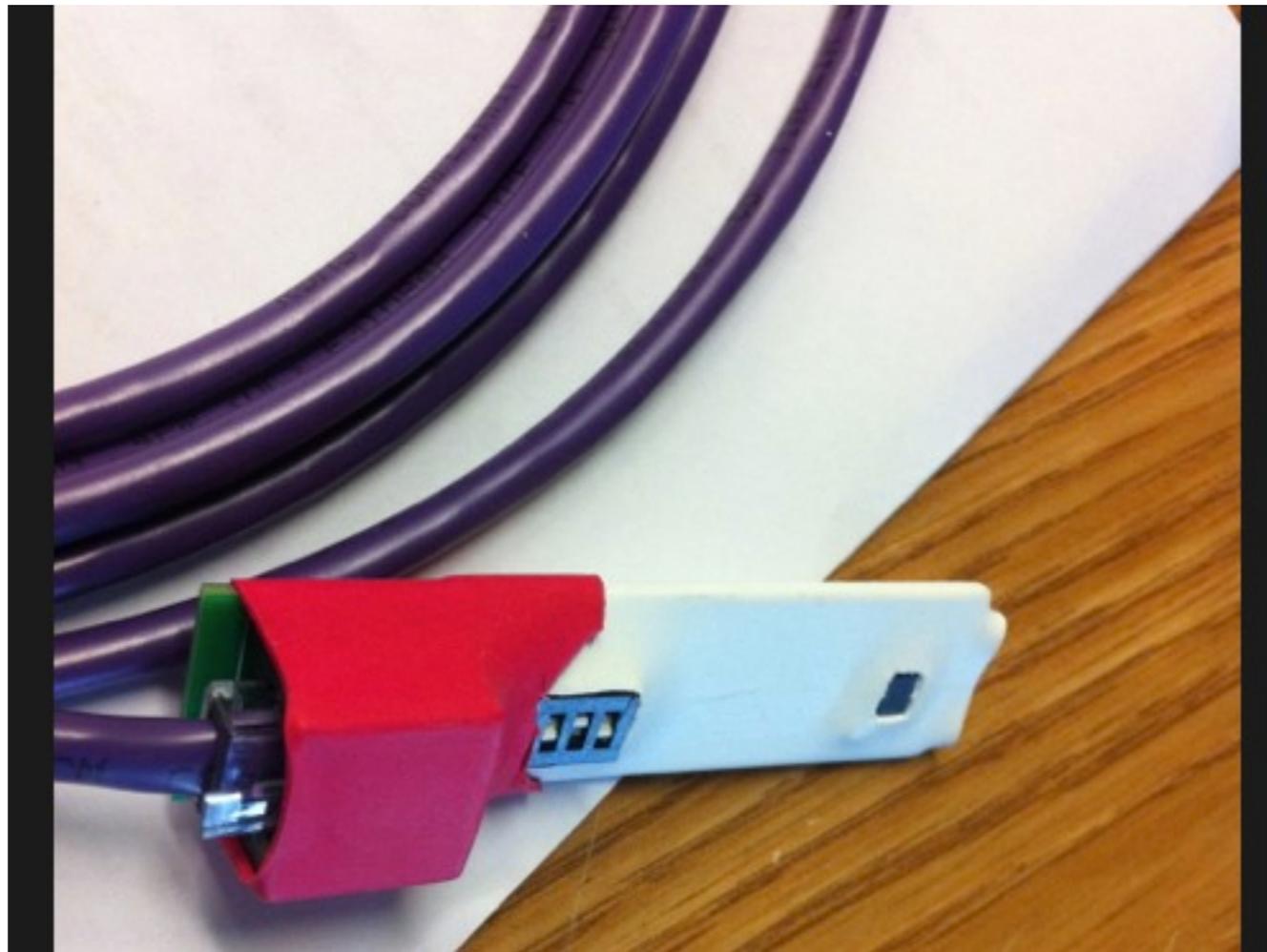

How to Prepare the Rack Temperature Sensors

