

Radio Flyers

EE 41440

21 March 2012

Minutes 03-21-12

#### 1. Website

- Up and running
- Still need to fill with pictures

#### 2. Package Size

- DFN
- Need bigger package

#### 3. Connectors

- Standard is in the closet
- Make sure one of the leads is taped
- MOLEX power connectors
- Soldering
  - Ignore heating stuff and use hot air
  - There is an oven that we can use
  - Put solder paste (freezer on loading dock in stinson) and then align and heat bottom of the board
  - Consult Shafer on soldering

#### 4. I2C Code

- Go through I2C code
- Already have the Logic Analyzer output

#### 5. Second Design Review

- Date hasn't been established yet
- System integration test-subsystems working together
- Made boards in cart-same family of processors
  - Notes on Sakai
  - Code in current programmer is incorrect-have configuration bits wrong so have to use beta version

- I2C has peripheral libraries of it
  - Use their libraries or try to write your own
    - Found in the installation
- Worry about I2C, are the receiver signals coordinated?(only use one to grab the count)
- Adam was going to try to get it installed generally
- From a control standpoint, look at fusion
  - Filtering routine that takes acceleration data and gyroscope data that is integrated and useful
- Reasonably well equipped to answer questions on the PIC24 family

## 6. I2C Code Check

- Running I2C at the slowest possible rate initially
  - In documentation for the microchip, I2C reference manual is very useful
  - Could be a hardware connection problem
  - Conceivably is could not have been in a start condition
  - Address is right (shifted over one)
  - Make volital bit names that make sense