**Date:** 8/23/2010 **Time:** 23:15 **Entry:** 001 **Title:** C Code Rewrite Progress

Today, additional progress was made in the rewriting of the CardPOV code in C. In particular, microcontroller device initializations were performed for the PIC18F25J50 device. After considerable investigation, it was found that the #pragma config directive could be used to set device configuration bits. Further efforts revealed a convenient way to set and clear bits in builtin function registers (INTCON0, in this particular example). To do that, I made use of the <RegisterName>bits.<BitName> feature, the structures for which are conveniently set up in the microcontroller’s header file.

**Date:** 8/24/2010 **Time:** 13:18 **Entry:** 002 **Title:** CardPOV C Code Rewrite

Development on the CardPOV v1 C Code continued today, with bit structures created for the povctrl and pbctrl registers. Similar to standard registers in assembly, these structures allow me read and write access to individual bits. The structures were created as a result of analysis and examination of the p18f25j50.h header file, and an example is included below:

//pov control structure

extern volatile far unsigned char povctrl;

extern volatile far struct {

unsigned povdir:1;

unsigned updatepov:1;

unsigned :6;

} povctrlbits;