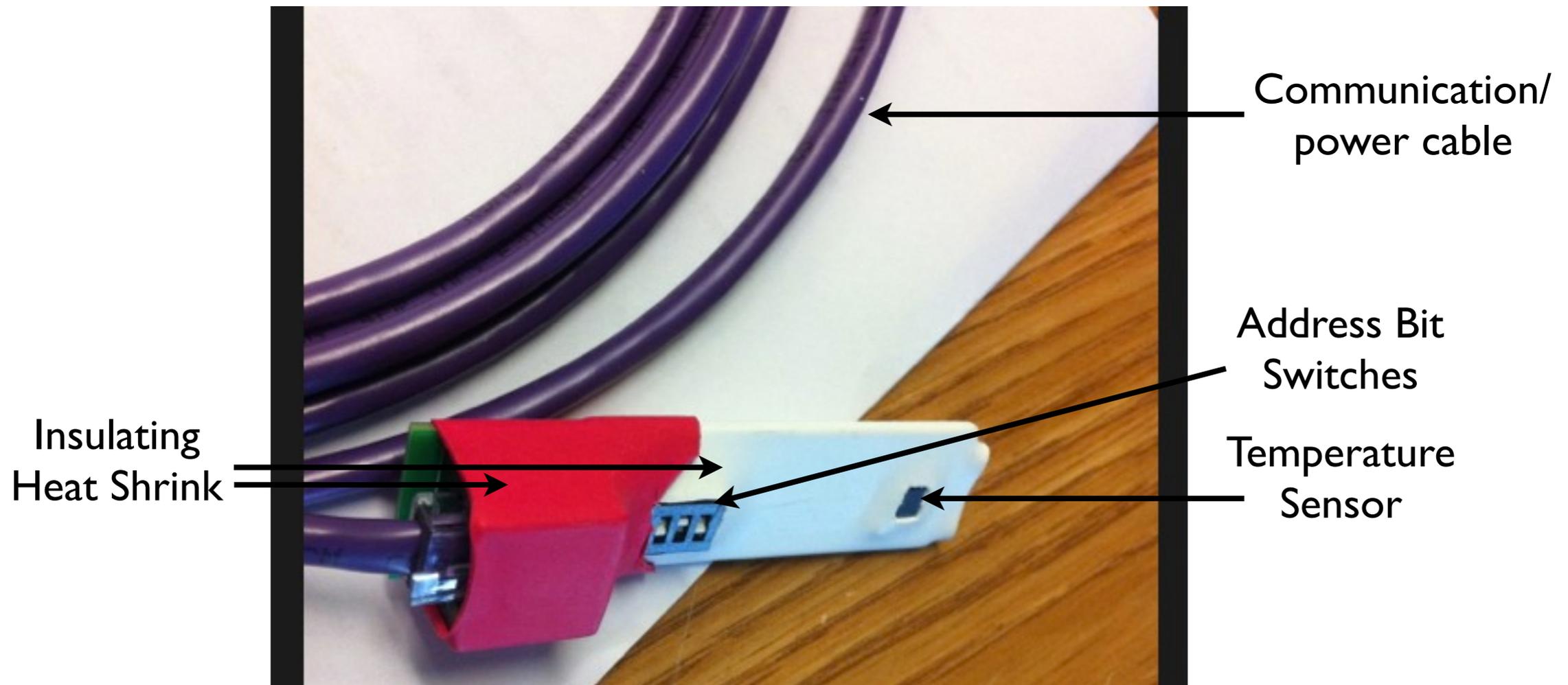
Bryce Littlejohn
University of Cincinnati





What are the temperature sensors for?

