

**Table 3-9**  
Slot 3 firmware protocol table

Address	Value	Description
\$C30B	\$01	Generic signature byte of firmware cards.
\$C30C	\$88	80-column card device signature.
\$C30D	\$ii	\$C3ii is entry point of initialization routine (PINIT).
\$C30E	\$rr	\$C3rr is entry point of read routine (PREAD).
\$C30F	\$ww	\$C3ww is entry point of write routine (PWRITE).
\$C310	\$ss	\$C3ss is entry point of the status routine (PSTATUS).

### **PINIT, \$C30D**

PINIT does the following:

- ☐ sets a full 80-column window
- ☐ sets 80STORE (\$C001)
- ☐ sets 80COL (\$C00D)
- ☐ switches on ALTCHAR (\$C00F)
- ☐ clears the screen; places cursor in upper-left corner
- ☐ displays the cursor

### **PREAD, \$C30E**

PREAD reads a character from the keyboard and places it in the accumulator with the high bit cleared. It also puts a zero in the X register to indicate IORESULT = GOOD.

### **PWRITE, \$C30F**

PWRITE should be called after placing a character in the accumulator with its high bit cleared. PWRITE does the following:

- ☐ It turns the cursor off.
- ☐ If the character in the accumulator is not a control character, it turns the high bit on for normal display or off for inverse display, displays it at the current cursor position, and advances the cursor. If the character at the end of a line, PWRITE does carriage return but not line feed. (See Table 3-10 for control character functions.)

When PWRITE has completed this, it

- ☐ turns the cursor back on (if it was not intentionally turned off)
- ☐ puts a zero in the X register (IORESULT = GOOD) and returns to the calling program