



What Does It Do?

Our device allows users to send distress text messages with the touch of a button. This makes it possible for those with disabilities living at home to easily reach the help they need.

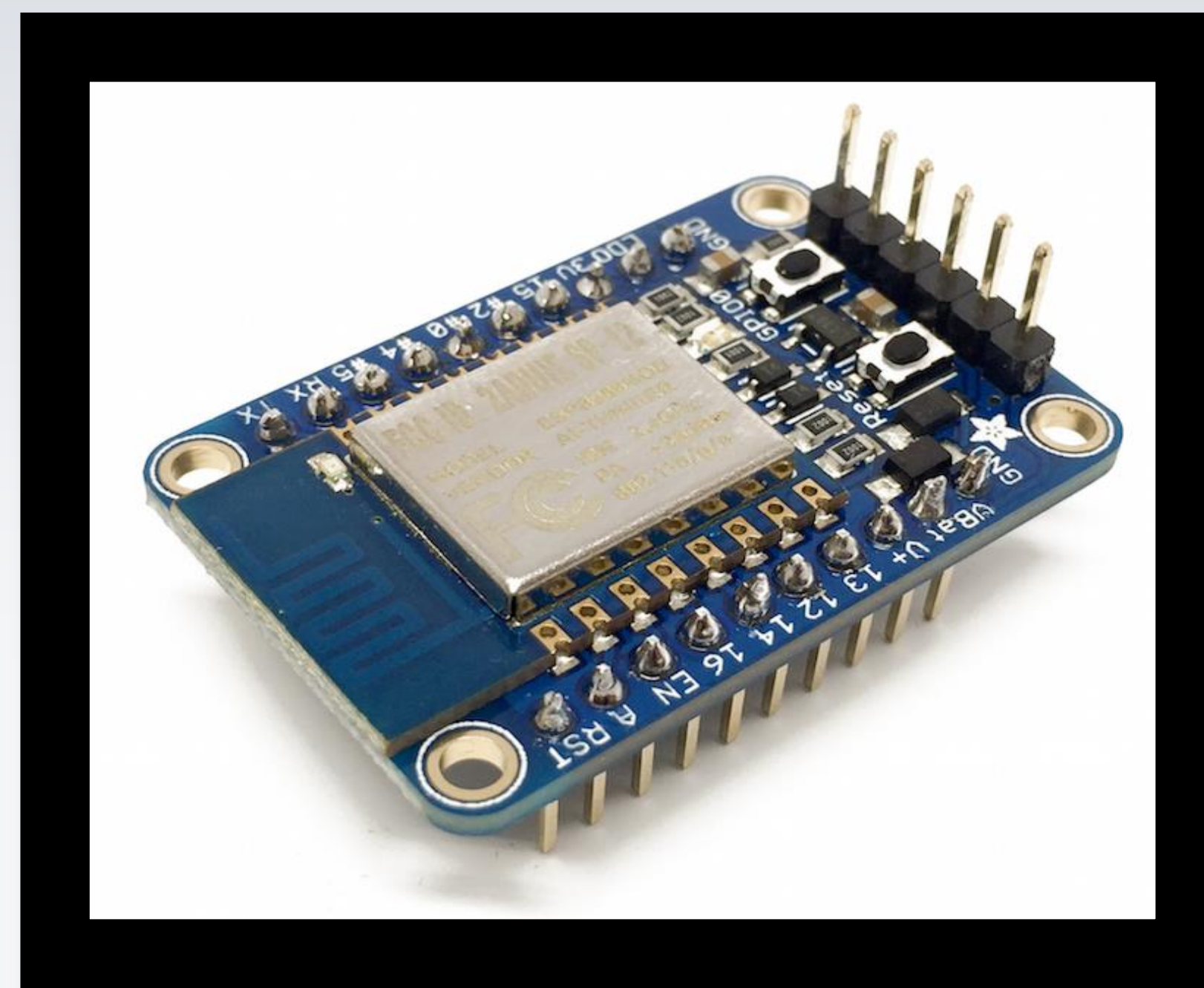
Goals

- Create the most low cost design
- Simplify the setup process of our design as much as possible
- Develop a button that is easily pressed, but not accidentally triggered
- Ensure the device does not interfere with medical equipment
- Design a rigid and unbreakable casing for the device
- Create a low profile and comfortable device
- Low power usage

