

## Activity 9.2: Transmitting LunaSat Data

## Task 1: Temperature Threshold Set-Up

- Use same LunaSat configuration from Activity 9.1
- ☑ Connect the Transmit LunaSat to the computer
- Open "RF\_Transmit\_Temperature" sketch and modify Team ID (line 5)
- Open the serial monitor for the Transmit LunaSat

What's the room temperature? 27.1 C

☑ Place your finger on the temperature sensor

What's the temperature now? 29.1 C

☑ Subtract three degrees and record the temperature as a threshold value

Threshold temperature: 28 C (in Celsius we use different value)]

## Task 2: Modify Temperature Threshold

- ☑ Enter your determined temperature threshold on line 20 of the sketch
- ✓ Verify and Re-upload the sketch
- Open the serial monitor for the Transmit LunaSat
- ☑ Confirm that it's not transmitting when observed temperature is beneath the threshold
- Place finger on the temperature sensor and observe the temperature change
- ☑ Confirm that "Transmitting" messages appear when temperature exceeds the threshold

## Task 3: Incorporate the Receive LunaSat

- Connect the Receive LunaSat to the computer. Keep the Transmit LunaSat plugged in. Do not close the "RF\_Transmit\_Temperature" sketch
- ☑ Launch the serial monitor with Receive LunaSat's port selected
- M Confirm no transmission is received
- ☑ Place finger on the Transmit LunaSat's temperature sensor

Is the Receive LunaSat receiving the correct temperature value from the Transmit LunaSat? Yes!!!