

Positions C and D: Major logical group within the feature group, such as the adder drivers or the drum read circuits.

Positions E and F: Page number within the major logical group.

Position G: An insert page number, or reference page notation.

5. *Comments.* At the bottom of the page are listed the edge-connector locations used for the entry and exit lines on the logic page, and an area reserved for comments. Any pertinent information concerning the logic on the systems page is noted here, along with additional data about the various engineering changes affecting the logic page.

### Signal Lines, General

1. All lines entering or leaving a systems page are labeled and correspond to the symbol and sign of the logic block they connect.

2. Lines enter on the left side of the systems page and leave on the right side of the page.

3. If a line leaves a systems page and goes to several locations on another page, the line is usually distributed on the TO page and not the FROM page.

4. If a line leaves a page and goes to several pages, but carries the same line name, it can be shown as in Figure 11.

5. When a line performs a function with the UP status as well as the DOWN status the two functions are described in the line name on the FROM page.

### Edge Information (Figure 10)

Data shown in the vertical page coordinates 1 and 7 are called edge information. Edge information can consist of three lines of information, each line 15 characters in length. Edge information names input and output lines, and names the logic page the line appears on again.

The first line contains the coding and sign of the line type, followed by the signal name. (On some earlier ALD's the coaxial shield or twisted-pair reference wire of the signal line was also shown entering or leaving a page. Then the letters "cs" for coaxial shield and "tw" for a twisted-pair reference were used to indicate the coaxial shield or twisted-pair line.) The second line is reserved for continuation of the signal name, if required, and the third line lists the logic page number on which the signal appears again. The logic page number is directly opposite the signal line.

### Edge Connectors

When a signal or service wire enters or leaves a panel, it may be routed through an edge connector. Signal lines connected to edge connectors are indicated by a symbol

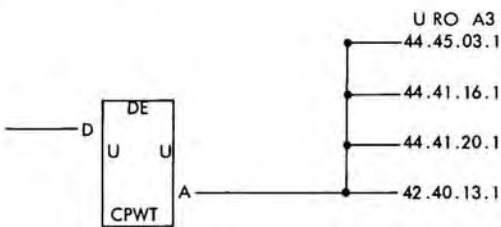


Figure 11. Multiple Outputs—Same Line Name

and a number or letter located on an entry line or exit line (Figure 10). These notations refer the reader to the bottom of the ALD page for the actual edge-connector location and pin number.

### Reference Drawing

All locations that identify core arrays, resistors, and other components mounted on a gate, are given on a reference drawing. Signal lines on the systems pages refer to these drawings for locations. Reference drawings are easily identified by noting the logic page number. The seven-digit number always ends in zero for these drawings (xx. xx. xx. 0).

### The Logic Block

To simplify the systems pages, logic blocks are used to represent the basic electronic circuits of the machine. A basic electronic function is usually represented by a single block but some functions (e.g., triggers) may require more than one block. In the case of multiple circuits on one sms card, each circuit is represented by a separate logic block. The size of the block allows for the printing of four characters across the box and for six vertical lines of printing. The standard format of the logic block is shown in Figure 12, and is explained below.

### Title

Over each logical block a ten-character name can be printed. However, only special circuits such as triggers, latches, single shots, and their associated timings, are named. The units of time used in the title are abbreviated as follows:

- S Seconds
- M Milliseconds
- U Microseconds
- ° Milli-microseconds

### Functional Symbol

The symbol that appears on line 1 of the block consists of a sign (where used) and the standard letter(s) that represent the circuit. The Appendix contains a listing of the symbols used.

### Machine Feature Index

The machine feature index (MFI) code is shown on line 2 and indicates a circuit not normally used in the standard equipment (e.g., TD=tape drive). Two dots indicate a block used in the basic circuit.

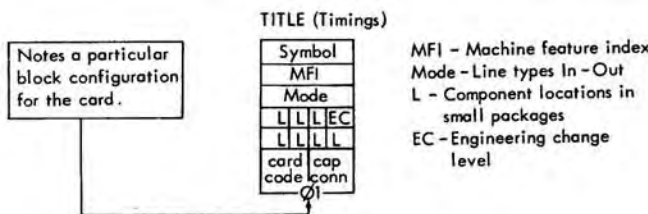


Figure 12. Logic Block Format