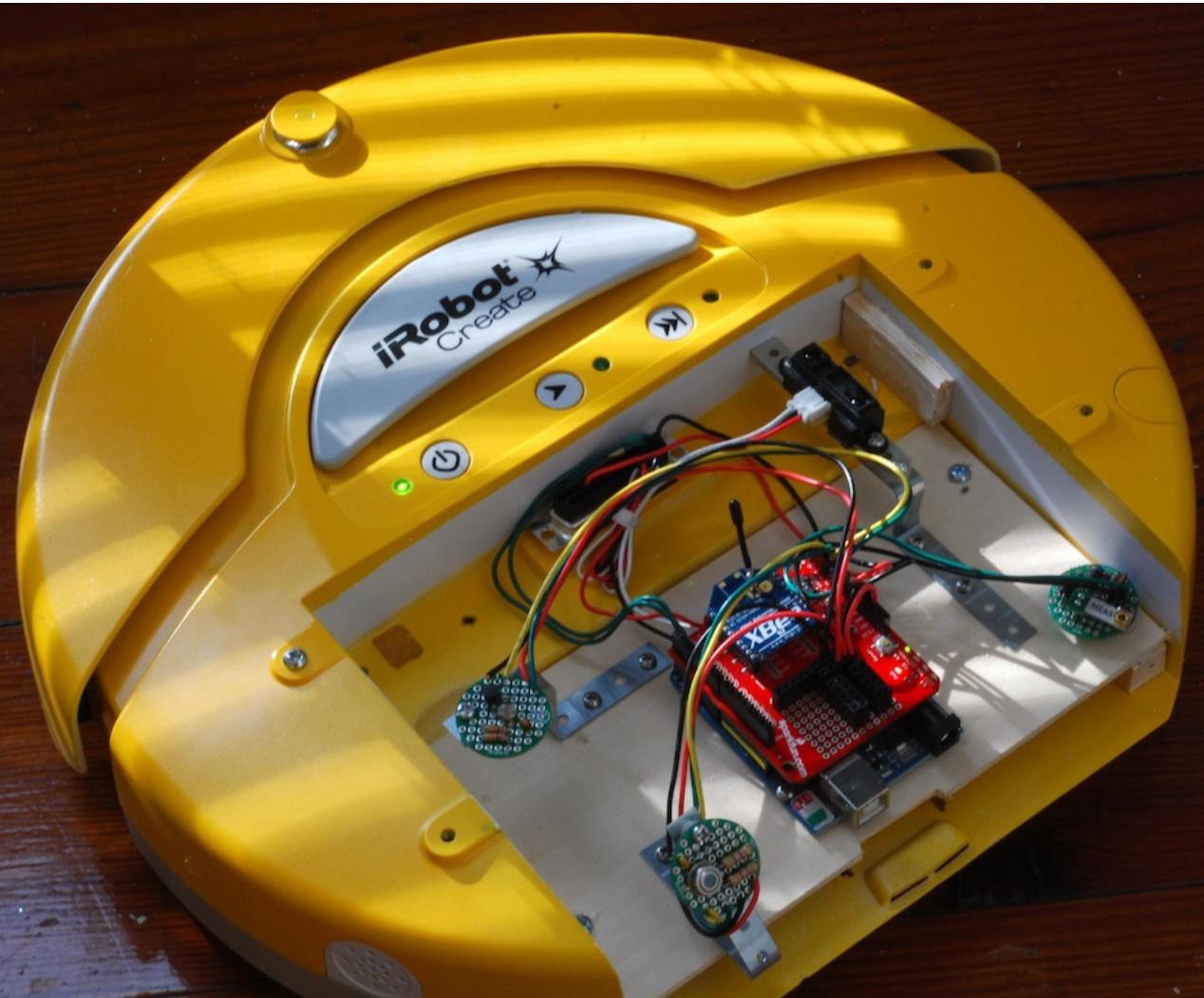


Katie Family of Household Explorer Robots



design notes

Katie Family of Household Explorer Robots

What is "a Katie"?

