P3C1024
HIGH SPEED 128K x 8
3.3V STATIC CMOS RAM

ADVANCE INFORMATION

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 $\overline{CE}_1$, CE_2 and $\overline{OE}$ Inputs**
- **Common Data I/O**
- **Three-State Outputs**
- **Fully TTL Compatible Inputs and Outputs**
- **Advanced CMOS Technology**
- **Fast t_{OE}**
- **Automatic Power Down**
- **Packages**
  - **—32-Pin DIP and SOJ**

DESCRIPTION

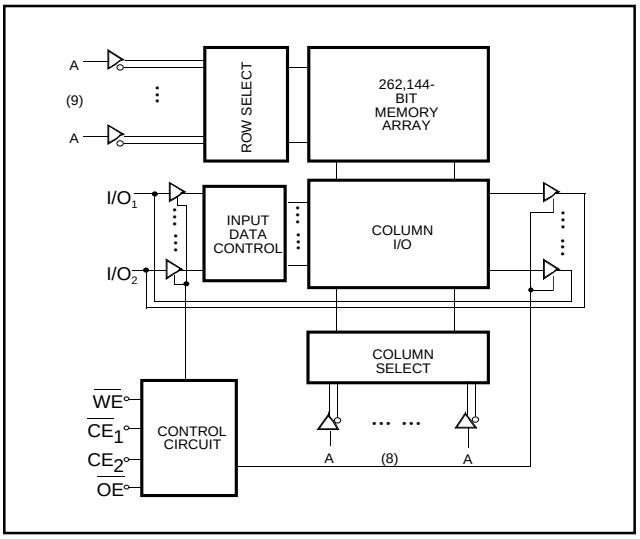
The P3C1024 is a 1,048,576-bit high-speed CMOS static RAM organized as 128Kx8. The CMOS memory requires no clocks or refreshing, and has equal access and cycle times. Inputs are fully TTL-compatible. The RAM operates from a single 3.3V ± 0.3V tolerance power supply.

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.

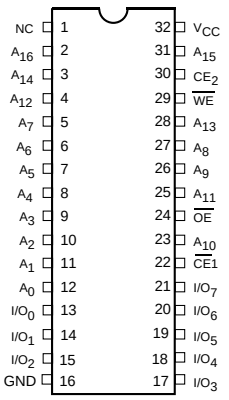
The P3C1024 device provides asynchronous operations with matching access and cycle times. Memory locations are specified on address pins A_0 to A_{16}. Reading is accomplished by device selection ($\overline{CE}_1$ low and CE_2 high) and output enabling ($\overline{OE}$) while write enable ($\overline{WE}$) 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 $\overline{CE}_1$ 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.

FUNCTIONAL BLOCK DIAGRAM



PIN CONFIGURATION



DIP , SOJ
TOP VIEW

PERFORMANCE SEMICONDUCTOR CORPORATION

Means Quality, Service and Speed