



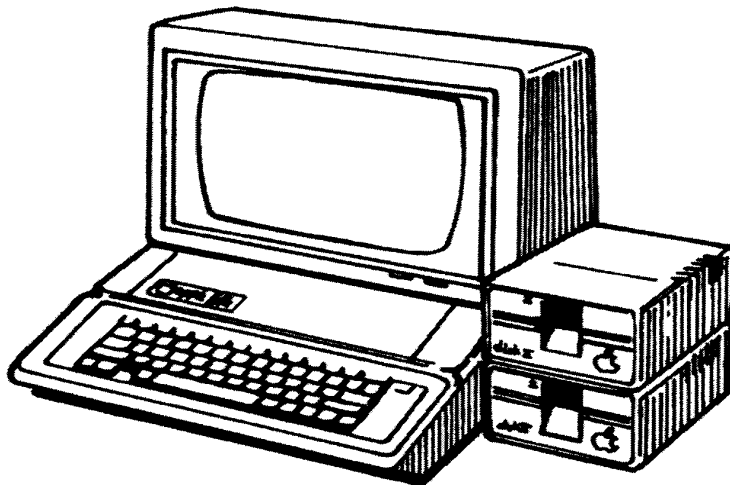
Apple][Computer Information

Floppy Disk I/O Controller IWM Chip Memo

Peter Baum -- Apple Computer, Inc. -- May 31, 1982

TOPIC

Software control of Disk II/IWM controller



SOURCE

Brutal Deluxe Software web site -- www.brutal-deluxe.fr
31 December 2008

TO: Norman Leung
Conrad Chen

May 31, 1982

From: Peter Baum

1) I think that the document "Software Control of Disk II/IWM Controller" should also contain specific examples in certain section. These examples should be included in the sections where the operation requires time dependent code. The reason I suggest this is that the 65C02 has a few operations that use a different number of cycles than their counterparts in the NMOS 6502. If the developer decides to use his own sequence of instructions, they may not work properly with the other processor. It will also make things easier in the future if we ever decide to use a processor that is similar to the 6502, but has a few operations with different cycle times. A specific example would make things easier on the programmer.

2) It has been brought to my attention by a developer that we don't follow the guidelines exactly for the write self sync byte operation in ProDOS. Here is what I was told:

```

        Last-1 self sync byte
40<
        Last self sync byte
***--> 36<
        1st address mark byte ($D5)
32<
        2nd address mark byte ($AA)
32<
        3rd address mark byte ($AD)
***--> 36<
        1st data nibble
32<
        2nd data nibble

```

I have not checked this myself because I am not sure where the routines are located in ProDOS. The developer didn't think this would affect the operation of ProDOS, but I think we should check into it just to make sure.

3) I am also unclear from the document where the address mark and data mark fit in. Nowhere in the document does it tell when to write these bytes out, but it does mention something about reading them under the section titled "Read self sync". Specifically, shouldn't this be covered in the section on writing the self sync byte? Currently this section shows how to write the self sync bytes, followed directly by the first data byte. Is that correct

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