

64K-BIT READ ONLY MEMORY

- PIN COMPATIBLE WITH M2764
- ACCESS TIME 250 ns (MAX)
- COMPLETELY STATIC OPERATION
- SINGLE +5V ± 10% POWER SUPPLY
- 8192 × 8 BIT ORGANISATION
- INPUTS AND OUTPUTS TTL COMPATIBLE
- PROGRAMMABLE CHIP SELECT
- THREE-STATE OUTPUTS FOR DIRECT BUS INTERFACE
- EPROMs ACCEPTED AS PROGRAM DATA INPUTS

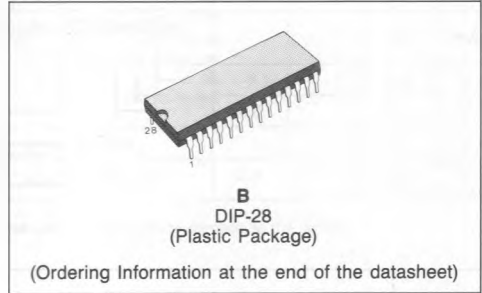
DESCRIPTION

The M2365 is a 65,536-bit static Read Only Memory organized as 8,192 by 8 bits. It is manufactured using our high density N-channel Si-gate MOS process and is ideal for non-volatile data storage applications where high performance, large bit storage and simple interfacing are important design considerations.

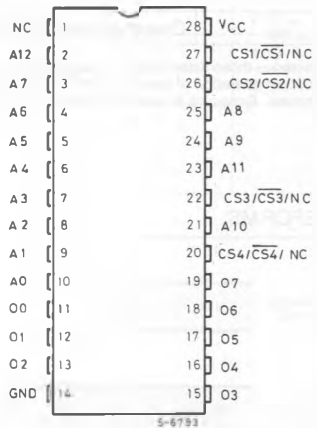
The M2365 available in 28-lead dual in-line plastic or ceramic package.

PIN NAMES

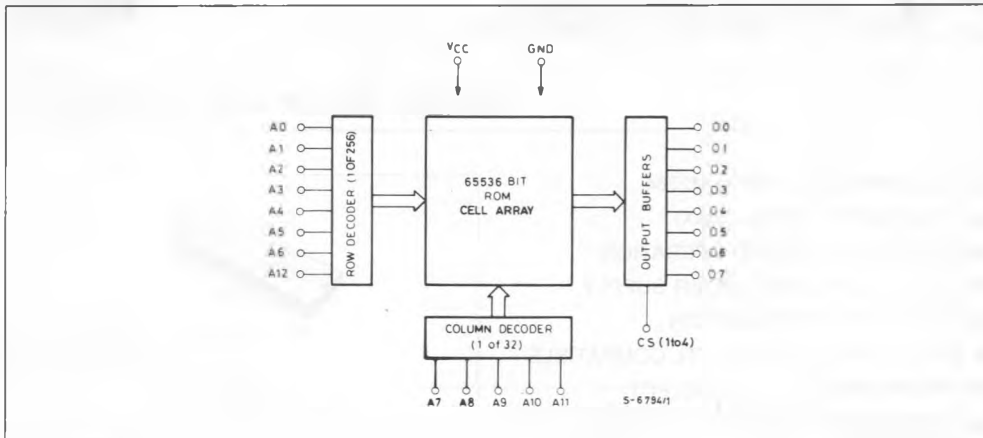
A0-A12	ADDRESS INPUT
CS1-CS4	CHIP SELECT INPUTS
NC	NO CONNECTION
O0-O7	DATA OUTPUT
V _{CC}	POWER SUPPLY
GND	GROUND



