RadioModule

Frequency: 2.4e9 Data Rate: 250000 RadioRangeRadius: 100 consumeTx | consumeRx: check radioModule file

runing power: check getTransmitPower under RadioModule_ZigBee file

RadioModule

ChannelNumber:

ZIGBEE_802_15_4: 16

LORA: 1

WiFI_802_11: 14

which means how many MessageEventList that this module can handle

Data Rate:

Which will give the duration of Sending and receiving

base on the function:

ratio1 = 1.0/'Sender'.'RadioModule'.'DataRate';

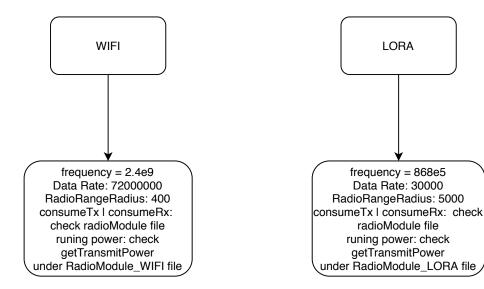
ratio2 = 1.0/'Receiver'.getUartDataRate(); (uartDataRate: 9600 as default)

durationOfSending = ratio1*(RadioPacketGenerator.packetLengthInBits(message,

type, tSensor.getStandard()))

durationOfUARTReceiving = ratio2*(message.length()*8); if the type is acking type

then the duration of receiving is 0



About ErrorBits Checks

The funciton of ErrorBits checker is used to find the error in the message.

The reson why have those method is because in the real world, the digit frequency should be convert to signal frequency. during the tramsit there must be some error generated for example: the signal frequency will be influenced by other frequencies. So this method is to check the message at receive end is no error.

For instance: LORA uses FEC to check (forward error correction) search on youtube

https://www.youtube.com/watch?v=0CLTy231Hsw