## FEATURES

■ High Speed (Equal Access and Cycle Times) - 20/25/35/45/55/70 ns

- Single 5 Volts $\pm 10 \%$ Power Supply
- Easy Memory Expansion Using $\overline{C E}_{1}, \mathrm{CE}_{2}$ and $\overline{\mathrm{OE}}$ Inputs
- Common Data I/O

■ Three-State Outputs

■ Fully TTL Compatible Inputs and Outputs

- Advanced CMOS Technology
- Fast $t_{\mathrm{OE}}$
- Automatic Power Down
- Packages
-32-Pin 400 mil and 600 mil Ceramic DIP
-32-Pin CERPACK
-32-Pin LCC


## DESCRIPTION

The P4C1024 is a 1,048,576-bit high-speed CMOS static RAM organized as 128 Kx 8 . 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 $5 \mathrm{~V} \pm 10 \%$ 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 P4C1024 is a member of a family of PACE RAM ${ }^{\text {TM }}$ products offering fast access times.

The P4C1024 device provides asynchronous operations with matching access and cycle times. Memory locations are specified on address pins $\mathrm{A}_{0}$ to $\mathrm{A}_{16}$. Reading is accomplished by device selection ( $\overline{\mathrm{CE}}$, low and $\mathrm{CE}_{2}$ high) and output enabling ( $\overline{\mathrm{OE}}$ ) while write enable ( $\overline{\mathrm{WE}})$ 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 $\overline{\mathrm{CE}}_{1}$ or $\overline{\mathrm{OE}}$ is HIGH or $\overline{\mathrm{WE}}$ or $\mathrm{CE}_{2}$ is LOW .

FUNCTIONAL BLOCK DIAGRAM


## PIN CONFIGURATION



