



C Electronics Inc.

# **$\mu$ PD43256A** **32,768 x 8-Bit** **Static CMOS RAM**

## Description

$\mu$ PD43256A is a 32,768-word by 8-bit static RAM fabricated with advanced silicon-gate technology. Its design uses CMOS peripheral circuits and N-channel memory cells with polysilicon resistors to make  $\mu$ PD43256A a high-speed device that requires very low power and no clock or refreshing.

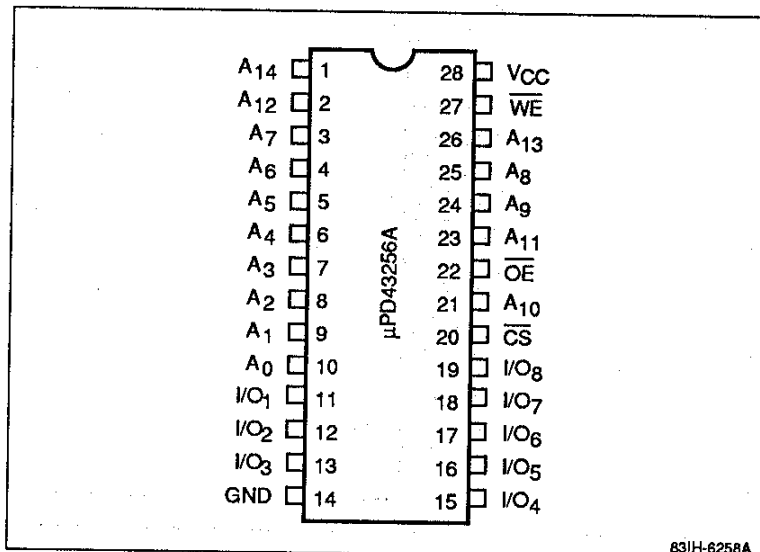
Minimum standby power is drawn when  $\overline{CS}$  is high, independent of the other inputs' levels. Data retention is guaranteed at a power supply voltage as low as 2 V. The  $\mu$ PD43256A is available in standard 28-pin plastic DIP, 28-pin plastic miniflat, or 32-pin plastic TSOP packaging.

## Features

- Single +5-volt power supply
- Fully static operation—no clock or refreshing required
- Compatible inputs and outputs
- Common I/O using three-state outputs
- One  $\overline{CS}$  pin and one  $\overline{OE}$  pin for easy application
- Data retention of 2 V minimum
- Standard 28-pin plastic DIP and miniflat packaging
- Standard 32-pin plastic TSOP packaging
- Available in either normal or reverse bent leads

