



MILITARY HIGH SPEED 16K x 8 CMOS PROM/RPROM

KEY FEATURES

- **Ultra-Fast Access Time**
— 45 ns
- **Low Power Consumption**
- **Fast Programming**
- **Pin Compatible with Am27S51 and N82HS1281**
- **Immune to Latch-Up**
— Up to 200 mA
- **ESD Protection Exceeds 2000 V**

GENERAL DESCRIPTION

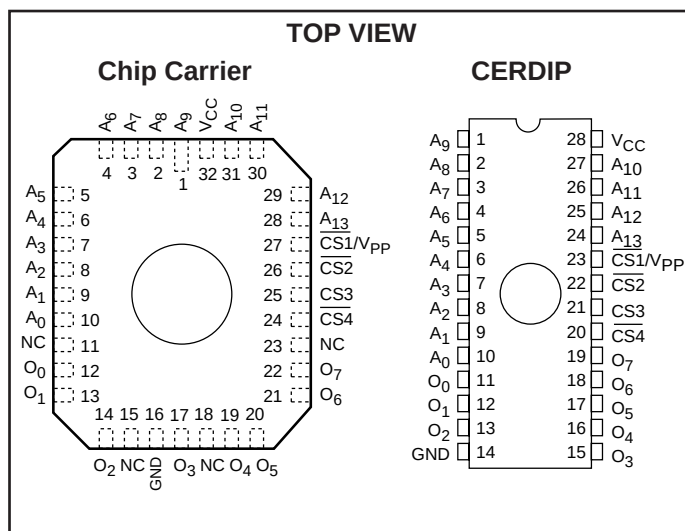
The WS57C51C is a High Performance 128K UV Erasable Electrically Re-Programmable Read Only Memory (RPROM). It is manufactured in an advanced CMOS technology which enables it to operate at Bipolar PROM speeds while consuming only 25% of the power required by its Bipolar counterparts. A further advantage of the WS57C51C over Bipolar PROM devices is the fact that it utilizes a proven EPROM technology. This enables the entire memory array to be tested for switching characteristics and functionality after assembly. Unlike devices which cannot be erased, every WS57C51C in a windowed package is 100% tested with worst case test patterns both before and after assembly.

The WS57C51C provides a low power alternative to those designs which are committed to a Bipolar PROM footprint. It is a direct drop-in replacement for a Bipolar PROM of the same architecture (16K x 8). No software, hardware or layout changes need be performed.

MODE SELECTION

MODE \ PINS	$\overline{CS1}/V_{PP}$	$\overline{CS2}$	$CS3$	$\overline{CS4}$	V_{CC}	OUTPUTS
Read	V_{IL}	V_{IL}	V_{IH}	V_{IL}	V_{CC}	D_{OUT}
Output Disable	V_{IH}	X	X	X	V_{CC}	High Z
Output Disable	X	V_{IH}	X	X	V_{CC}	High Z
Output Disable	X	X	V_{IL}	X	V_{CC}	High Z
Output Disable	X	X	X	V_{IH}	V_{CC}	High Z
Program	V_{PP}	V_{IH}	X	X	V_{CC}	D_{IN}
Program Verify	V_{IL}	V_{IL}	V_{IH}	V_{IL}	V_{CC}	D_{OUT}

PIN CONFIGURATION



PRODUCT SELECTION GUIDE

PARAMETER	WS57C51C-45	WS57C51C-55	WS57C51C-70
Address Access Time (Max)	45 ns	55 ns	70 ns
CS to Output Valid Time (Max)	20 ns	25 ns	30 ns

ORDERING INFORMATION

PART NUMBER	SPEED	PACKAGE TYPE	PACKAGE DRAWING	OPERATING TEMPERATURE RANGE	WSI MANUFACTURING PROCEDURE
WS57C51C-45CMB	45	32 Pad CLLCC	C2	Military	MIL-STD-883C
WS57C51C-45DMB	45	28 Pin Cerdip, 0.6"	D2	Military	MIL-STD-883C
WS57C51C-45TMB	45	28 Pin Cerdip, 0.3"	T2	Military	MIL-STD-883C
WS57C51C-55CMB	55	32 Pad CLLCC	C2	Military	MIL-STD-883C
WS57C51C-55DMB	55	28 Pin Cerdip, 0.6"	D2	Military	MIL-STD-883C
WS57C51C-55TMB	55	28 Pin Cerdip, 0.3"	T2	Military	MIL-STD-883C

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

PROGRAMMING/ALGORITHMS/ERASURE/PROGRAMMERS

**REFER TO
PAGE 5-1**

The WS57C51C is programmed using Algorithm D shown on page 5-9.

For complete data sheet and electrical specifications see page 2-47.

