



## **MILITARY HIGH SPEED 2K x 8 CMOS PROM/RPROM**

### **KEY FEATURES**

- **Ultra-Fast Access Time**
  - $t_{ACC} = 35 \text{ ns}$
  - $t_{CS} = 20 \text{ ns}$
- **Low Power Consumption**
- **Fast Programming**
- **Available in 300 and 600 Mil DIP**
- **Pin Compatible with Am27S191/291 and N82S191 Bipolar PROMs**
- **Immune to Latch-UP**
  - Up to 200 mA
- **ESD Protection Exceeds 2000V**

### **GENERAL DESCRIPTION**

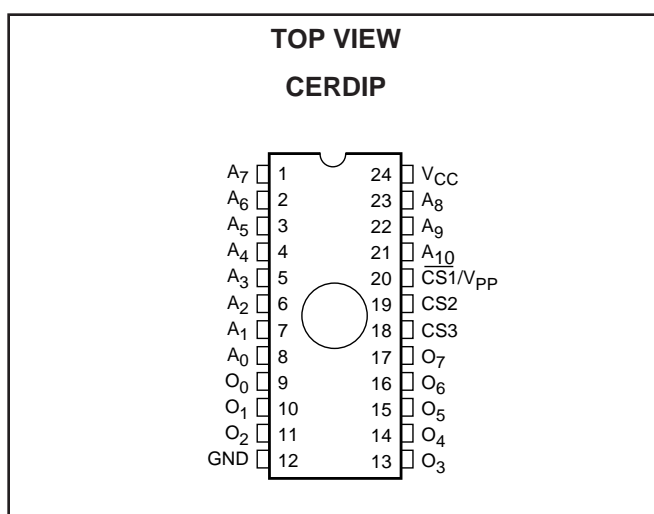
The WS57C191C/291C is an extremely High Performance 16K UV Erasable Electrically Re-Programmable Read Only Memory (RPROM). It is manufactured in an advanced CMOS technology which enables it to operate at Bipolar PROM speeds while consuming only 25% of the power required by its Bipolar counterparts. The WS57C191C/291C is also configured in the standard Bipolar PROM pinout which provides an easy upgrade path for systems which are currently using Bipolar PROMs.

The WS57C191C is packaged in a conventional 600 mil DIP package. The WS57C291C is packaged in a space saving 300 mil DIP package configuration.

### **MODE SELECTION**

<b>PINS MODE</b>	<b><math>\overline{CS1}/V_{PP}</math></b>	<b>CS2</b>	<b>CS3</b>	<b><math>V_{CC}</math></b>	<b>OUTPUTS</b>
Read	$V_{IL}$	$V_{IH}$	$V_{IH}$	$V_{CC}$	$D_{OUT}$
Output Disable	$V_{IH}$	X	X	$V_{CC}$	High Z
Output Disable	X	$V_{IL}$	X	$V_{CC}$	High Z
Program	$V_{PP}$	X	X	$V_{CC}$	$D_{IN}$
Program Verify	$V_{IL}$	$V_{IH}$	$V_{IH}$	$V_{CC}$	$D_{OUT}$
Output Disable	X	X	$V_{IL}$	$V_{CC}$	High Z

### **PIN CONFIGURATION**



### **PRODUCT SELECTION GUIDE**

<b>PARAMETER</b>	<b>WS57C191C/291C-35</b>	<b>WS57C191C/291C-45</b>	<b>WS57C191C/291C-55</b>
Address Access Time (Max)	35 ns	45 ns	55 ns
CS to Output Valid Time (Max)	20 ns	20 ns	20 ns

**ORDERING INFORMATION**

PART NUMBER	SPEED (ns)	PACKAGE TYPE	PACKAGE DRAWING	OPERATING TEMPERATURE RANGE	WSI MANUFACTURING PROCEDURE
<b>WS57C191C</b>					
WS57C191C-35DMB	35	24 Pin Cerdip, 0.6"	D1	Military	MIL-STD-883C
WS57C191C-45DMB	45	24 Pin Cerdip, 0.6"	D1	Military	MIL-STD-883C
WS57C191C-55DMB	55	24 Pin Cerdip, 0.6"	D1	Military	MIL-STD-883C
<b>WS57C291C</b>					
WS57C291C-35TMB	35	24 Pin Cerdip, 0.3"	T1	Military	MIL-STD-883C
WS57C291C-45TMB	45	24 Pin Cerdip, 0.3"	T1	Military	MIL-STD-883C
WS57C291C-55TMB	55	24 Pin Cerdip, 0.3"	T1	Military	MIL-STD-883C

**NOTE:** 9. The actual part marking will not include the initials "WS."

**PROGRAMMING/ALGORITHMS/ERASURE/PROGRAMMERS**

**REFER TO  
PAGE 5-1**

The WS57C191C and WS57C291C are programmed using Algorithm D shown on page 5-9.

**For complete data sheet and electrical specifications see page 2-7.**

