



## ADVANCED INFORMATION **CY7C1016**

### 256K x 4 Static RAM

#### Features

- **High speed**  
—  $t_{AA} = 10 \text{ ns}$
- **Output enable ( $\overline{OE}$ ) feature**
- **CMOS for optimum speed/power**
- **Center power/ground pinout**
- **Automatic power-down when deselected**
- **TTL-compatible inputs and outputs**

#### Functional Description

The CY7C1016 is a high-performance

CMOS static RAM organized as 262,144 words by 4 bits. Easy memory expansion is provided by an active LOW chip enable ( $\overline{CE}$ ), an active LOW output enable ( $\overline{OE}$ ), and three-state drivers. The device has an automatic power-down feature that significantly reduces power consumption when deselected.

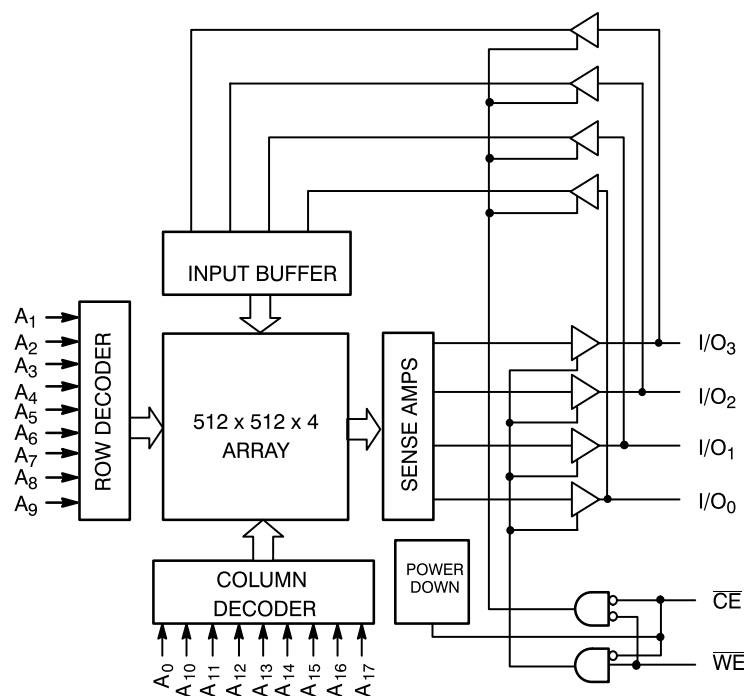
Writing to the device is accomplished by taking chip enable ( $\overline{CE}$ ) and write enable ( $\overline{WE}$ ) inputs LOW. Data on the four I/O pins ( $I/O_0$  through  $I/O_3$ ) is then written into the location specified on the address pins ( $A_0$  through  $A_{17}$ ).

Reading from the device is accomplished by taking chip enable ( $\overline{CE}$ ) LOW while forcing write enable ( $\overline{WE}$ ) HIGH. Under these conditions, the contents of the memory location specified by the address pins will appear on the four I/O pins.

The four input/output pins ( $I/O_0$  through  $I/O_3$ ) are placed in a high-impedance state when the device is deselected ( $\overline{CE}$  HIGH), or during a write operation ( $\overline{CE}$  and  $\overline{WE}$  LOW).

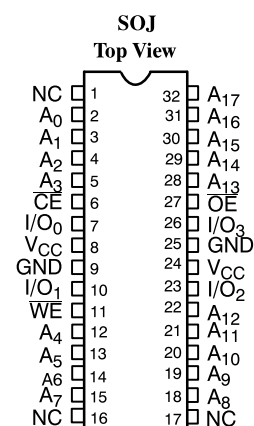
The CY7C1016 is available in standard 400-mil-wide SOJs.

#### Logic Block Diagram



C1016-1

#### Pin Configuration



C1016-2

#### Selection Guide

		7C1016-10	7C1016-12	7C1016-15
Maximum Access Time (ns)		10	12	15
Maximum Operating Current (mA)	Commercial	175	165	155
	Military		175	165
Maximum Standby Current (mA)	Commercial	55	50	40
	Military		50	40

Document #: 38-00439