Household companion

Phone charger and caddy

Children's thermometer

Thermostat

A floor camera (look under couches ...etc)

Collect images for doing repairs or cleaning

Nightlight

Alarm clock

Egg timer

Security guard

Learning assistant

Temperature mapping

Remote parent and family participation

Data scrapbooking

Preschool and daycare activities

An idea generator

Communications device

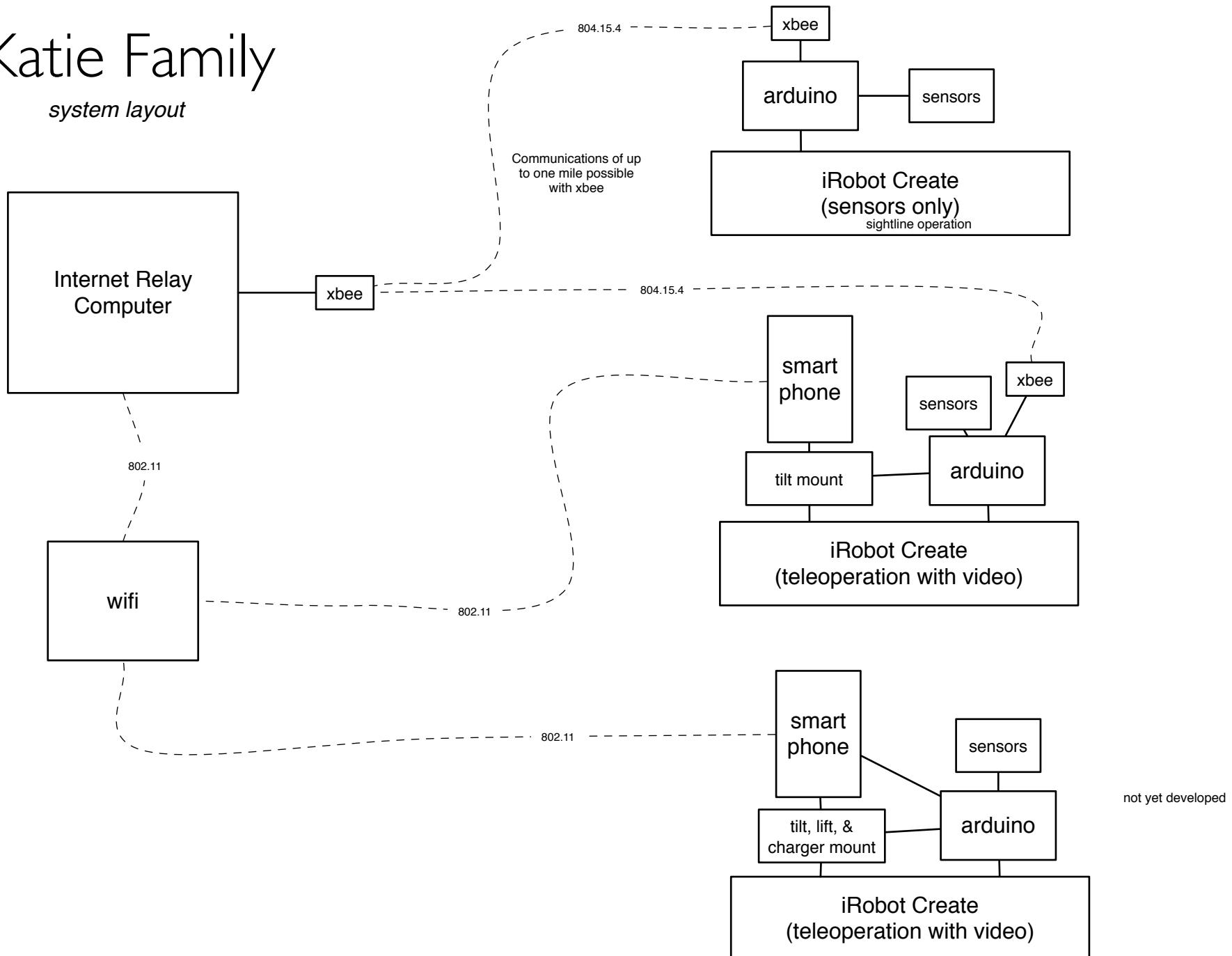
Teleoperation by a social network

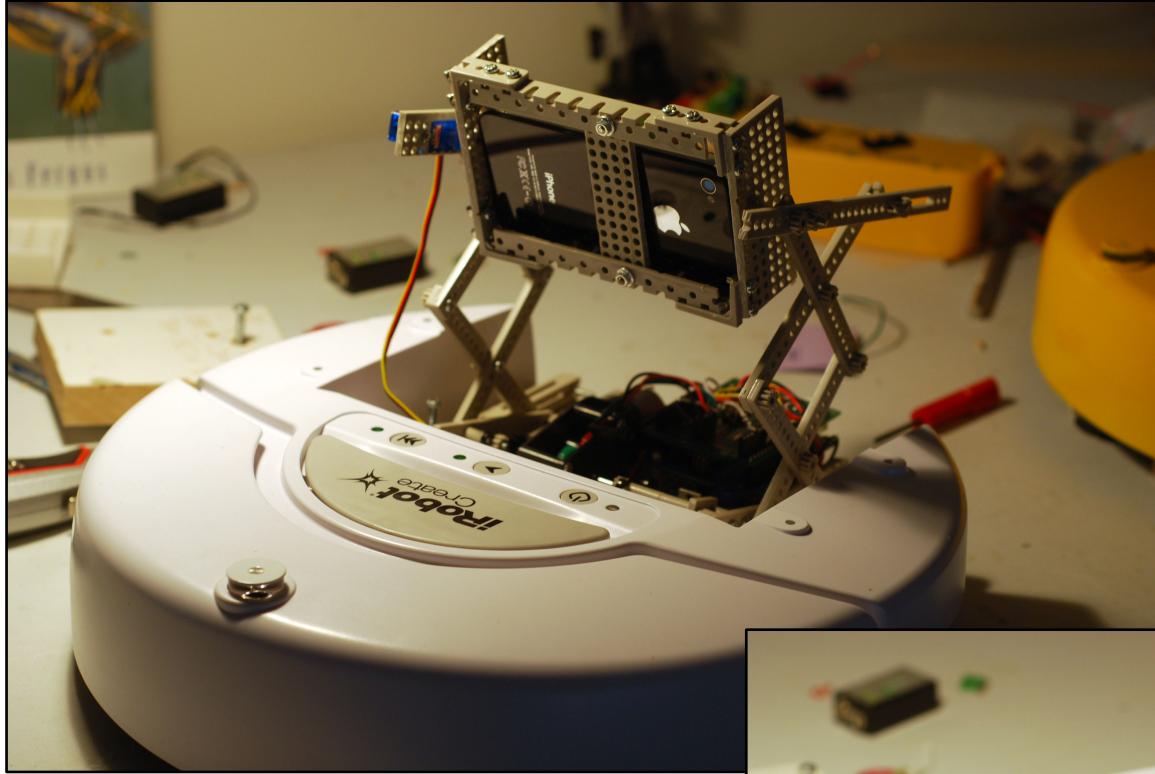
Build 3d models with others (such as with modeling environments Minecraft)

Collaborate on interior design projects (where to put shelves... what shelves?)

