

# Apple II Technical Notes



---

Developer Technical Support

## AppleTalk

### #9: The PAP Status Buffer

Written by:

Jim

Luther

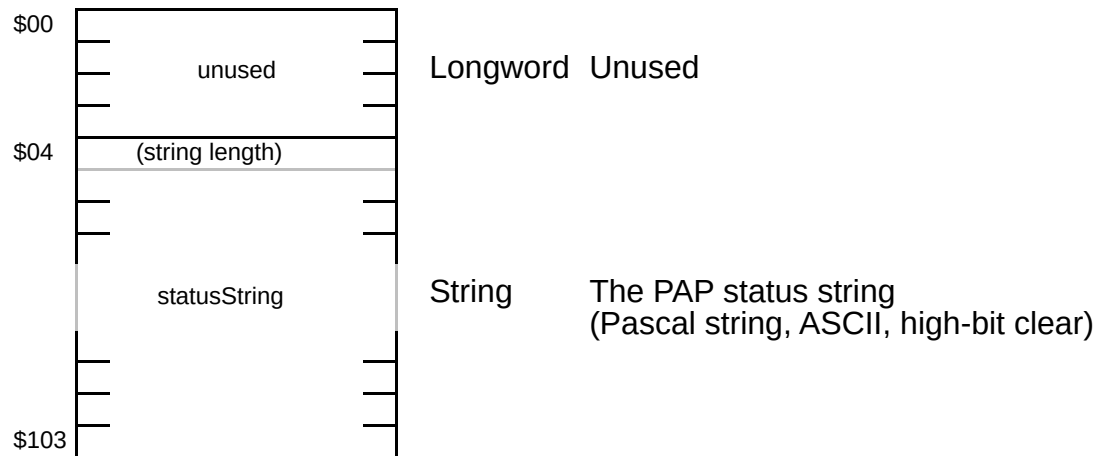
November 1990

This Technical Note shows the format of the status data returned into the application-supplied status buffer by the `PAPStatus` and `PAPOpen` Printer Access Protocol (PAP) AppleTalk commands. The status buffer format is shown for both LaserWriter and ImageWriter (with the ImageWriter II/LQ LocalTalk Option card installed) printers.

