Advance Information

T-46-13-29

Am27C2048

131,072 x 16-Bit CMOS UV EPROM

Advanced Micro Devices

DISTINCTIVE CHARACTERISTICS

- Fast access time — 100 ns
- Low power consumption:
  - 100 μA maximum standby current
- Programming voltage: 12.5 V
- Single +5-V power supply
- JEDEC-approved pinout
- ±10% power supply tolerance available
- Flashrite™ programming
- Latch-up protected to 100 mA from −1 V to V_{CC} +1 V

GENERAL DESCRIPTION

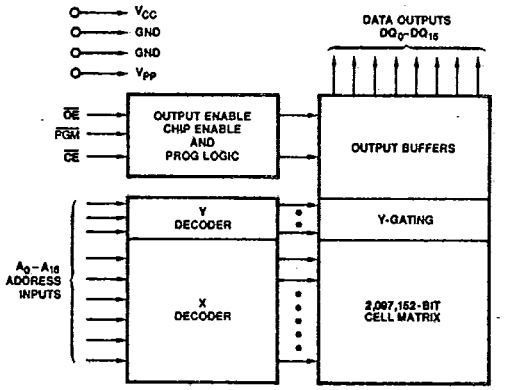
The Am27C2048 is a 2 megabit, ultraviolet erasable programmable read-only memory. It is organized as 131,072 words by 16 bits per word, operates from a single +5-V supply, has a static standby mode, and features fast single address location programming.

Typically, any byte can be accessed in less than 100 ns, allowing operation with high-performance microprocessors without WAIT states. The Am27C2048 offers separate Output Enable ($\overline{OE}$) and Chip Enable ($\overline{CE}$) controls, thus eliminating bus contention in a multiple bus microprocessor system.

AMD's CMOS process technology provides high speed, low power, and high noise immunity. Typical power consumption is only 100 mW in active mode, and 500 μW in standby mode.

All signals are TTL levels, including programming signals. Bit locations may be programmed singly, in blocks, or at random. The Am27C2048 supports both AMD's interactive programming algorithm (0.5 ms pulses) and Flashrite algorithm (0.1 ms pulses).

BLOCK DIAGRAM



BD008370

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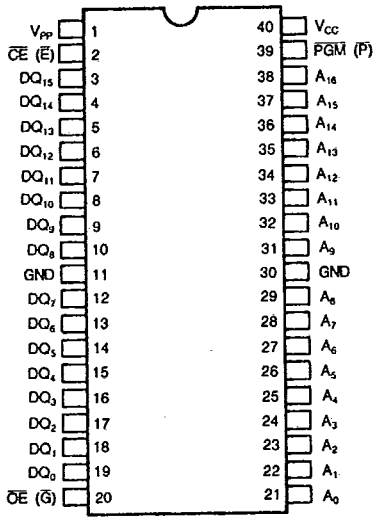
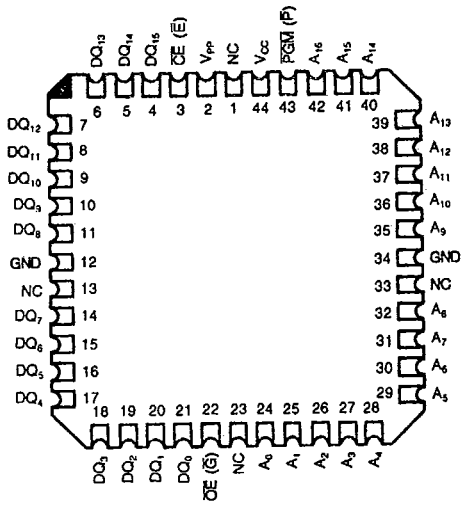
CONNECTION DIAGRAMS
Top View

DIP



CD009305

LCC



CD009318

Note: 1. JEDEC nomenclature is in parentheses.

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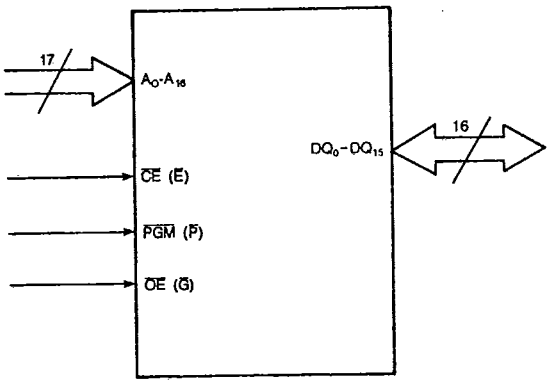
LOGIC SYMBOL



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V_{CC} = 5.0-V Power Supply
GND = 0-V Power Supply
V_{PP} = 12.5 V Power Supply