

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-UpUp to 200 mA
- ESD Protection Exceeds 2000 V

GENERAL DESCRIPTION

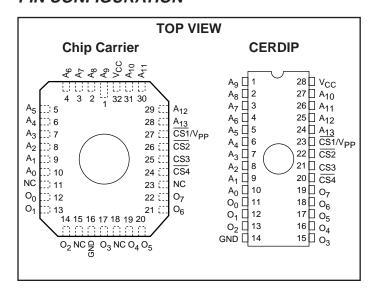
The WS57C51C is a High Performance 128K UV Erasable Electrically Re-Programmable Read Only Memory (RPROM). It is manufactured in an advanced CMOS technology which enables it to operate at Bipolar PROM speeds while consuming only 25% of the power required by its Bipolar counterparts. A further advantage 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 WS5751C 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

PINS	CS1/ V _{PP}	CS2	CS3	CS4	vcc	OUTPUTS
Read	V _{IL}	V _{IL}	V_{IH}	V_{IL}	VCC	D _{OUT}
Output Disable	V _{IH}	Х	Х	Х	VCC	High Z
Output Disable	Х	VIH	Х	Х	V _{CC}	High Z
Output Disable	Х	Х	V _{IL}	Х	V _{CC}	High Z
Output Disable	Х	Х	Х	V _{IH}	VCC	High Z
Program	V _{PP}	V _{IH}	Х	Х	Vcc	D _{IN}
Program Verify	V _{IL}	V _{IL}	V _{IH}	V _{IL}	Vcc	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

Return to Main Menu 4-11

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.