---

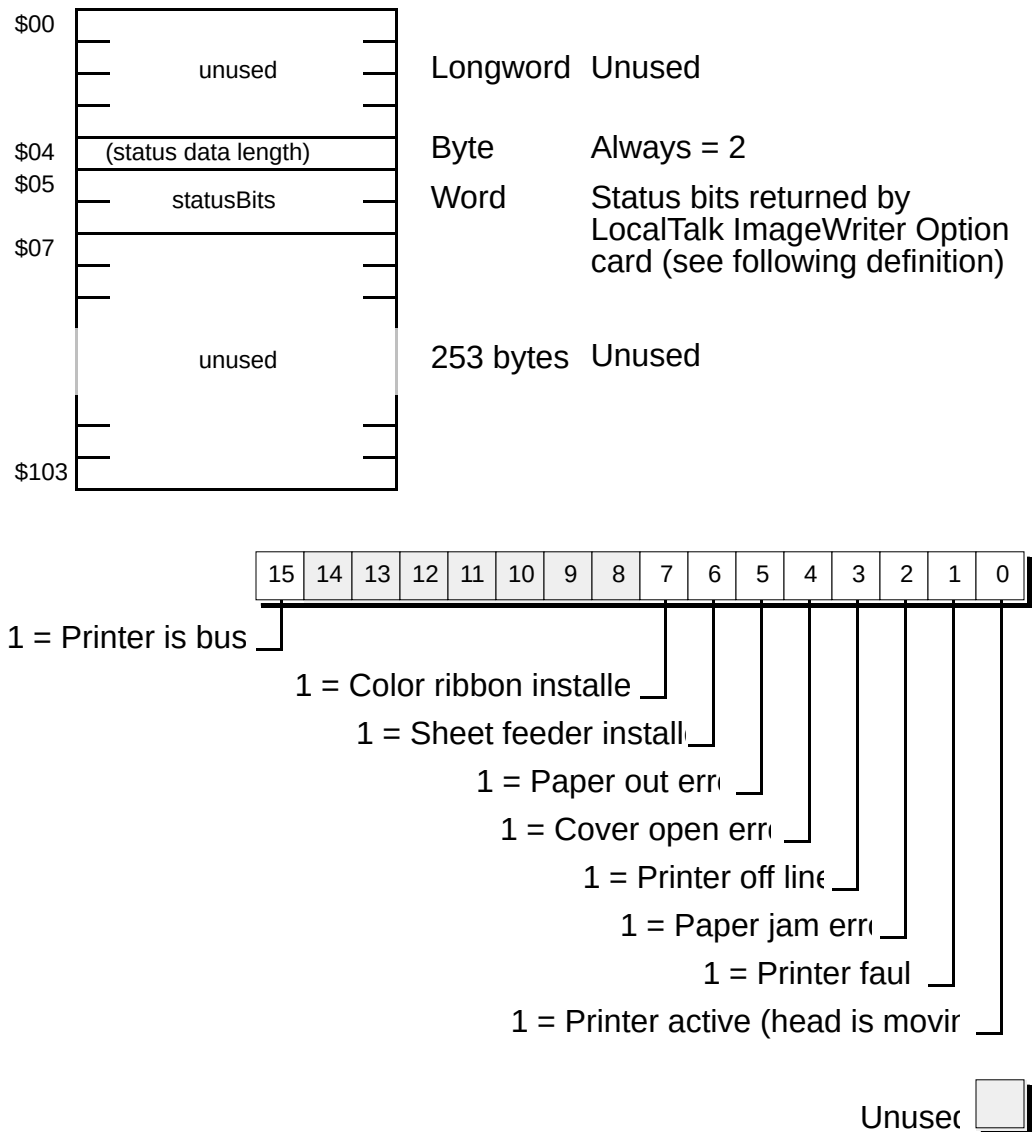
The `PAPStatus` and `PAPOpen` AppleTalk commands must supply a pointer to a 260-byte status buffer. When the `PAPStatus` or `PAPOpen` commands complete, the status buffer contains the ATP data portion of a Status (TResp) packet. The first four bytes of that data are unused, so the actual status data starts at offset \$04 in the status buffer.

The LaserWriter printer returns its status data in the form of a Pascal string. That string is usually something suitable to display on the screen (e.g., “status: idle” or “job: Fred; document: My LaserWriter is on fire; status: busy; source: AppleTalk”). In fact, the status text displayed in the Print Manager LaserWriter dialog boxes is usually the `statusString` returned by `PAPStatus` or `PAPOpen`. Figure 1 shows the contents of the status buffer returned by a LaserWriter.



**Figure 1–PAP Status Buffer from a LaserWriter**

The ImageWriter II/LQ LocalTalk Option card does not return a status string for display. Instead, it returns a `statusBits` word where each bit within that word has a specific meaning. Your application can interpret the `statusBits` word and generate an appropriate message to display. Figure 2 shows the contents of the status buffer returned by the ImageWriter II/LQ LocalTalk Option card and the individual bit definitions of the `statusBits` word.



**Figure 2—PAP Status Buffer from an ImageWriter II/LQ LocalTalk Option Card**

There are two additional things to note when interpreting the statusBits word returned by a ImageWriter II/LQ LocalTalk Option card:

- If a sheet feeder is installed (bit 6 = 1), running out of paper results in a “Paper jam error” (bit 2 = 1) instead of a “Paper out error” (bit 5).
- The ImageWriter II/LQ LocalTalk Option card has been known

to randomly return all ones in the low byte (bits 0-7) of the `statusBits` word. When this happens, the `statusBits` word is invalid and an application should repeat the `PAPStatus` call to get valid information.

## Further Reference

---

- *Inside AppleTalk*, Second Edition
- *AppleShare Programmer's Guide for the Apple II Family*