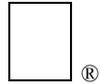# Apple II
Technical Notes

®

Developer Technical Support

SmartPort
#5:   SCSI SmartPort Call Changes

Revised by: Matt   Deatherage   &   Llew   Roberts
             November 1990
Written by: Rilla Reynolds & Matt Deatherage   May
   1988

This Technical Note describes two CONTROL codes which have changed in revision C of the Apple II SCSI card firmware.
Changes since January 1989: Added notes about the Apple II High-Speed SCSI Card.

Revision C of the Apple II SCSI card firmware includes two CONTROL code changes.

CONTROL code $04, previously defined as FORMAT, is now defined as EJECT. This change reflects the revised SmartPort requirement that all devices maintain CONTROL code $04 as EJECT. See SmartPort Technical Note #2, SmartPort Calls Updated, for more information. CONTROL code $15 is now defined as FORMAT instead of RESERVED. Note that there are two EJECT calls in this version, as CONTROL code $26 is still defined as EJECT.

To determine which version of the SCSI ROM is on any particular Apple II SCSI Interface Card, issue a $03 SmartPort STATUS call. The revision C SCSI ROM returns the word $0200. This does not follow the SmartPort

Interface Version scheme described in SmartPort Technical Note #2. However, future revisions of the Apple II SCSI card will follow this scheme. Therefore, applications should expect any SmartPort SCSI firmware to behave as described in this Note if the version number is $0200 **or** if it is greater than or equal to $2000. The Apple II High-Speed SCSI Card returns version $3000 (3.0).

To maintain compatibility with the Apple II High-Speed SCSI Card and future SCSI products, you should use the following guidelines when programming with the revision C card:

- Avoid access to the hardware or any RAM locations on the SCSI card.
- Do not use the `Patch1Call`, `SetNewSDAT`, or `SetBlockSize` control calls.
- For devices with a block size other than 512 bytes, use the SmartPort `Read` and `Write` calls. Do not use `ReadBlock` and `WriteBlock` calls for these devices, since they only read or write the first 512 bytes of a block. The `Read` and `Write` calls may also be used for devices with a 512-byte block size.
- Never Reset the SCSI bus.

The Apple II SCSI Card firmware was designed to operate with SCSI CD-ROM and disk drives only; however, the Apple II High-Speed SCSI Card works with most SCSI devices, including removable drives, scanners, and tape backup units.

Further Reference
- *Apple II SCSI Card Technical Reference*
- SmartPort Technical Note #2, SmartPort Calls Updated