm
 - Cell edge: edge before you need another access point (AP) to match edges



Rain Vs. No Rain

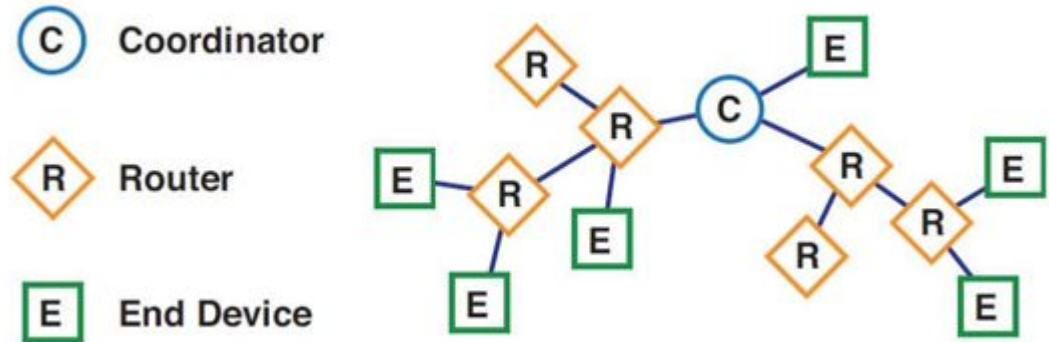


Updates

- Wireless band vs. traffic in airspace
 - XBee operating frequency band: 2.4 GHz
 - Avoid: metal, kitchens, continuous bends in concrete
 - Preferred range: line of sight
- RP-SMA Connector on different XBees
 - RSSI affected greatly

Setting up a Network

- Set destination address of each router to the serial address of the coordinator
- Set destination address of end device to serial address of corresponding router or coordinator
- Use the broadcast address, setting on the coordinator DH = 0x0 and DL = 0xFFFF.



Remaining tasks

- Set up a network
- Open field testing
- Finding different alternative

Issues

- Soldering
- Finding information

Thank You :)