## Pin Configurations

### 28-Pin Plastic DIP or Miniflat

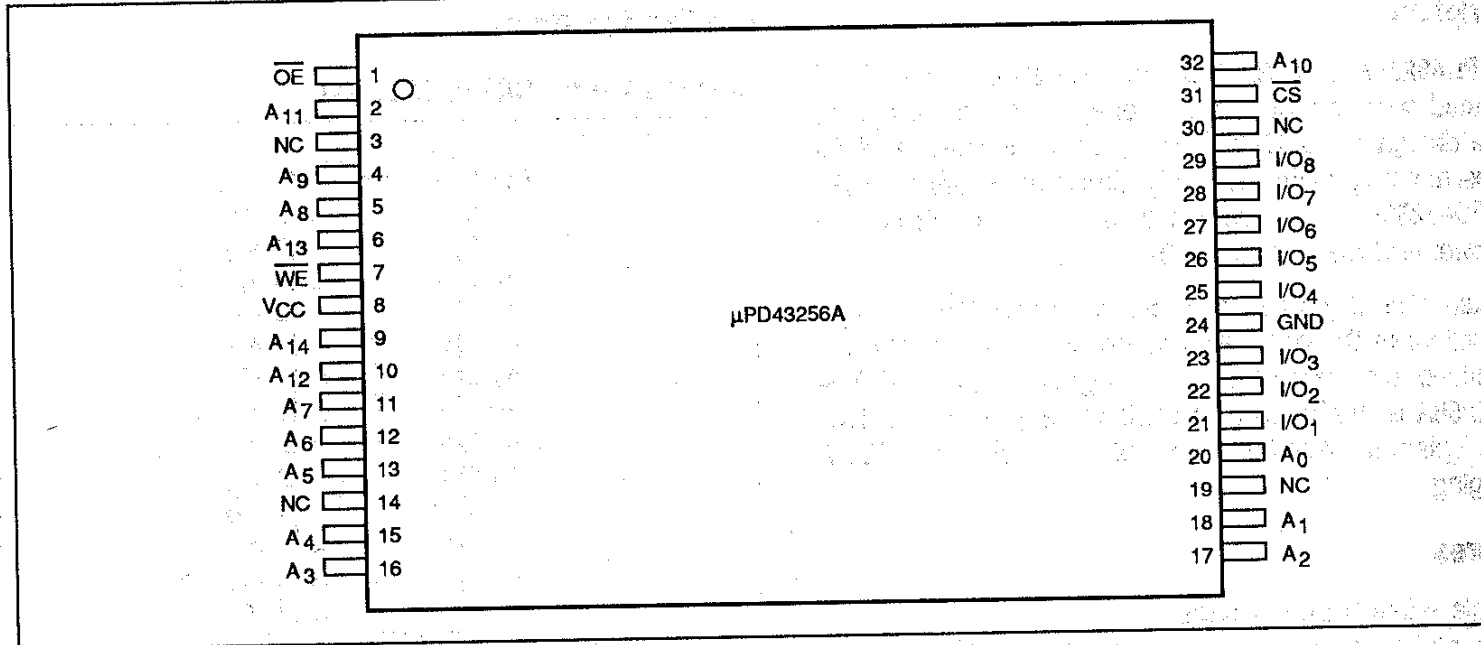


## Pin Identification

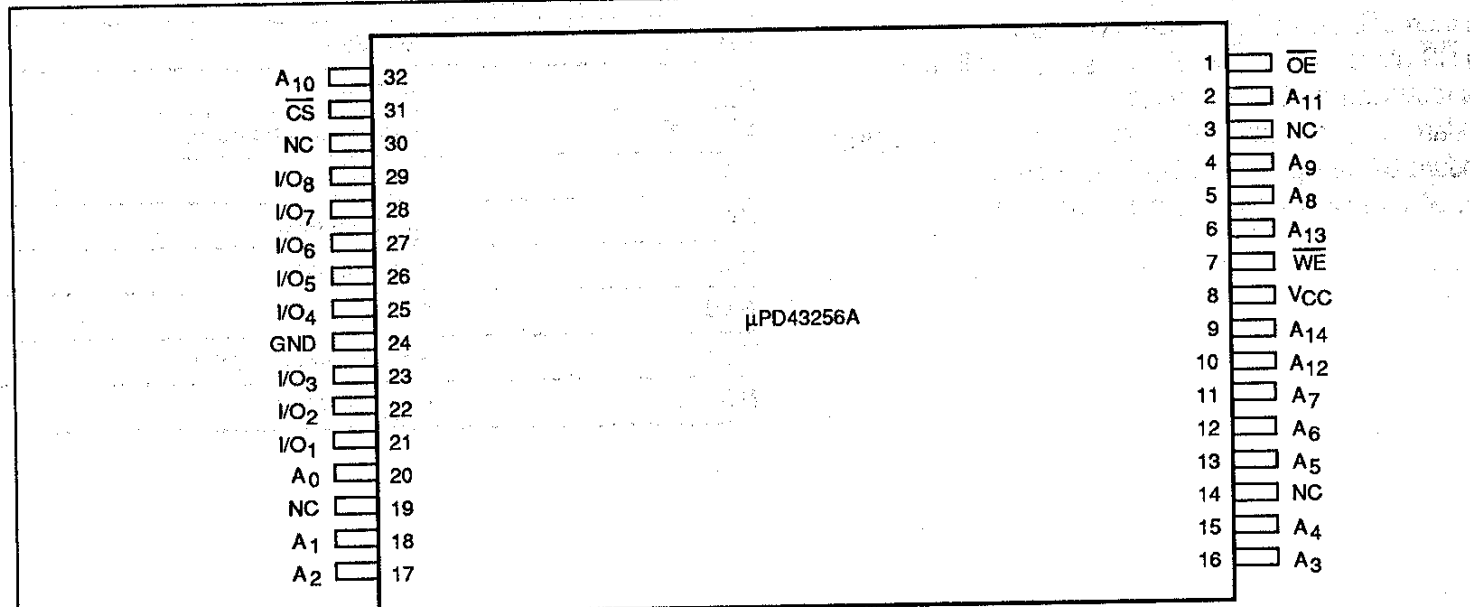
| Symbol          | Function                |
|-----------------|-------------------------|
| $A_0 - A_{14}$  | Address Inputs          |
| $I/O_1 - I/O_8$ | Data Inputs and outputs |
| $\overline{CS}$ | Chip select             |
| $\overline{OE}$ | Output enable           |
| $\overline{WE}$ | Write enable            |
| GND             | Ground                  |
| $V_{CC}$        | +5-volt power supply    |
| NC              | No connection           |

