Am1736/Am1765

Serial Configuration PROM

DISTINCTIVE CHARACTERISTICS

- One-time programmable 36,288 or 65,536 x 1-bit serial memories designed to store configuration patterns for Logic Cell™ Arrays.

- Simple interface to the AMD LCA™ requires only one user I/O pin on the LCA.

- A single Am1736 supports all members of the Am2000 family and members of the Am3000 family as large as Am3042. The Am1765 supports all Am2000 and Am3000 family members. Both Serial Configuration PROMs support multiple patterns for daisy-chained configurations.

- Low power CMOS EPROM process.

- Cascadable to provide more memory for additional configurations or high-density arrays.

- Storage for multiple configurations for a single Logic Cell Array.

- Space-efficient, 8-pin ceramic DIP package

- Programming supported by leading programmer manufacturers.

GENERAL DESCRIPTION

The Am1736 and Am1765 Serial Configuration PROMs (SCP) provide easy-to-use, cost-effective configuration memories for the AMD family of programmable gate arrays. Packaged in an economical 8-pin DIP package, the devices use a simple serial access procedure to configure one or more Logic Cell Arrays (LCA). The 36,288 x 1-bit organization of the Am1736 supplies enough to configure any of the following devices: Am2064, Am2018, Am3020, and Am3042. The Am1765, with its 65,536 x 1-bits, in addition to the parts listed above, also supports the Am3040, Am3064 and Am3090 devices.

Multiple configurations for a single LCA device can be loaded from either SCP. Multiple SCPs can also be cascaded to provide larger memory for more configurations.

The Am1736/65 can be programmed on programming machines supplied by leading manufacturers, including Am081 from AMD. The LCA design file is first compiled into a standard HEX format with the PC-based Design System (AmPGA021). It can be transferred to the programmer through a serial port.

BLOCK DIAGRAM
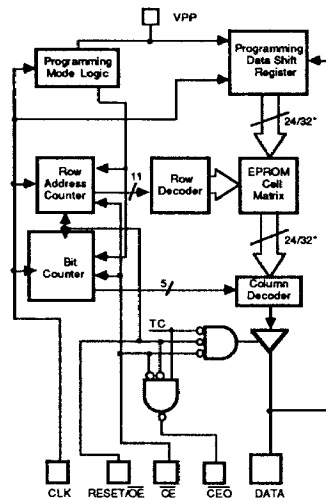
*24-bit word for Am1736
32-bit word for Am1765

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