Apple II
Technical Notes

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Developer Technical Support

ProDOS 8
#1:   The GETLN Buffer and a ProDOS Clock Card

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This Technical Note describes the effect of a clock card on the GETLN buffer.

ProDOS automatically supports a ThunderClock™ or compatible clock card when the system identifies it as being installed. When programming under ProDOS, always consider the impact of a clock card on the GETLN input buffer ($200 – $2FF). ProDOS can support other clocks which may also use this space.

When ProDOS calls a clock card, the card deposits an ASCII string in the GETLN input buffer in the form: 07,04,14,22,46,57. This string translates as the following:

     07 = The month, July (01=Jan,...,12=Dec)
     04 = The day of the week, Thurs.(00=Sun,...,06=Sat)
     14 = The date (00 to 31)
     22 = The hour, 10 p.m. (00 to 23)
     46 = The minute (00 to 59)
     57 = The second (00 to 59)

ProDOS calls the clock card as part of many of its routines. Anything in the first 17 bytes of the GETLN input buffer is subject to loss if a clock card is installed and is called.

In general, it has been the practice of programmers to use the GETLN input buffer for every conceivable purpose. Therefore, an application should never store anything there. If your application has a future need to know about the contents of the $200 – $2FF space, you should transfer it to some other location to guarantee that it will remain intact, particularly under ProDOS, where a clock card may regularly be overwriting the first 17 bytes.

The *ProDOS 8 Technical Reference Manual* contains more information on the clock driver, including the necessary identification bytes, how the ProDOS driver calls the card, and how you may replace this routine with your own.

Further Reference
- *ProDOS 8 Technical Reference Manual*