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**Cc:** B. Belleville S. Jobs W. Dirks

**From:** K. Okin *Ke*

**Date:** Feb 27, 1984

**Subj:** Small File Server Meeting Minutes and Status

The Next meeting will be Wednesday, March 7, 1984 9:00Am to 12:00 Noon in the Sitting Bull Room (Bandley ?). The agenda for that meeting includes review of status and discussion of open issues.

## Hardware Status

Gary Marten is going to spend this week reviewing the design of the hardware to be as close to Mac as makes sense. Right now (if major changes occur,) we expect to be able to go to layout on March 19, go for boards April 9, and have a working prototype by May 1. This version of the hardware has a fast parallel port to talk to the widget, a DB9 for the AppleBus connector and a DB25 (same pinout as the Lisa A port.) For the real product, we would like to put the controller on the same physical circuit board as the server, and talking with Wolfgang about the possibility of having the 68000 act as the Widget controller instead of the Z8.

## AppleBus Status

George Crow reported that the electrical specifications are complete for AppleBus. He is experimenting with thinner Twinax for the Cable. By 3/13 he expects to have the electrical section signed off, including specs for all tap box and cable components.

## Product Design

### Tap Box

Jim Stewart and Terry Oyama reported that the tap box aesthetic was complete. They expect a model by 3/1, the prints and board blank ready by 4/1. Then the tooling complete by 6/15, textured by 7/15, and parts available by 8/1.

### Server Enclosure

They are still in the concept stage. Their guidelines are to house a drive with the same dimensions as the current Widget, a power supply with the same area as the profile supply, and a logic board with about the same dimensions as the profile controller card. At best, the enclosure is one month behind the Tap box.

## Open Issues

Owner      Resolve  
Date

### AppleBus

- |    |   |   |   |
|----|---|---|---|
| 1) | We must make public the fact the AppleBus is NOT for building to building connections               | ? | ? |
| 2) | What are the Standard AppleBus cable lengths going to be. Current thinking is 3/2, 3, and 6 meters. | ? | ? |
| 3) | We must make the statement that tap boxes will be required for ALL AppleBus peripherals             | ? | ? |
| 4) | If we make that statement then AppleBus isn't very attractive as an I/O bus.                        | ? | ? |
| 5) | If we make AppleBus Class B do we have to make Lisas Class B?                                       | ? | ? |

### File Server Itself

- |     |  |           |   |
|-----|--|-----------|---|
| 1)  | What are the marketing forecasts?  | ?         | ? |
| 2)  | What is the Label requirements?  | ?         | ? |
| 3)  | What is the name of this product?  | Marketing | ? |
| 4)  | Is this FCC Class A or B?  | ?         | ? |
| 5)  | How does this Small File Server relate to the Com Server   | ?         | ? |
| 6)  | We are resolved to use an existing Power supply as the safety agency approvals will delay the product if a new supply is designed. | ?         | ? |
| 7)  | is 10MB storage enough?  | ?         | ? |
| 8)  | What is the availability of the 20MB Widget?   | ?         | ? |
| 9)  | How do we expand the file server. Currently there is no way to add a second drive or a drive with higher capacity than a widget.   | ?         | ? |
| 10) | What is our strategy for adding a large disc?  | ?         | ? |
| 11) | Might we want to put a server in the Priam?  | ?         | ? |

- |     |  |           |   |
|-----|--|-----------|---|
| 12) | Can we make the design closer to Mac to ease ROM development?  | G. Marten | ? |
| 13) | Do we need a Sony at all? Current plans still include the IWM circuitry but nobody seems to believe that the Sony is necessary. If you are going to talk to the server through a serial connection, presumably you're going to be using a Mac which <i>already has the Sony</i> .  | ?         | ? |
| 14) | Should we have 2 DB9s or 1 DB9 and 1 DB25. (\$5 extra cost to put in a DB25 and associated circuitry to support high speed modems.)  | ?         | ? |
| 15) | Is Parity really necessary on the Ram?   | ?         | ? |
| 16) | Should the 68000 replace the Z8 as the widget controller? The savings are limited to the cost of the Z8 minus the extra parts required to allow the 68000 to talk to the gate array, etc.. We currently are leaning towards leaving the Z8 in. If it stays, we won't have to transcribe the code from Z8 to 68000 (and introduce a new set of bugs in the process) and there will remain a single set of controller software which can be jealously guarded by MSD. Also we have determined that we cannot run the gate array / widget read - write electronics faster than 2 to 1 interleave which can be obtained with the current controller. | ?         | ? |