

# New Technical Notes

Macintosh

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Developer Support

## HW 20 - Slot Interrupt Prio-Technics Hardware

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This Technical Note describes the way interrupt priorities are scheduled, which corrects the description of slot interrupt queue priorities in the Device Manager chapter of *Inside Macintosh*, Volume V-426.

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According to *Inside Macintosh*, Volume V-426, The Device Manager, the `SQPrIo` field of a slot interrupt queue element is an unsigned byte that determines the order in which slots are polled and interrupt service routines are called. This is **incorrect** on all Macintosh models prior to the IIci that are running a system version earlier than System Software 7.0.

In reality, slot interrupts of **lower** priority values have always been called first. However, all new Macintosh computers, starting with the Macintosh IIci, as well as all machines running System Software 7.0 or later, will have an `_SIntInstall` routine that has been changed to reflect the description in *Inside Macintosh*.

In addition, the `SQPrIo` field is, and has always been, two bytes long, but the high byte is reserved and must be set to zero.

Apple still reserves priority values 200-255 as documented in *Inside Macintosh*.

Note that in any case of slot interrupts with equal priority, the most recently installed interrupt is run first, regardless of system version.

### Further Reference:

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- *Inside Macintosh*, Volume V-426, The Device Manager