Agenda:

* Microcontroller
* Pinouts
* Interface spec
* Agenda

Tentative project restart

* This week
* 1 weekly meeting

3 chief hardware components:

- Control box

- Laptop

- Archer assembly

Microcontroller:

54 digital pins, 16 analog

Digital pins take 0 or 1

Analog pins take 0..5V and slip that spectrum between 0..1023

Pins can be set to input or output & default to input

Analog pins are input only

Interrupt vs. polling IO (noted on MA\_Pinout.xls)

Maximum of 6 interrupts; 4 are used for control (E-Stop, retract/draw bump)

Used for time-sensitive events

No ‘main’ function in microcontroller; you get a ‘setup() function and loop() which repeats.

Test for Arming Chain input in loop()

If arming chain is not enabled, only interrupts will execute.

Arming chain is required for Draw and Fire commands

**Ask Dustin about test harness**

Bryan will handle ‘getting power to things’ on the final unit

Arduino documentation

- Arduino website

- Look up old Arduino emulator research

- Borrow someone’s ‘Duino? Possibly ours?

- FIND CODE