



M48Z35 M48Z35Y, M48Z35V

256 Kbit (32Kb 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
- WRITE PROTECT VOLTAGES (V_{PFD} = Power-fail Deselect Voltage):
 - M48Z35: $4.50V \leq V_{PFD} \leq 4.75V$
 - M48Z35Y: $4.20V \leq V_{PFD} \leq 4.50V$
 - M48Z35V: $2.7V \leq V_{PFD} \leq 3.0V$
- SELF-CONTAINED BATTERY 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 32K x 8 SRAMs

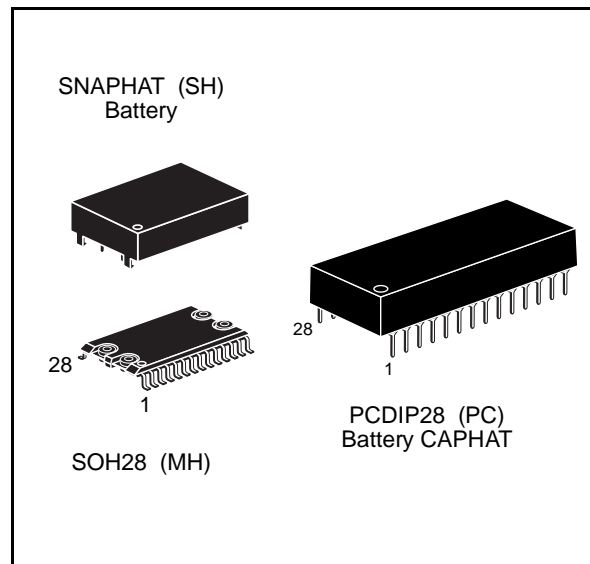
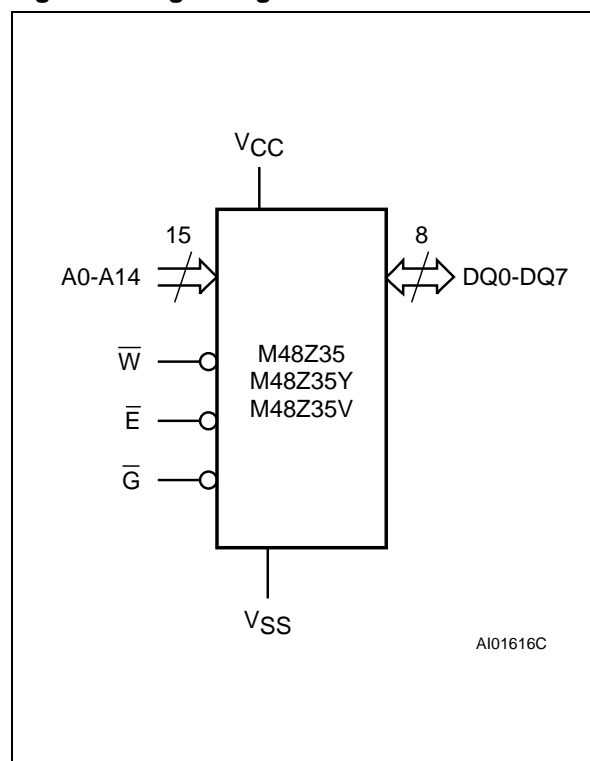