## Pin Configurations (cont)

### 32-Pin Plastic TSOP (normal leads, top view)



### 32-Pin Plastic TSOP (reverse bent leads, bottom view)



#### Notes:

- [1] This package is designed to be mounted with the top of the package closest to the mounting surface. In this position, the exposed side will be the bottom of the package.

### Ordering Information

| Part Number          | Access Time (max) | Data Retention Current (max)<br>$T_A = 0 \text{ to } 70^\circ\text{C}$ | Package                                  |
|----------------------|-------------------|------------------------------------------------------------------------|------------------------------------------|
| μPD43256AC-85L       | 85 ns             | 50 μA                                                                  | 28-pin plastic DIP (600 mil)             |
| C-12L                | 120 ns            |                                                                        |                                          |
| C-15L                | 150 ns            |                                                                        |                                          |
| μPD43256AC-85LL      | 85 ns             | 20 μA                                                                  | 28-pin plastic DIP (600 mil)             |
| C-10LL               | 100 ns            |                                                                        |                                          |
| C-12LL               | 120 ns            |                                                                        |                                          |
| C-15LL               | 150 ns            |                                                                        |                                          |
| μPD43256AGU-85L      | 85 ns             | 50 μA                                                                  | 28-pin plastic miniflat                  |
| GU-10L               | 100 ns            |                                                                        |                                          |
| GU-12L               | 120 ns            |                                                                        |                                          |
| GU-15L               | 150 ns            |                                                                        |                                          |
| μPD43256AGU-85LL     | 85 ns             | 20 μA                                                                  | 28-pin plastic miniflat                  |
| GU-10LL              | 100 ns            |                                                                        |                                          |
| GU-12LL              | 120 ns            |                                                                        |                                          |
| GU-15LL              | 150 ns            |                                                                        |                                          |
| μPD43256AGX-10L-EJA  | 100 ns            | 50 μA                                                                  | 32-pin plastic TSOP (normal leads)       |
| GX-12L-EJA           | 120 ns            |                                                                        |                                          |
| μPD43256AGX-10LL-EJA | 100 ns            | 20 μA                                                                  | 32-pin plastic TSOP (normal leads)       |
| GX-12LL-EJA          | 120 ns            |                                                                        |                                          |
| μPD43256AGX-10L-EKA  | 100 ns            | 50 μA                                                                  | 32-pin plastic TSOP (reverse bent leads) |
| GX-12L-EKA           | 120 ns            |                                                                        |                                          |
| μPD43256AGX-10LL-EKA | 100 ns            | 20 μA                                                                  | 32-pin plastic TSOP (reverse bent leads) |
| GX-12LL-EKA          | 120 ns            |                                                                        |                                          |