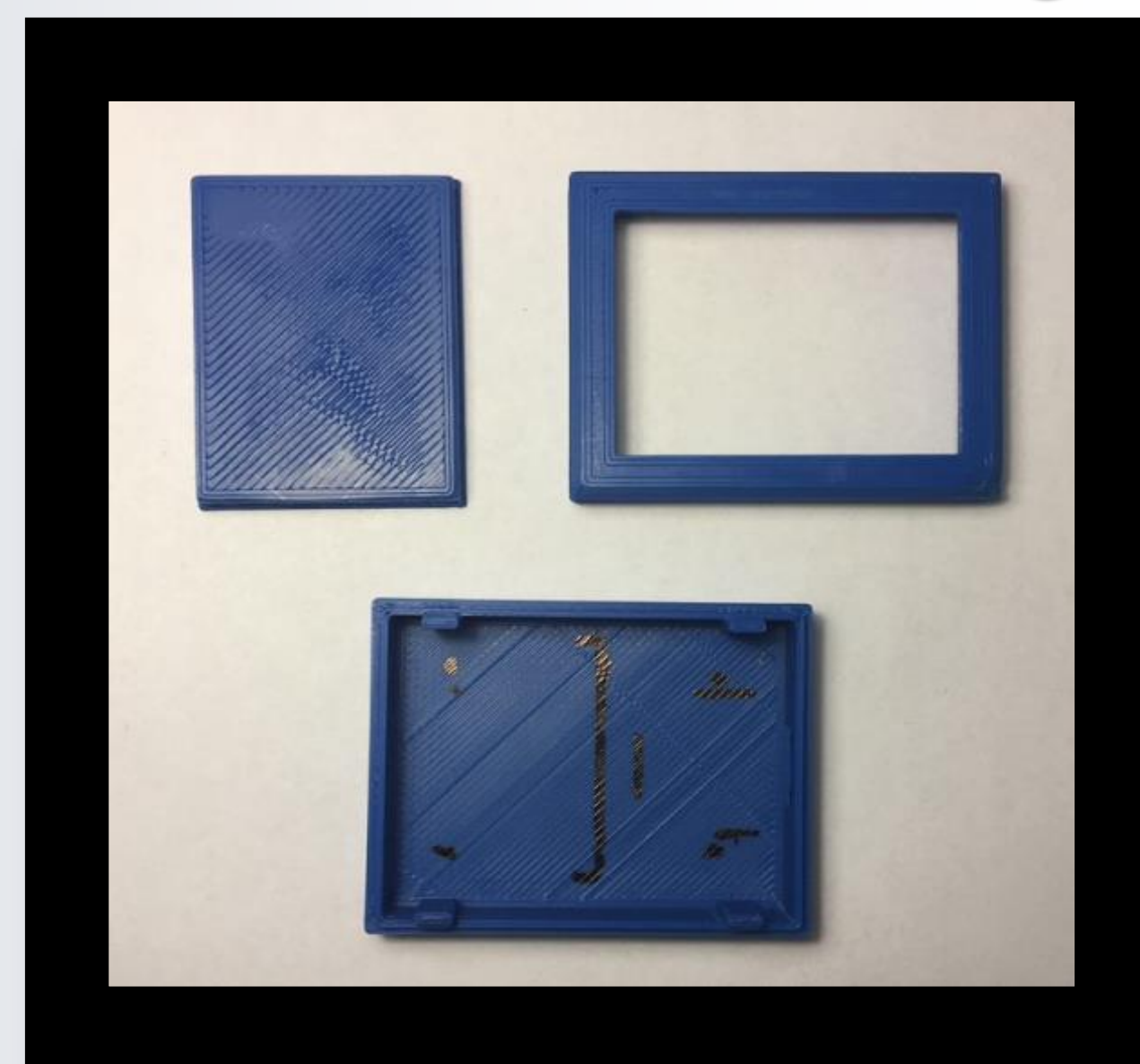
ESC 497 Multidisciplinary Design
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Our Device

HUZZAH ESP8266 Breakout



ABS Plastic Casing



3.7V Lipo Battery



Wireless Home Wi-Fi Alert Device



Features

- Three different messages can be sent using the single button
- Messages are sent using the GroupMe messaging app
- Device automatically powers off after sending a message
- Device can be removed from wristwatch casing for easy charging
- A fraction of the cost compared to competing devices
- Able to be mounted to beds or bedsheets

Conclusions

The device we created accomplished our initial goals, but was not as feature complete as we had hoped. Additional time on the design would have allowed us to add LEDs for power level indication, and create a more low profile design. We believe our device is a stepping stone for AAC, and can be used as a resource for future capstone projects.