National Semiconductor

MOS EPROMs
PREVIEW

NMC2564 64k-Bit (8k × 8) UV Erasable PROM

General Description

The NMC2564 is a 65,536-bit EPROM operating from a single 5V power supply. This device is an ultraviolet erasable, electrically programmable, read only memory fabricated using National's high speed, low power, silicon gate technology.

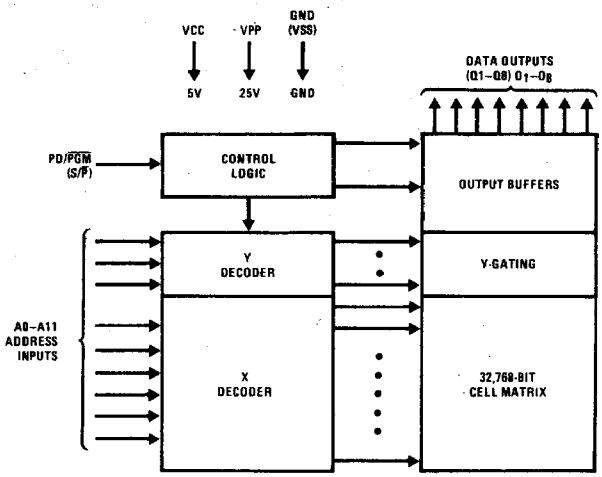
This device is deselected when pin 20 is high and automatically placed in the standby mode. This mode provides an 85% reduction in power with no increase in access time.

Bits may be programmed at random, in sequence or singly. Typical erasure time is 20 minutes using a 12 mW/cm^2 ultraviolet lamp.

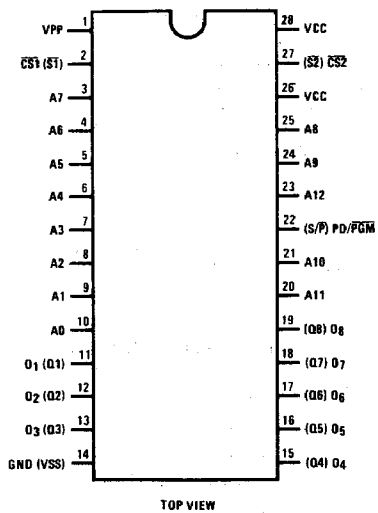
Features

- Single 5V power supply
- 450 ns max access time
- Low power:
  Active — 200 mA max
  Standby — 30 mA max
- Fully static
- TRI-STATE® output
- All I/O pins TTL compatible
- Pin compatible with the 2516 and 2532 EPROMs
- Separate chip selects for multiple bus systems
- Single location programming

Block and Connection Diagrams*



Dual-In-Line Package



TOP VIEW

Modes

Mode	VCC 26, 28	VPP 1	PD/PGM (S/P) 22	CS1 (S1) 2	CS2 (S2) 27	Outputs (Q1-Q8) 11-13, 15-19
	Pin Name/Number					
Read	5	5	VIL	VIL	VIL	DOUT
Deselect	5	5	VIL	VIH	X	Hi-Z
Deselect	5	5	VIL	X	VIH	Hi-Z
Standby	5	5	VIH	X	X	Hi-Z
Program Inhibit	5	25	VIH	X	X	DIN
Program Inhibit	5	25	X	VIH	X	DIN
Program Inhibit	5	25	X	X	VIH	DIN
Program	5	25	Pulsed VIH to VIL	VIL	VIL	DIN

X = don't care

* Symbols in parentheses are industry standard

Pin Names

PD/PGM (S/P)	Power Down (Chip Select)
A0-A12	Address Inputs
O_1-O_8 (Q1-Q8)	Data Outputs
VPP	Program Power (+25V)
VCC	Power (+5V)
GND (VSS)	Ground