- Four temperature sensors are placed in each rack: top middle, bottom
- They measure temperature in that area, and report it to the slow control system
- Thermally isolated from surrounding support materials



Preparations Steps

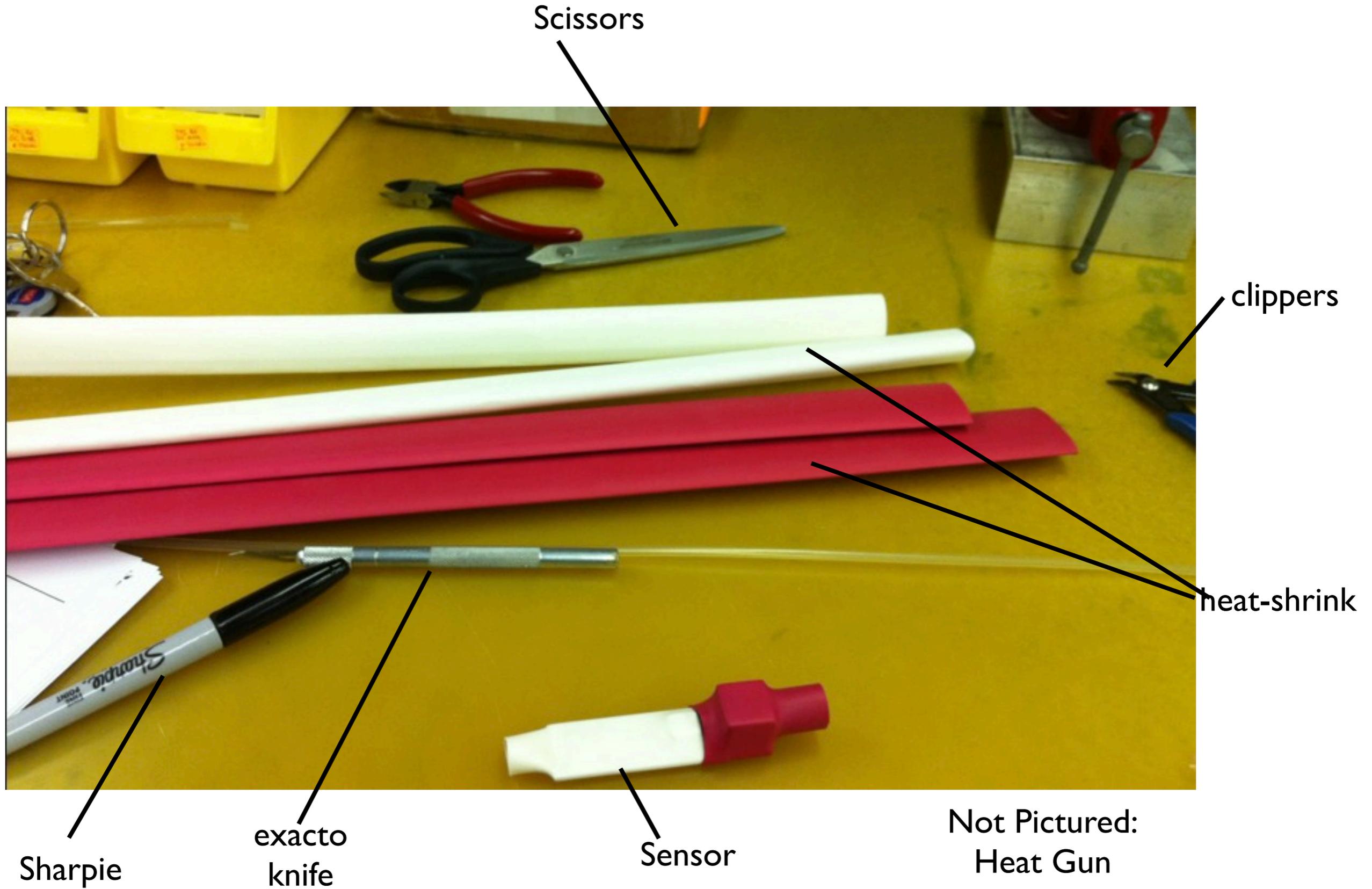


- Here are the general building steps:
 1. Heat-shrink the sensor
 2. Cut out shrink from address bit and sensor
 3. Set address bit
 4. Plug in ethernet cord

Pretty simple, right?

