

M48T58 M48T58Y

64Kb (8K x 8) TIMEKEEPER[®] SRAM

DATA BRIEFING

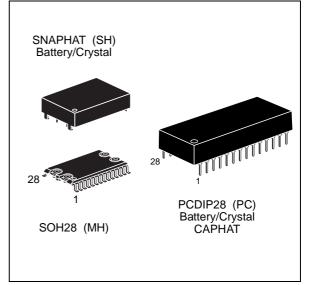
- INTEGRATED ULTRA LOW POWER SRAM, REAL TIME CLOCK, POWER-FAIL CONTROL CIRCUIT and BATTERY
- BYTEWIDE[™] RAM-LIKE CLOCK ACCESS
- BCD CODED YEAR, MONTH, DAY, DATE, HOURS, MINUTES and SECONDS
- FREQUENCY TEST OUTPUT for REAL TIME CLOCK
- AUTOMATIC POWER-FAIL CHIP DESELECT and WRITE PROTECTION
- WRITE PROTECT VOLTAGES (V_{PFD} = Power-fail Deselect Voltage):
 M48T58: 4.5V ≤ V_{PFD} ≤ 4.75V
 - M48T58Y: $4.2V \le V_{PED} \le 4.5V$
- SELF-CONTAINED BATTERY and CRYSTAL in the CAPHAT DIP PACKAGE
- PACKAGING INCLUDES a 28-LEAD SOIC and SNAPHAT[®] TOP (to be Ordered Separately)
- SOIC PACKAGE PROVIDES DIRECT CONNECTION for a SNAPHAT TOP which CONTAINS the BATTERY and CRYSTAL
- PIN and FUNCTION COMPATIBLE with JEDEC STANDARD 8K x 8 SRAMs

DESCRIPTION

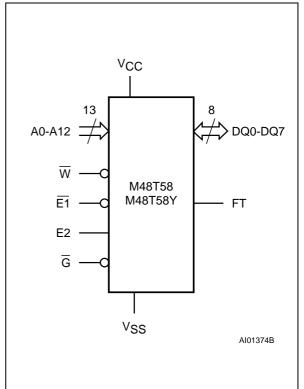
The M48T58/58Y TIMEKEEPER[®] RAM is an 8K x 8 non-volatile static RAM and real time clock. The monolithic chip is available in two special packages to provide a highly integrated battery backed-up memory and real time clock solution.

The M48T58/58Y 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.

The 28 pin 600mil DIP CAPHAT^M houses the M48T58/58Y silicon with a quartz crystal and a long life lithium button cell in a single package.



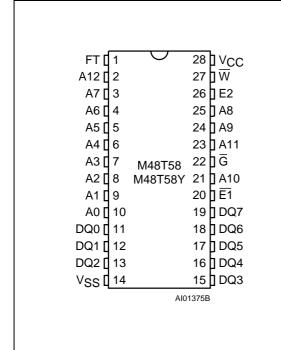
Logic Diagram



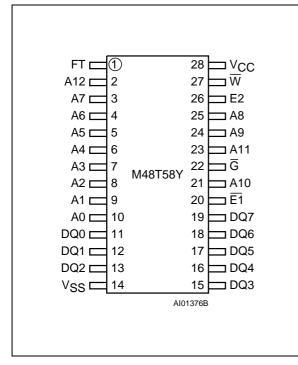
B48T58/801

Complete data available on DATA-on-DISC CD-ROM or at www.st.com

DIP Pin Connections



SOIC Pin Connections

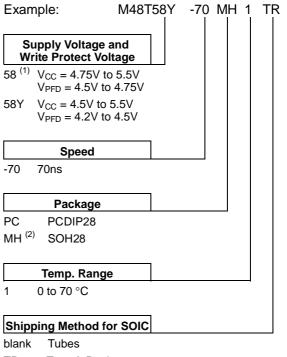


Signal Names

Address Inputs
Data Inputs / Outputs
Frequency Test Output (Open Drain)
Chip Enable 1
Chip Enable 2
Output Enable
Write Enable
Supply Voltage
Ground

Ordering Information Scheme

For a list of available options or for further information on any aspect of this device, please contact the SGS-THOMSON Sales Office nearest to you.



TR Tape & Reel

Notes: 1. The M48T58 part is offered with the PCDIP28 (i.e.

 The M46136 part is obliefed with the PCDP26 (i.e. CAPHAT) package only.
The SOIC package (SOH28) requires the battery/crystal package (SNAPHAT) which is ordered separately under the part number "M4T28-BR12SH1" in plastic tube or "M4700 DD1001 WTD": "M4T28-BR12SH1TR" in Tape & Reel form.

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Caution: Do not place the SNAPHAT battery/crystal package "M4T28-BR12SH1" in conductive foam since this will drain the lithium button-cell battery.