**This is an abbreviated datasheet.
Contact a Cypress representative
for complete specifications.**

CY7C291
CY7C292

**CYPRESS
SEMICONDUCTOR**

T-46-13-29

Reprogrammable 2048 x 8 PROM

PROMs

Features

- Windowed for reprogrammability
- CMOS for optimum speed/power
- High speed
  - 35 ns (commercial)
  - 35 ns (military)
- Low power
  - 330 mW (commercial)
  - 413 mW (military)
- EPROM technology 100% programmable
- Slim 300-mil or standard 600-mil packaging available
- 5V ±10% V_{CC}, commercial and military
- TTL-compatible I/O
- Direct replacement for bipolar PROMs
- Capable of withstanding > 2000V static discharge

Functional Description

The CY7C291 and CY7C292 are high-performance 2048-word by 8-bit CMOS PROMs. They are functionally identical, but are packaged in 300-mil and 600-mil wide plastic and hermetic DIP packages respectively. The 300-mil ceramic DIP package is equipped with an erasure window; when exposed to UV light the PROM is erased and can then be reprogrammed. The memory cells utilize proven EPROM floating gate technology and byte-wide intelligent programming algorithms.
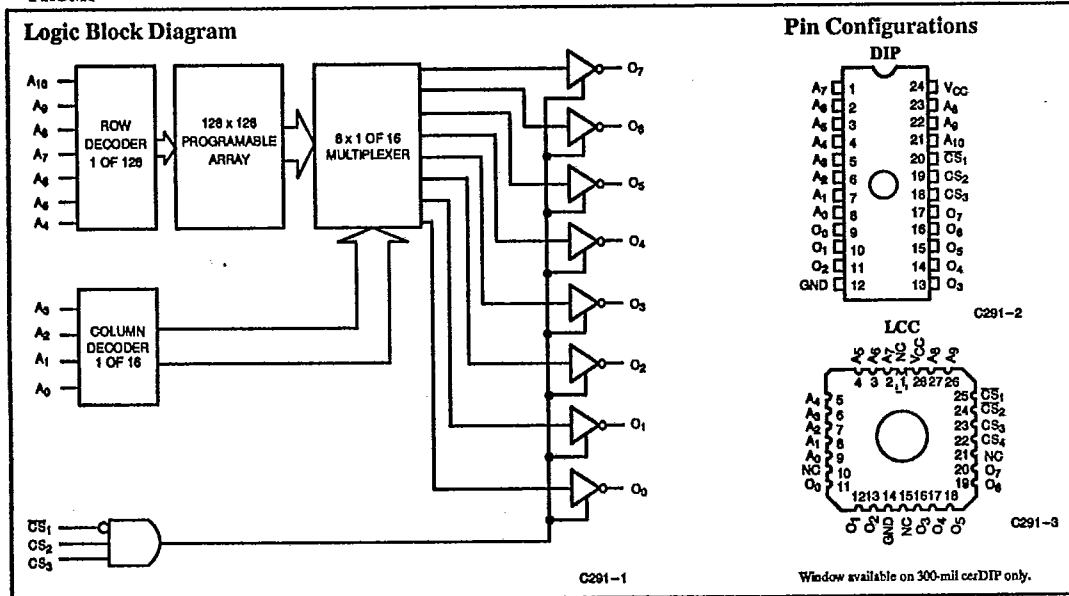
The CY7C291 and CY7C292 are plug-in replacements for bipolar devices and offer the advantages of lower power, superior performance, and programming yield. The EPROM cell requires only 12.5V for the super voltage, and low current requirements allow for gang programming. The EPROM cells allow each memory location to be tested 100% because each location is written into, and repeatedly exercised prior to encapsulation. Each PROM is also tested for AC performance to guarantee that after customer programming, the product will meet DC and AC specification limits.

Reading is accomplished by placing an active LOW signal on $\overline{CS_1}$, and active HIGH signals on CS_2 and CS_3. The contents of the memory location addressed by the address lines ($A_0 - A_{10}$) will become available on the output lines ($O_0 - O_7$).

Logic Block Diagram

C291-1

Pin Configurations

C291-2

C291-3

Window available on 300-mil cerDIP only.

Selection Guide

			7C291-35 7C292-35	7C291-50 7C292-50
Maximum Access Time (ns)			35	50
Maximum Operating Current (mA)	STD	Commercial	90	90
		Military	120[1]	120
	L	Commercial	60	60

Note:
1. 7C291 only.