

Pivot

A motion based computer controller

6.111 Final Project
Nestor Franco and Andrew Kurtz

The Living Room



User Interfaces



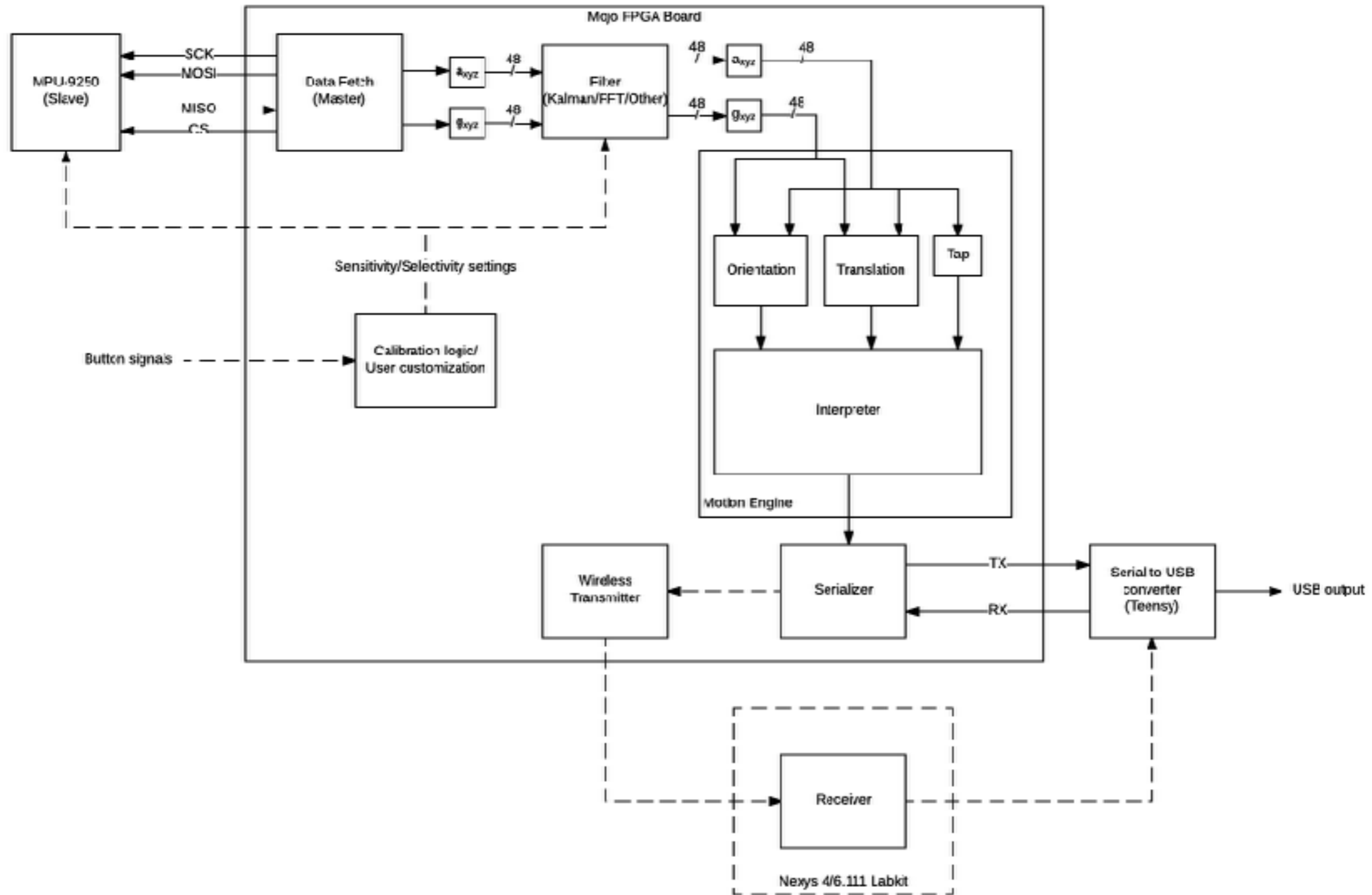
A Bad Solution



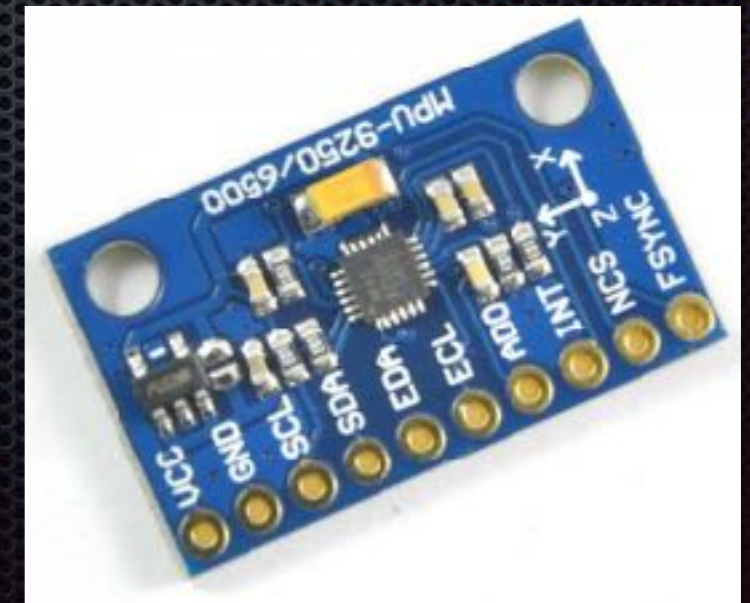
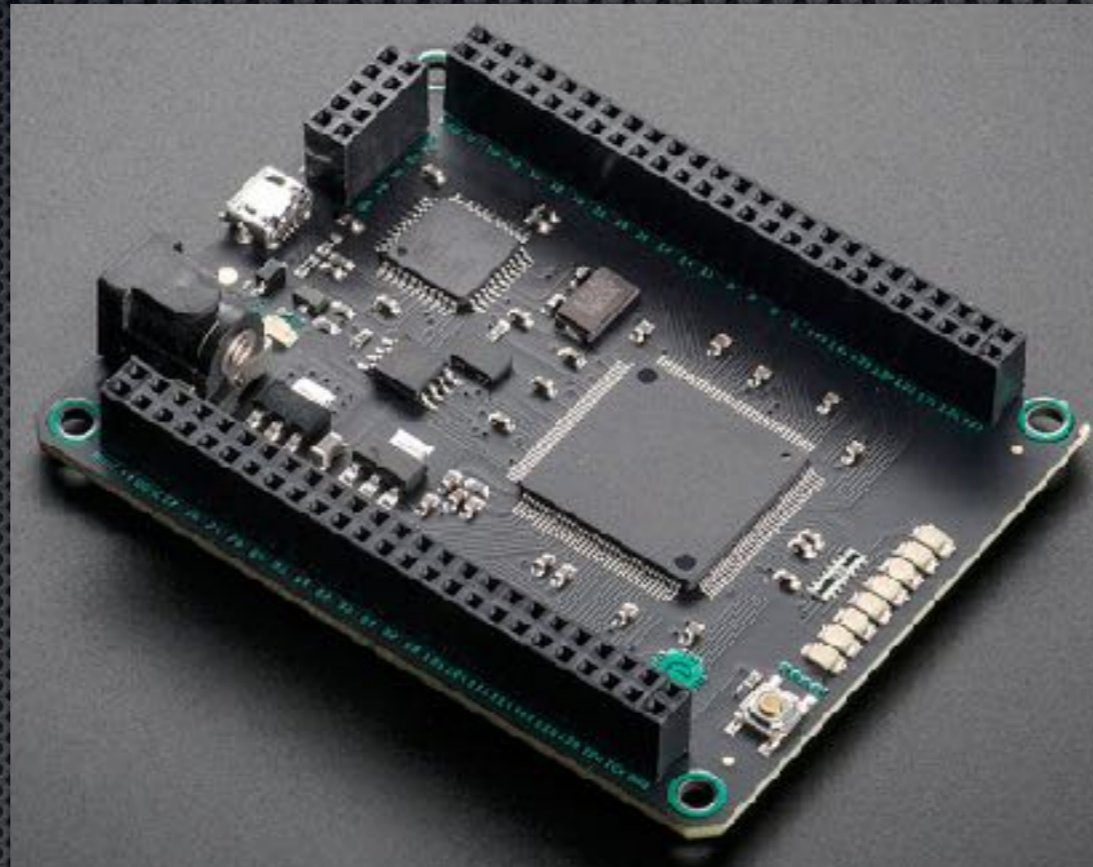
Our Idea... Sorta...



Block Diagram



Hardware



Timeline

- Week 1 (10/30 - 11/05): Research communication protocols and filtering methods, define precise functionality desired by controller (Andrew and Nestor)
- Week 2 (11/06 - 11/12): Design and simulation of the SPI Interpreter (Nestor) Teensy HID development and design of serializer module (Andrew)
- Week 3 (11/13 - 11/19): Design and simulation of the filter module (Andrew) Design and simulation of the Motion Engine (Nestor and Andrew)
- Week 4 (11/20 - 11/26): Continue work on Motion Engine and integration (Nestor and Andrew)
- Week 5 (11/27 - 12/03): Combine all the parts and hope for a working system. Design and 3D print sexy ergonomic housing (Andrew)
- Week 6 (12/04 - 12/10): Bug fixing and additional functionality implementation.

Tricky Bits

- ✦ Living up to our parents/ societies expectations
- ✦ President Trump
- ✦ Coping with daily existential crises (but really, what does it all mean, man)

Tricky Bytes

(Do you see what we did there?)

- ✦ Making an intuitive final product
- ✦ Managing several interfaces
(IMU -> Mojo -> Teensy -> USB)
- ✦ Containing project scope

Questions?