Katie Family

system layout





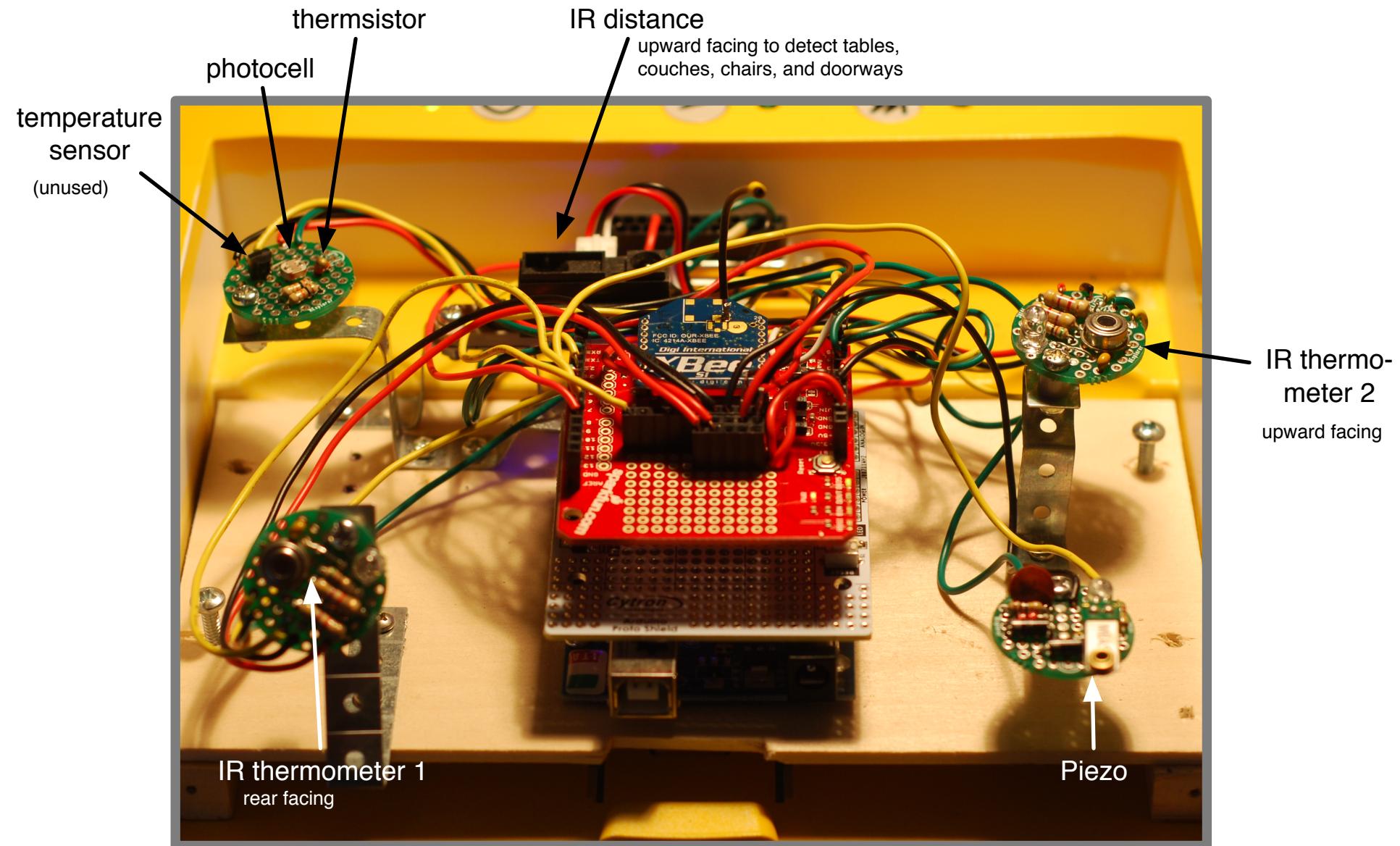
Many design challenges

A smart phone lift and tilt mount plus charger.

Retain size and weight of
Create to maximize mobility
in physically tight or socially
constrained indoor spaces.