Figure 1. Logic Diagram



DESCRIPTION

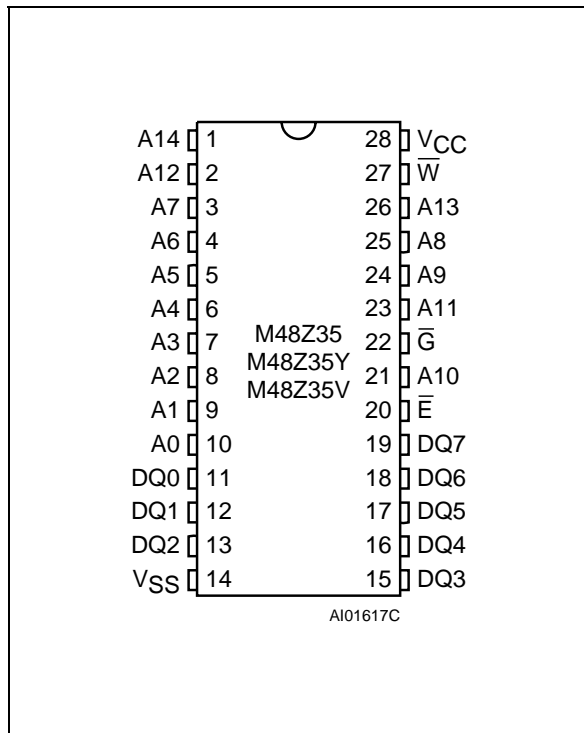
The M48Z35/35Y/35V ZEROPOWER[®] RAM is a 32 Kbit x 8 non-volatile static RAM that integrates power-fail deselect circuitry and battery control logic on a single die. The monolithic chip is available in two special packages to provide a highly integrated battery backed-up memory solution.

Signal Names

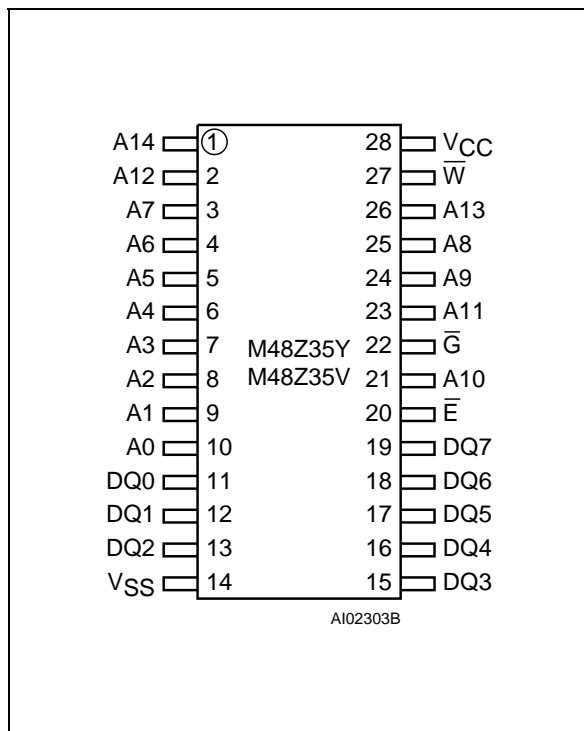
A0-A14	Address Inputs
DQ0-DQ7	Data Inputs / Outputs
\bar{E}	Chip Enable
\bar{G}	Output Enable
\bar{W}	Write Enable
V _{CC}	Supply Voltage
V _{SS}	Ground

M48Z35, M48Z35Y, M48Z35V

DIP Pin Connections



SOIC Pin Connections



Ordering Information Scheme

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

Example: M48Z35Y -70 MH 1 TR

Supply Voltage and Write Protect Voltage	
35 ⁽¹⁾	$V_{CC} = 4.75V$ to $5.5V$ $V_{PFD} = 4.5V$ to $4.75V$
35Y	$V_{CC} = 4.75V$ to $5.5V$ $V_{PFD} = 4.2V$ to $4.5V$
35V	$V_{CC} = 3.0V$ to $3.6V$ $V_{PFD} = 2.7V$ to $3.0V$
Speed	
-70	70 ns (M48Z35/Y)
-10	100 ns (M48Z35V)
Package	
PC	PCDIP28
MH ⁽²⁾	SOH28
Temperature Range	
1	0 to 70 °C
6 ⁽³⁾	-40 to 85 °C
Shipping Method for SOIC	
blank	Tubes
TR	Tape & Reel

- Note:**
- The M48Z35 part is offered with the PCDIP28 (CAPHAT) package only.
 - The SOIC package (SOH28) requires the battery package (SNAPHAT) which is ordered separately under the part number "M4Z28-BR00SH1" in plastic tube or "M4Z28-BR00SH1TR" in Tape & Reel form.
 - Industrial temperature grade available in SOIC package (SOH28) only.

Caution: Do not place the SNAPHAT battery package "M4Z28-BR00SH1" in conductive foam since this will drain the lithium button-cell battery.