

CMOS 8K x 8 ZEROPOWER SRAM

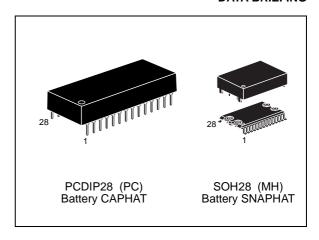
DATA BRIEFING

- INTEGRATED ULTRA LOW POWER SRAM, POWER-FAIL CONTROL CIRCUIT and BATTERY
- READ CYCLE TIME EQUALS WRITE CYCLE TIME
- AUTOMATIC POWER-FAIL CHIP DESELECT and WRITE PROTECTION
- CHOICE of TWO WRITE PROTECT VOLTAGES:
 - $M48Z58: 4.5V \le V_{PFD} \le 4.75V$
 - M48Z58Y: 4.2V ≤ V_{PFD} ≤ 4.5V
- SELF CONTAINED BATTERY in the CAPHAT DIP PACKAGE
- SMALL OUTLINE PACKAGE PROVIDES DIRECT CONNECTION for a SNAPHAT HOUSING CONTAINING the BATTERY
- SNAPHAT HOUSING (BATTERY) REPLACEABLE
- PIN and FUNCTION COMPATIBLE with JEDEC STANDARD 8K x 8 SRAMs

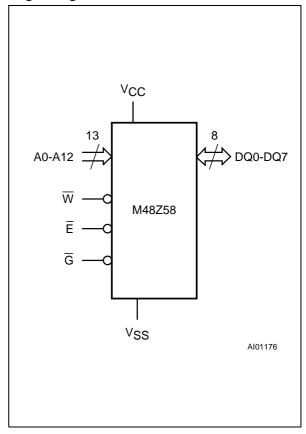
DESCRIPTION

The M48Z58 ZEROPOWER[®] RAM is an 8K x 8 non-volatile static RAM that integrates power-fail deselect circuitry and battery control logic on a single die. The monolithic chip is available in two special packages to provide a highly integrated battery backed-up memory solution.

The M48Z58 is a non-volatile pin and function equivalent to any JEDEC standard 8K x 8 SRAM. It also easily fits into many ROM, EPROM, and EEPROM sockets, providing the non-volatility of PROMs without any requirement for special write timing or limitations on the number of writes that can be performed.



Logic Diagram



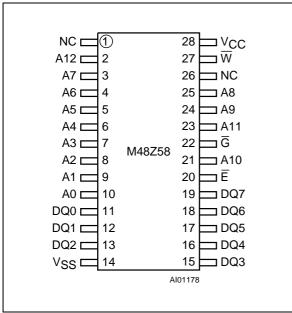
B48Z58/507 1/2

DIP Pin Connections

NC [1	$\overline{}$	28] V _{CC}
A12 🛮 2		27 🛮 W
A7 🛚 3	M48Z58	26 NC
A6 🛚 4		25] A8
A5 [] 5		24 🛮 A9
A4 [6		23 A11
A3 [7		22] G
A2 [8		21 A10
A1 [9		20 Ē
A0 [10		19 DQ7
DQ0 [11		18 DQ6
DQ1 [12		17 DQ5
DQ2 [13		16 DQ4
V _{SS} [14		15 DQ3
	A	l01177

Warning: NC = Not Connected

SO Pin Connections



Warning: NC = Not Connected

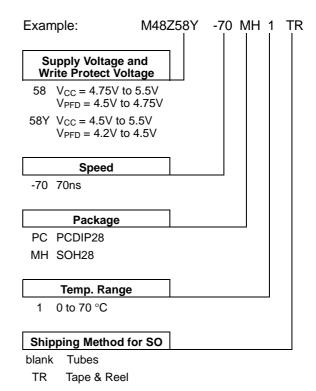
Signal Names

A0-A12	Address Inputs	
DQ0-DQ7	Data Inputs / Outputs	
Ē	Chip Enable	
G	Output Enable	
W	Write Enable	
Vcc	Supply Voltage	
V _{SS}	Ground	

Ordering Information Scheme

For a list of available options refer to the current Memory Shortform catalogue.

For further information on any aspect of this device, please contact the SGS-THOMSON Sales Office nearest to you.



Note: The SO and battery packages are shipped separately in plastic anti-static tubes. The SO package is also available to ship in Tape & Reel form. For the 28 lead SO, the battery package (i.e. SNAPHAT) part number is "M4Z28-BR00SH1".

47/