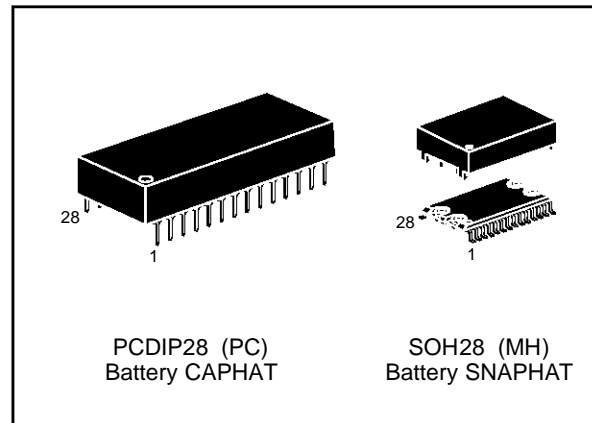


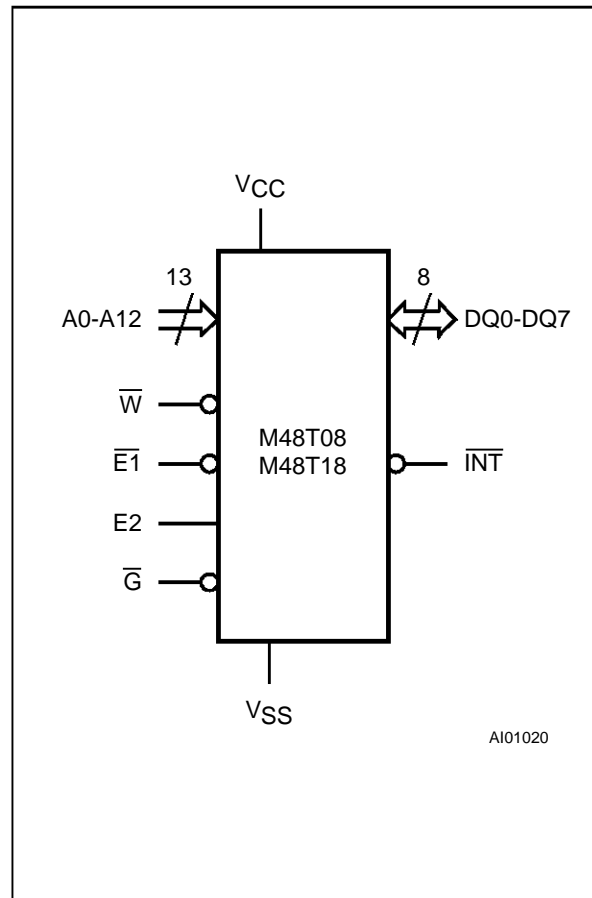
CMOS 8K x 8 TIMEKEEPER SRAM

DATA BRIEFING

- INTEGRATED ULTRA LOW POWER SRAM, REAL TIME CLOCK and POWER-FAIL CONTROL CIRCUIT
- BYTEWIDE RAM-LIKE CLOCK ACCESS
- BCD CODED YEAR, MONTH, DAY, DATE, HOURS, MINUTES and SECONDS
- CLOCK ACCURACY of ± 1 MINUTE a MONTH, @ 25°C
- SOFTWARE CONTROLLED CLOCK CALIBRATION for HIGH ACCURACY APPLICATIONS
- AUTOMATIC POWER-FAIL CHIP DESELECT and WRITE PROTECTION
- CHOICE of TWO WRITE PROTECT VOLTAGES:
 - M48T08: $4.5V \leq V_{PFD} \leq 4.75V$
 - M48T18: $4.2V \leq V_{PFD} \leq 4.5V$
- SELF CONTAINED BATTERY and CRYSTAL in the CAPHAT DIP PACKAGE
- SMALL OUTLINE PACKAGE PROVIDES DIRECT CONNECTION for a SNAPHAT HOUSING CONTAINING the BATTERY and CRYSTAL
- SNAPHAT HOUSING (BATTERY and CRYSTAL) REPLACEABLE
- 10 YEARS of DATA RETENTION and CLOCK OPERATION in the ABSENCE of POWER
- PIN and FUNCTION COMPATIBLE with JEDEC STANDARD 8K x 8 SRAMS



