MILITARY HIGH SPEED 32K x 8 CMOS EPROM

KEY FEATURES

- **Fast Access Time**
  - — 55 ns
- **Low Power Consumption**
- **DESC SMD No. 5962-86063**
- **EPI Processing**
  - — Latch-up Immunity Up to 200 mA
- **Standard EPROM Pinout**

GENERAL DESCRIPTION

The WS57C256F is a High Performance 256K UV Erasable Electrically Programmable Read Only Memory. It is manufactured using an advanced CMOS process technology enabling it to operate at speeds as fast as 55 ns Access Time.

Two major features of the WS57C256F are its Low Power and High Speed. While operating in a TTL environment it consumes less than 120 mA while cycling at full speed. Additionally, the WS57C256F can be placed in a standby mode which drops operating current below 5 mA in a TTL environment and 500 µA in a CMOS environment.

The WS57C256F also has exceptional output drive capability. It can source 4 mA and sink 16 mA per output.

The WS57C256F is configured in the standard EPROM pinout which provides an easy upgrade path for systems which are currently using standard EPROMs.

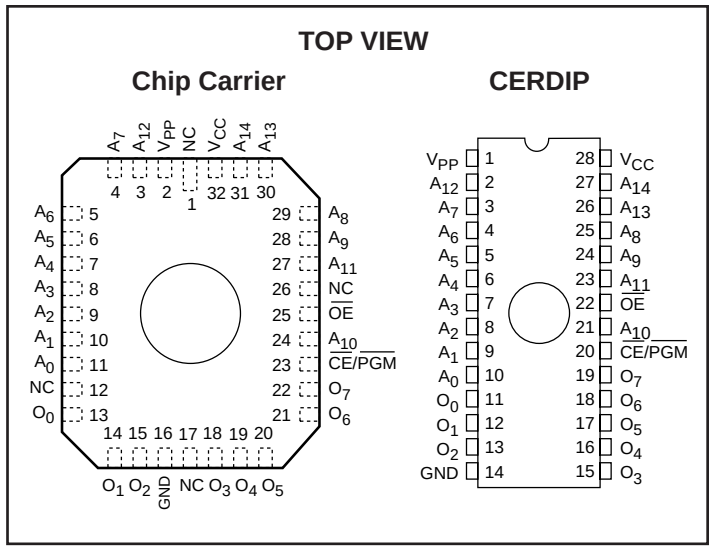
MODE SELECTION

PINS / MODE	$\overline{CE}$/$\overline{PGM}$	$\overline{OE}$	A_9	A_0	V_{PP}	V_{CC}	OUTPUTS
Read	V_{IL}	V_{IL}	X	X	V_{CC}	V_{CC}	D_{OUT}
Output Disable	X	V_{IH}	X	X	V_{CC}	V_{CC}	High Z
Standby	V_{IH}	X	X	X	V_{CC}	V_{CC}	High Z
Program	V_{IL}	V_{IH}	X	X	V_{PP}[2]	V_{CC}	D_{IN}
Program Verify	X	V_{IL}	X	X	V_{PP}[2]	V_{CC}	D_{OUT}
Program Inhibit	V_{IH}	V_{IH}	X	X	V_{PP}[2]	V_{CC}	High Z
Signature[3]	V_{IL}	V_{IL}	V_H[2]	V_{IL}	V_{CC}	V_{CC}	23 H[4]
	V_{IL}	V_{IL}	V_H[2]	V_{IH}	V_{CC}	V_{CC}	EO H[5]

NOTES:

1. X can be V_{IL} or V_{IH}.
2. $V_{IH} = V_{PP} = 12.75 \pm 0.25$ V.
3. A1 – A8, A10 – A14 = V_{IL}.
4. Manufacturer Signature.
5. Device Signature.

PIN CONFIGURATION



PRODUCT SELECTION GUIDE

PARAMETER	WS57C256F-55	WS57C256F-70
Address Access Time (Max)	55 ns	70 ns
Output Enable Time (Max)	25 ns	30 ns

ORDERING INFORMATION

PART NUMBER	SPEED (ns)	PACKAGE TYPE	PACKAGE DRAWING	OPERATING TEMPERATURE RANGE	WSI MANUFACTURING PROCEDURE
WS57C256F-55CMB	55	32 Pad CLLCC	C2	Military	MIL-STD-883C
WS57C256F-55DMB	55	28 Pin CERDIP, 0.6"	D2	Military	MIL-STD-883C
WS57C256F-55TMB	55	28 Pin CERDIP, 0.3"	T2	Military	MIL-STD-883C
WS57C256F-70CMB*	70	32 Pad CLLCC	C2	Military	MIL-STD-883C
WS57C256F-70DMB*	70	28 Pin CERDIP, 0.6"	D2	Military	MIL-STD-883C

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

*SMD product. See page 4-1 for DESC SMD number.

PROGRAMMING/ALGORITHMS/ERASURE/PROGRAMMERS

REFER TO PAGE 5-1

The WS57C256F is programmed using Algorithm D shown on page 5-9.

For complete data sheet and electrical specifications see page 3-13.