PIN CONNECTIONS



BLOCK DIAGRAM

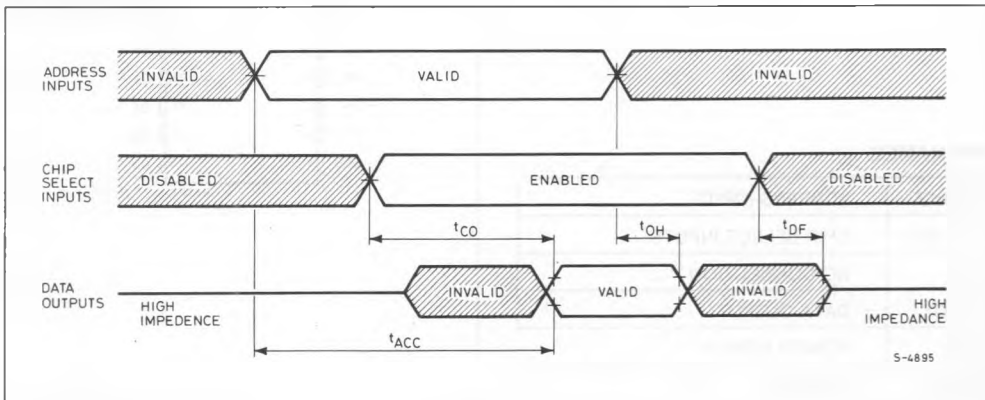


ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_I	Voltages on any pin with respect to ground	- 0.5 to + 7	V
P_{tot}	Total power dissipation	1	W
T_{stg}	Storage temperature: ceramic package plastic package	- 65 to + 150 - 55 to + 125	°C °C
T_{op}	Operating temperature	0 to + 70	°C

Stresses above those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

WAVEFORMS



DC AND OPERATING CHARACTERISTICS ($T_{amb} = 0^{\circ}\text{C}$ to $+70^{\circ}\text{C}$, $V_{CC} = 5\text{V} \pm 10\%$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Values			Unit
			Min.	Typ.	Max.	
I_{LI}	Input Load Current	$V_{CC} = 5.5\text{V}$, $0\text{V} \leq V_{IN} \leq 5.5\text{V}$			10	μA
I_{LO}	Output Leakage Current	Chip deselected $V_{OUT} = 0\text{V}$ to V_{CC}			10	μA
I_{CC}	Power Supply Current	Output unloaded, Chip enabled $V_{CC} = 5.5\text{V}$, $V_{IN} = V_{CC}$			70	mA
V_{IL}	Input Low Voltage	See Note 1	-0.5		0.8	V
V_{IH}	Input High Voltage		2.0		V_{CC}	V
V_{OL}	Output Low Voltage	$V_{CC} = 4.5\text{V}$ $I_{OL} = 2.1\text{ mA}$			0.4	V
V_{OH}	Output High Voltage	$V_{CC} = 4.5\text{V}$ $I_{OH} = -400\ \mu\text{A}$	2.4		V_{CC}	V

Note 1: Input levels that swing more negative than -0.5V will be clamped and may cause damage to the device.

AC CHARACTERISTICS

Symbol	Parameter	Test Conditions	M2365			Unit
			Min	Typ.	Max	
t_{ACC}	Address Access Time	Output load: 1 TTL load and 100 pf			250	ns
t_{CO}	Chip Select Delay				100	ns
t_{DF}	Chip Deselect Delay	Input transition time: 20 ns			100	ns
t_{OH}	Previous Data Valid After Address Change Delay	Timing reference levels: Input: 1.5V Output: 0.8V and 2.0V	10			ns

CAPACITANCE ($T_{amb} = 25^{\circ}\text{C}$, $f = 1\text{ MHz}$, see Note 2)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
C_{IN}	Input Capacitance	All pins except pin under test tied to AC ground			7	pF
C_{OUT}	Output Capacitance				10	pF

Note 2: This parameter is sampled periodically and is not 100% tested.

ORDERING INFORMATION

Part Number	Access Time	Supply Voltage	Temp. Range	Package
M2365B1	250ns	5V ± 10%	0° to +70°C	DIP-28

PACKAGE MECHANICAL DATA

28-PIN PLASTIC DIP