Rest of the talk will outline each of these steps

Materials



1: Heat-shrink sensor



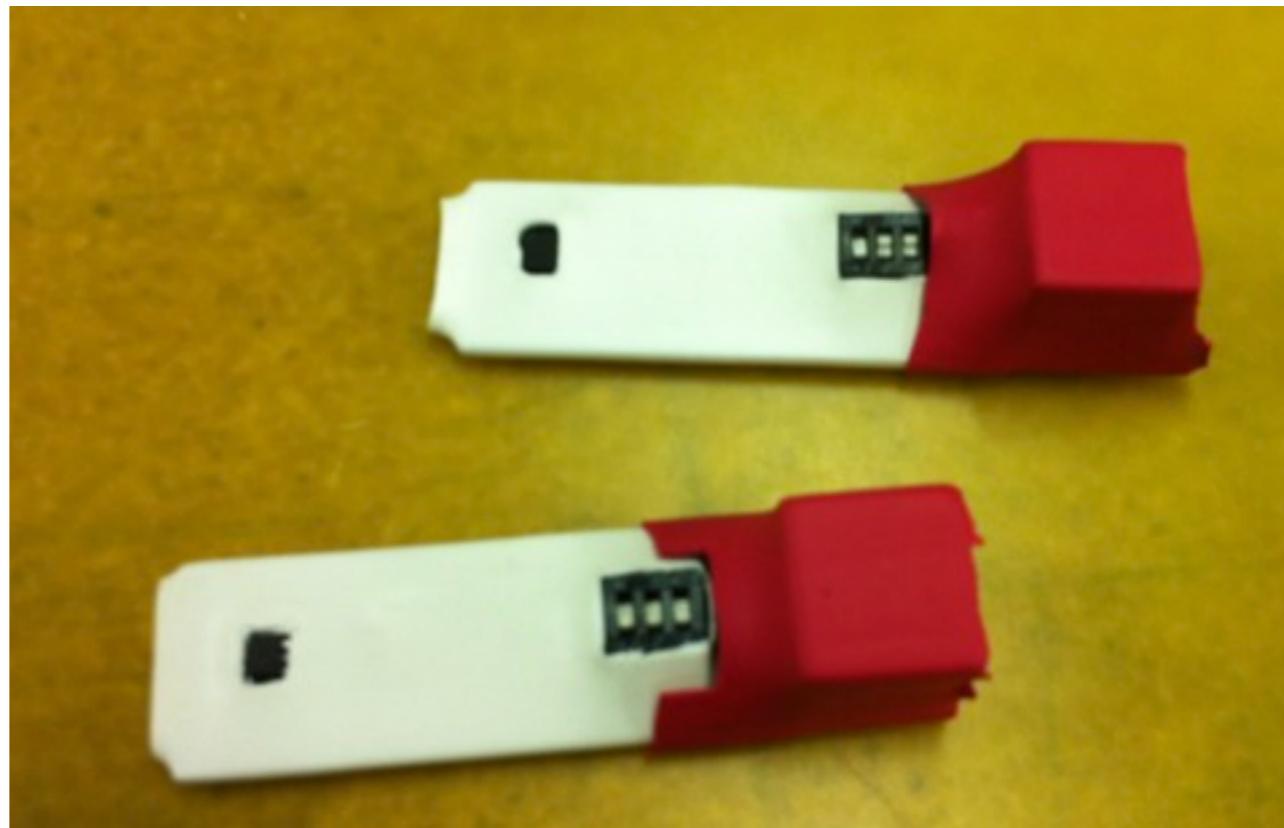
- Apply heat shrink:
 - White heat shrink goes on first, around long thin section; use heat gun to shrink plastic around board. Will be very hot!!
 - Next, apply red heat shrink over connector end. Try to keep red part completely over connector, but not covering the address switch too much.
- Clip back heat shrink where necessary
 - Use scissors to cut off excess white and red on ends
 - Use clippers to remove red insulation obstructing ethernet connection



2: Cut out some areas



- Use exacto knife and clippers to cut insulation from
 - Address switch: use exacto to repeatedly, delicately slice insulation. Avoid slicing the underlying plastic of the switch as much as possible. Clippers may also help in removing this plastic. Also cut red insulation if necessary
 - Sensor: even more delicately slice out white insulation. Try to avoid cutting sensor as much as possible.