Logic Diagram



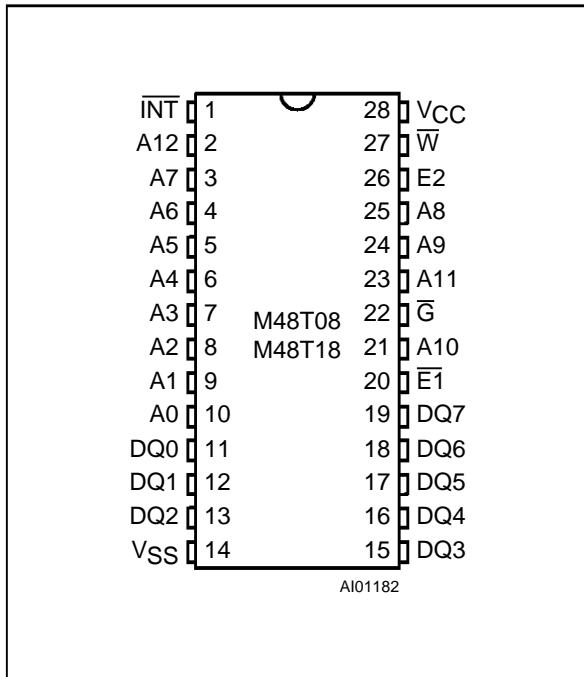
DESCRIPTION

The M48T08,18 TIMEKEEPER™ RAM is an 8K x 8 non-volatile static RAM and real time clock which is 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. The M48T08,18 is compatible with the MK48T08,18.

The monolithic chip is available in two special packages to provide a highly integrated battery backed-up memory and real time clock solution.

M48T08, M48T18

DIP Pin Connections



Signal Names

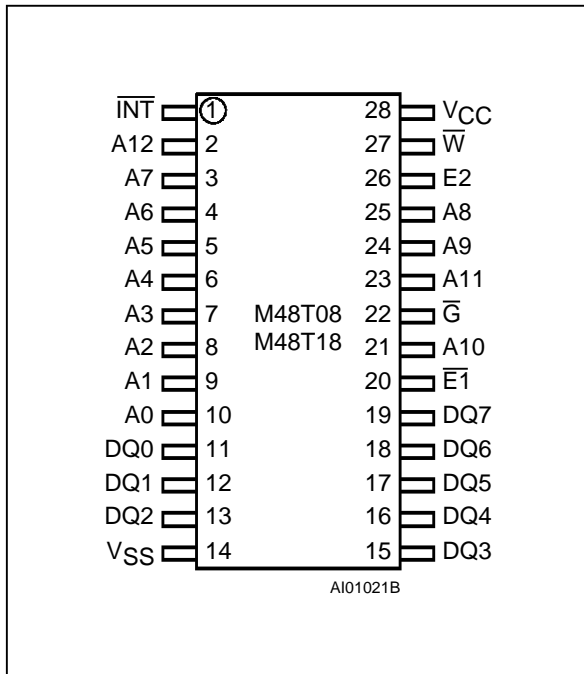
A0-A12	Address Inputs
DQ0-DQ7	Data Inputs / Outputs
$\overline{\text{INT}}$	Power Fail Interrupt
$\overline{\text{E1}}$	Chip Enable 1
E2	Chip Enable 2
$\overline{\text{G}}$	Output Enable
$\overline{\text{W}}$	Write Enable
V _{CC}	Supply Voltage
V _{SS}	Ground

Ordering Information Scheme

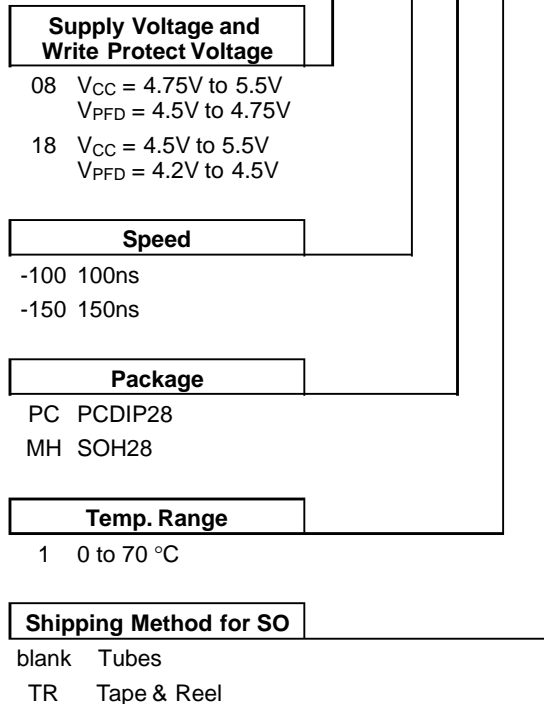
For a list of available options refer to the current Memory Shortform catalogue.

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

SO Pin Connections



Example: M48T18 -100 MH 1 TR



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 "M4T28-BR12SH1".