

Minutes

2/29/12

Julian: Board is ready.

Schafer:

Julian: need an oscillator crystal

Schafer: there is an internal oscillator, built into microcontroller. Lets you run at different frequencies depending on spec. For the one you're putting into the board, consider how fast you want it to run.

Julian: wanted to discuss I2C

John: We're not getting acknowledgements

Inputs set correctly

Schafer: If I detect the bus isn't in the idle state, I keep shifting clocks out by setting it high, setting it low. You could also be running too fast.

If you look at the I2C as standard speeds, I always start it at the lowest speed to run at.

John: One thing it mentioned, is that it will hold low when it needs to.

Schafer: You put your clock in a certain state and it will hold the clock low if it needs to "clock stretching"

John: Everything is coming back high. So it's not holding the pin low.

Schafer: For debugging, use a device that's a little cleaner. I have some boards.

John: On C port, which I believe is not connected to anything else.

Schafer: I'll take the board today and see if I can find one that has cereal eeprom on.

Controls:

Cos matrix

Integral term in PID controller continues adding up error to make a stronger correction

Derivative is for a rapid acceleration.