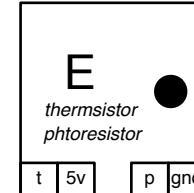
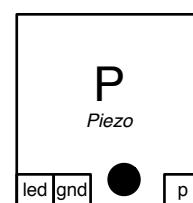
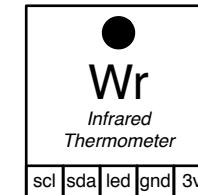
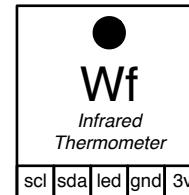
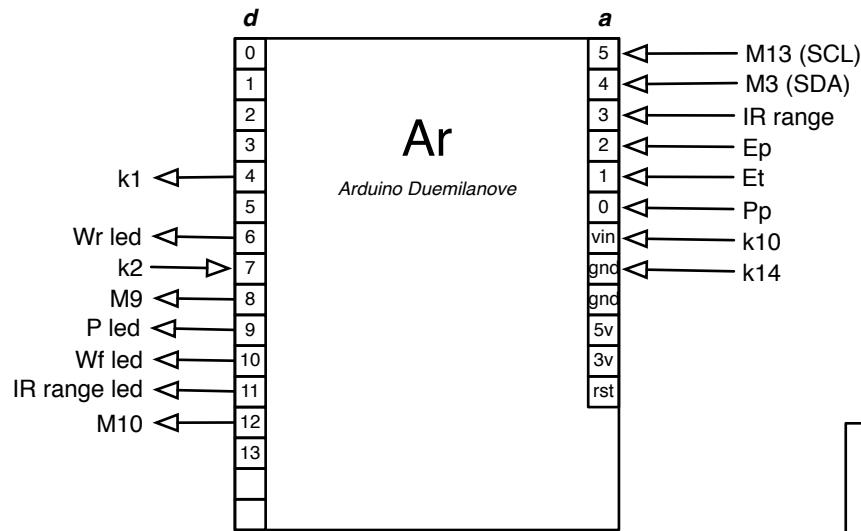
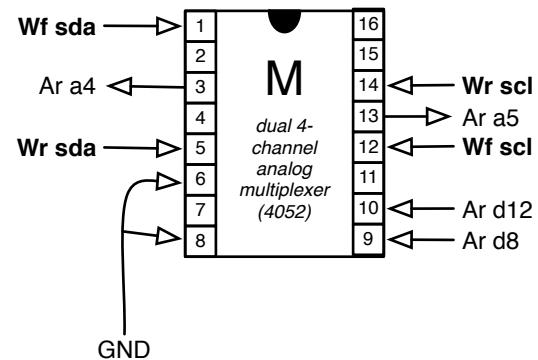
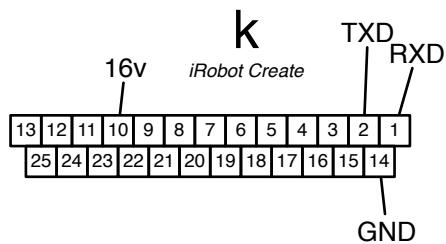


