# A

### **FEATURES**

- 3.3 Volts Power Supply
- High Speed (Equal Access and Cycle Times)
  - 15/17/20/25/35 ns (Commercial)
  - -- 20/25/35/45 ns (Industrial)
- Single 3.3 Volts ± 0.3 Volts Power Supply
- Easy Memory Expansion Using CE<sub>1</sub>, CE<sub>2</sub> and OE inputs
- **■** Common Data I/O

- **■** Three-State Outputs
- **Fully TTL Compatible Inputs and Outputs**
- Advanced CMOS Technology
- -■ Fast t<sub>oe</sub>
- Automatic Power Down
- Packages
  - -32-Pin DIP and SOJ



## DESCRIPTION

The P3C1024 is a 1,048,576-bit high-speed CMOS static RAM organized as 128Kx8. The CMOS memory requires no clocks or refreshing, and has equal access and cycle times. Inputs are fully TTL-compatible. The RAM operates from a single  $3.3V\pm0.3V$  tolerance power supply.

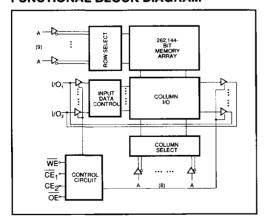
Access times of 20 nanoseconds permit greatly enhanced system operating speeds. CMOS is utilized to reduce power consumption to a low level. The P3C1024 is a member of a family of PACE RAM™ products offering fast access times.

The P3C1024 device provides asynchronous operations with matching access and cycle times. Memory locations are specified on address pins  $A_0$  to  $A_{16}$ . Reading is accomplished by device selection  $(\overline{CE}_1)$  low and  $CE_2$  high) and output enabling  $(\overline{OE})$  while write enable  $(\overline{WE})$  remains HIGH. By presenting the address under these conditions, the data in the addressed memory location is presented on the data input/output pins. The input/output pins stay in the HIGH Z state when either  $\overline{CE}$ , or  $\overline{OE}$  is HIGH or  $\overline{WE}$  or  $CE_2$  is LOW.

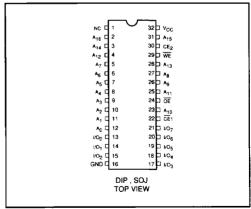
Package options for the P3C1024 include 32-pin 300 mil DIP and SOJ packages as well as 400 mil SOJ.

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### **FUNCTIONAL BLOCK DIAGRAM**



### PIN CONFIGURATION





Means Quality, Service and Speed