3: Set Address Bits

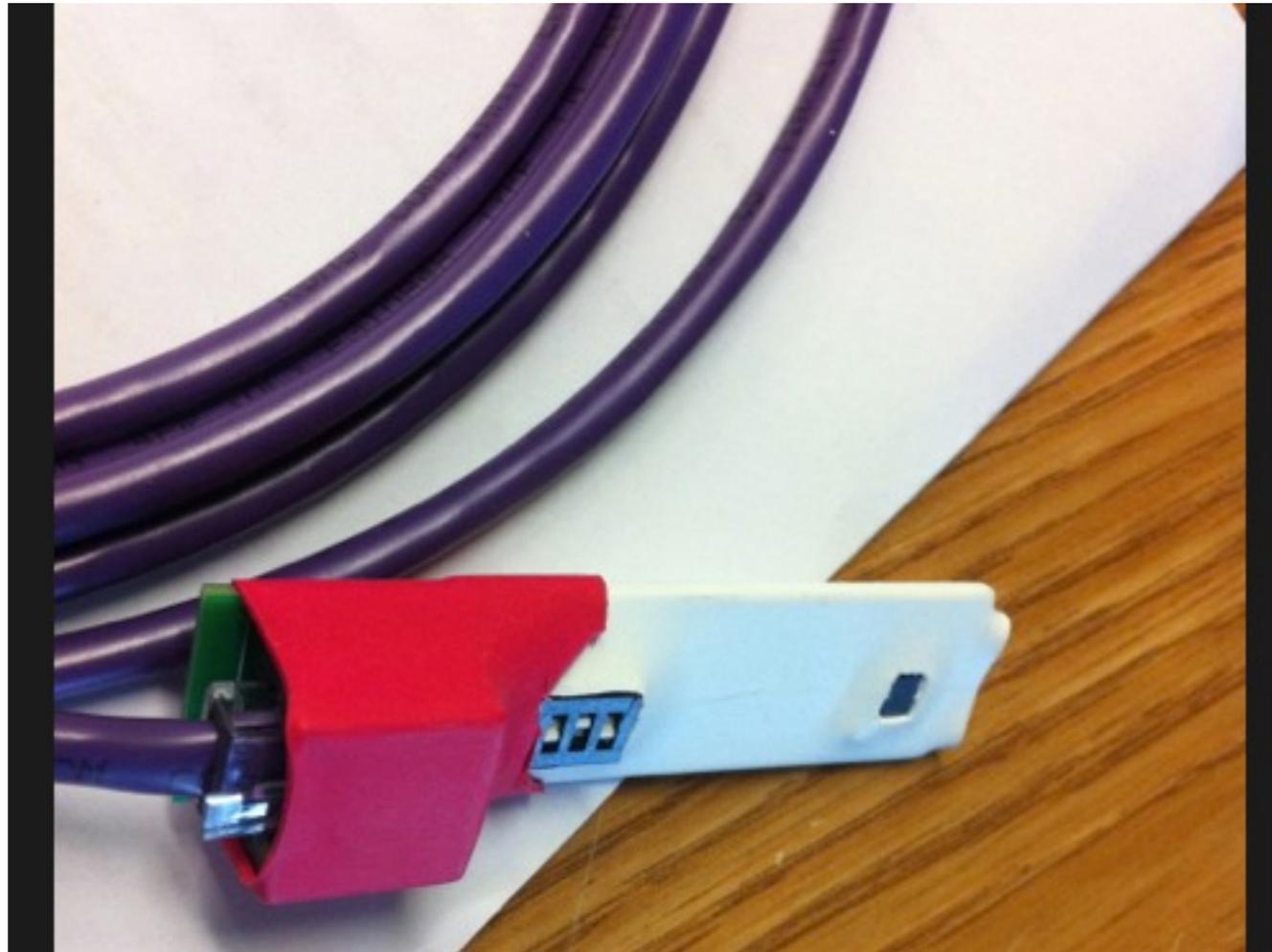


- Don't do this step; will do this later.
- Move to next step if you read this version of this talk.

4: Attach ethernet cable



- Attach purple ethernet cable. Cables are located in high-bay cabinets.



Testing



- Test temperature sensor as defined in DocDB 2562
- Number back-side of sensor starting with '1' and counting up

Done!