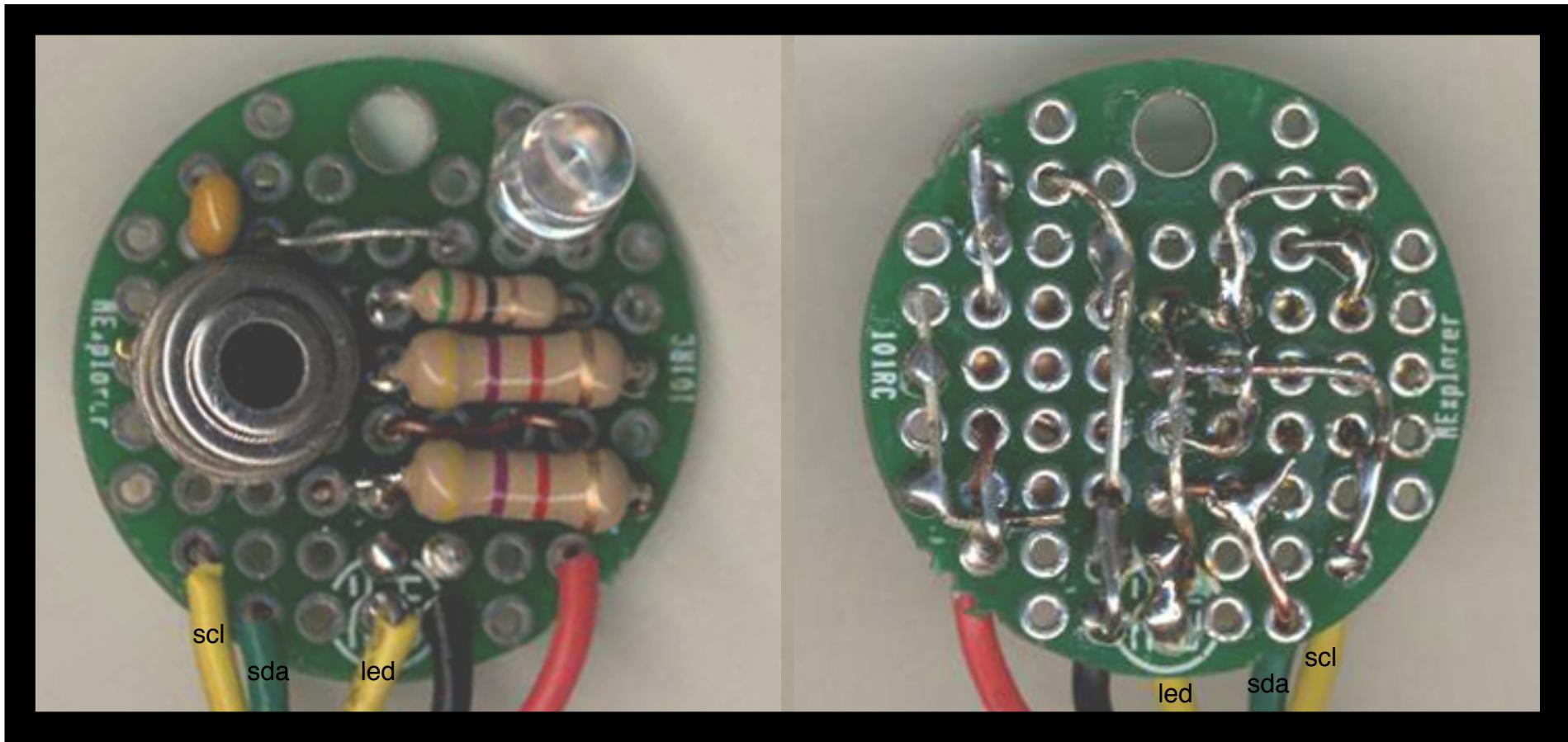
Kate Katie Arduino Sensors Array - Design 2



