



1990 Worldwide Developers Conference



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Developer Technical Support
Color Test Pilot



Designing for Apple OS Independence

Hardware Independence

Why be Hardware Independent?

- The Macintosh IIx is an example of the future
 - SCC IOP
 - SWIM IOP
 - ADB IOP
- IOP's are a trend

Where Does it Say I Can't Hit on Hardware

- Inside Macintosh, Volume V, Compatibility Guidelines
- Technical Note #2, Compatibility Guidelines
- Technical Note #117, Compatibility: Why and How
- Guide to the Macintosh Family Hardware, Second Edition

IOP's

- They are not available for direct access
 - If you directly access an IOP you will have problems in the future

SCC IOP



- External clocking
- Synchronous communication
- IIfx Serial Switch cdev
- New Serial Driver

SWIM IOP



- Copy protection
- Diagnostic raw track dump
- Use .Sony Driver

SCSI DMA



- DMA is turned off
- Low memory globals
- IOP in the future?
- Use the SCSI Manager

Apple Sound Chip

- IOP in the future?
- New architecture?
- Use the Sound Manager
- Dependencies on older hardware (i.e. Mac +)
 - Hardware emulation in the Sound Manager
 - Will not last forever

VIA's

- Micro-Second Timing
 - With interrupts turned off
 - With interrupts turned on
- The Time Manager (use 6.0.3 or better)
- What happened to the VIA2 on the IIfx?
- What will happen to the VIA's in the future?

ADB IOP



- Looking for user interrupts
- IOP
- Use ADB Manager
- ADB devices do not need direct access
 - `_ADBOp` will do all your work for you

GetPhysical

- Only used for DMA from hardware other than the 680X0
- Returns RAM address which has been allocated by the Memory Manager
- I/O addresses
- See 7.0 Memory Manager documentation

Video Cards

- Daughter boards to our boards don't survive
- Bit depth dependencies
- Direct blasting to video RAM

UNIX

- All the above is irrelevant under A/UX
- A/UX allows direct access by special device drivers
- A/UX does not allow direct access by applications

Tracking Hardware Dependencies and Compatibility

- Compatibility data base
- If your application has hardware dependencies
- Please tell us:
 - Company name, contact name
mailing address, phone, AppleLink
 - Application name, version
dependencies

Where Do I Sign Up?

- AppleLink: APP.COMPT or
- MacDTS
Applications Compatibility
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