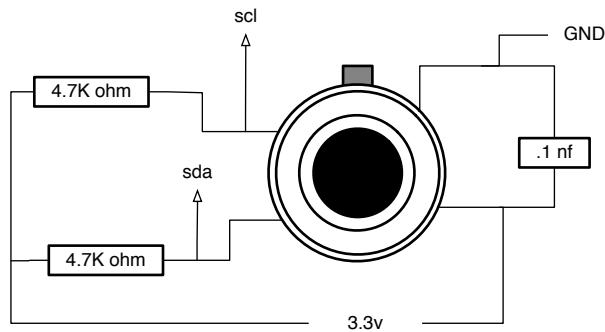
Kate Katie

pin layout

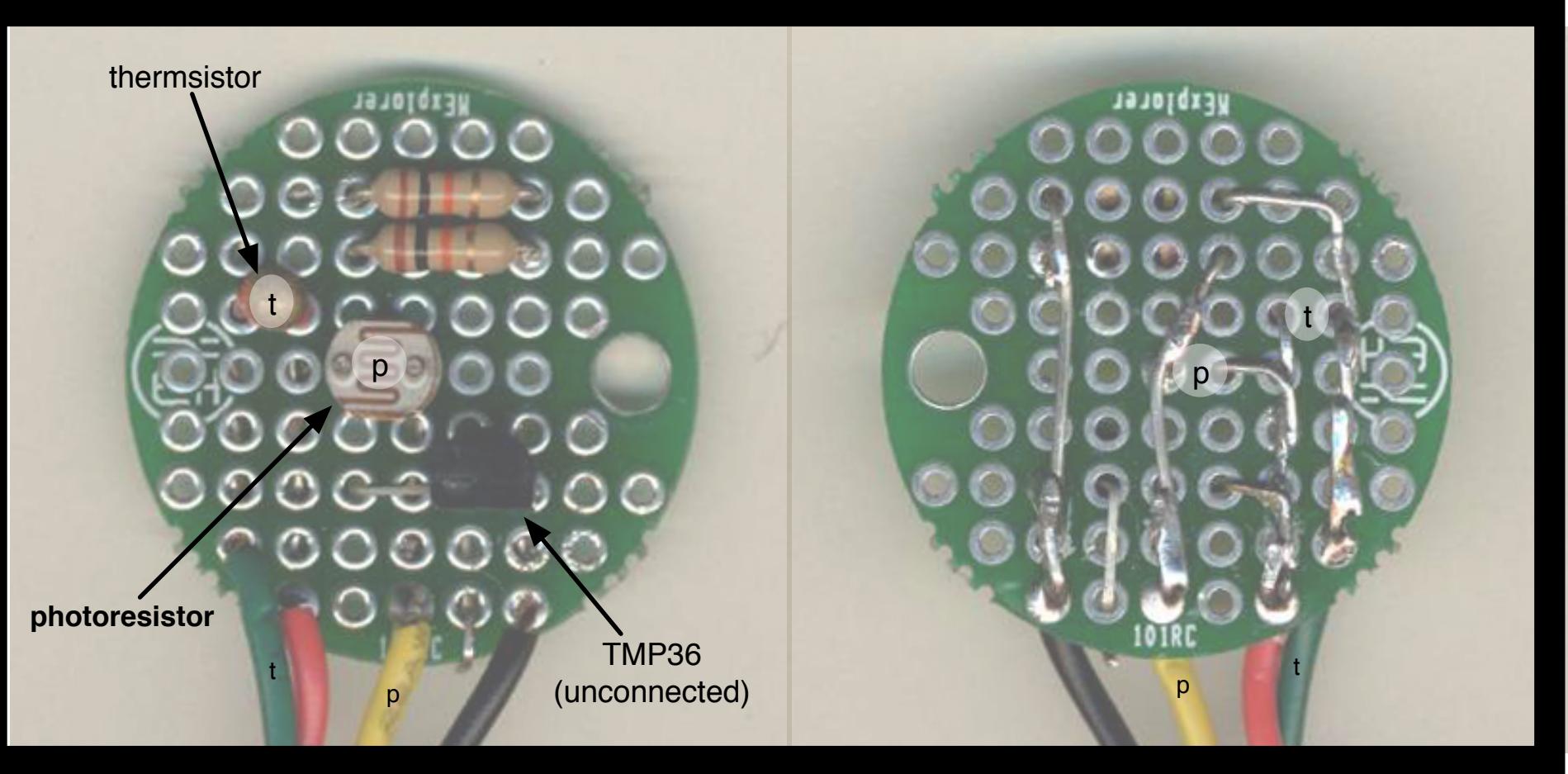




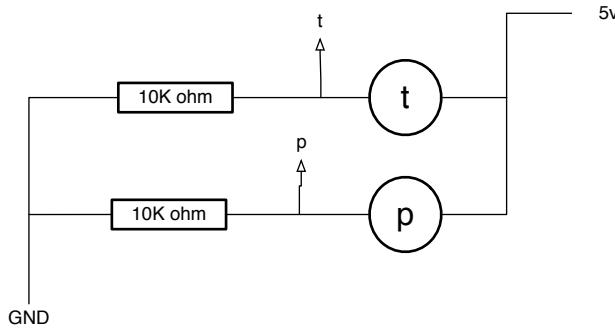
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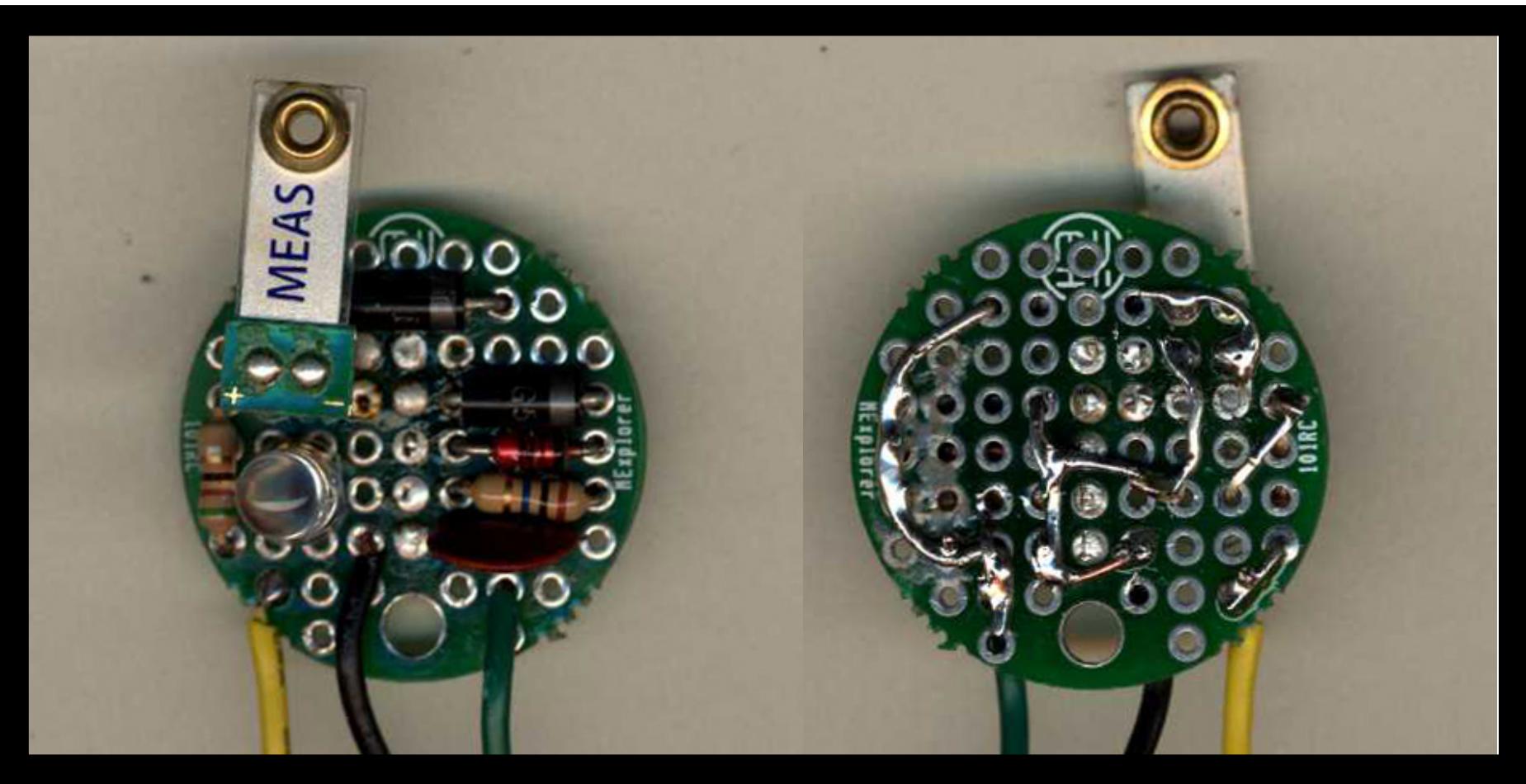
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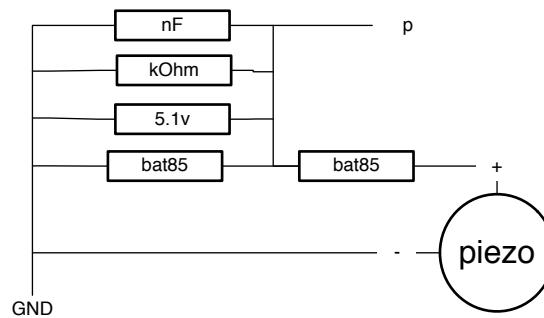
E



Notes:
Board has plenty of room
for another component.



P



Notes:

- This piezo circuit does not work as well as the one built from recommended 5v zener and schottky diodes.
- For this particular circuit I used one of the dirtier piezos on a reused board since I was unsure of how well components just outside of spec would work.