

EMM3539

SEMI 3539 400NSEC, STATIC, TTL IN/OUT 256x8 N-MOS RAM

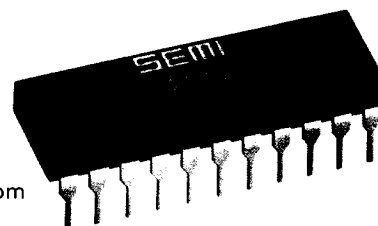
FEATURES

- 256 x 8 with Common I/O Bus
- Standard 22-Pin Dip
- Single +5V Power Supply
- Completely Static — No Clocks or Refresh
- Totally TTL Compatible
- 400 ns Maximum Access Time
- Less than 400 mW Power Dissipation
- Two Separate Chip Select Inputs
- Separate Output Disable Function

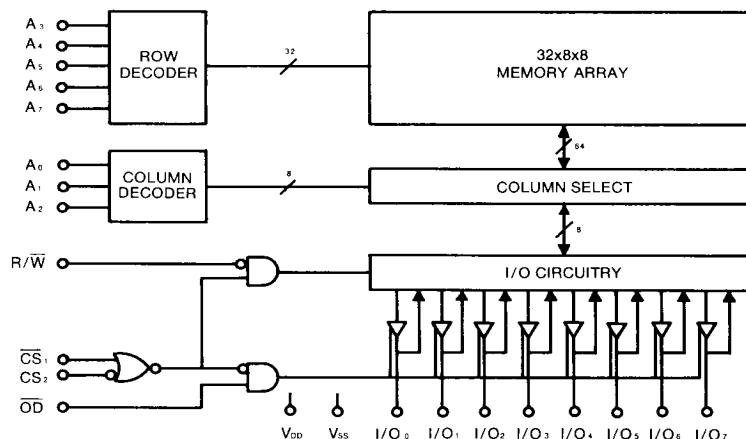
GENERAL DESCRIPTION

The 3539 is a 2048-bit Static Read/Write Random Access Memory.

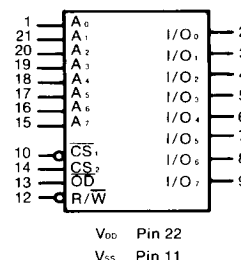
Organized as 256 8-bit words, the 3539 features a common I/O structure which allows packaging in a standard 22-pin plastic or cerdip dual in-line package. This device uses a single +5V power supply and is TTL-compatible on inputs and outputs.



BLOCK DIAGRAM



LOGIC SYMBOL



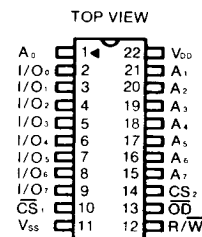
TRUTH TABLE

CS ₁	CS ₂	OD	R/W	STATUS	I/O BUS MODE
H	X	X	X	DESELECTED	HI Z
X	L	X	X	DESELECTED	HI Z
L	H	L	L	WRITE MODE	OUTPUT DISENABLE DATA CAN BE WRITTEN
L	H	H	L	WRITE MODE	OUTPUT ENABLED DATA CAN NOT BE WRITTEN
L	H	L	H	READ MODE	OUTPUT DISABLED DATA CAN NOT BE READ
L	H	H	H	READ MODE	OUTPUT ENABLED DATA CAN BE READ

X = IRRELEVANT STATE

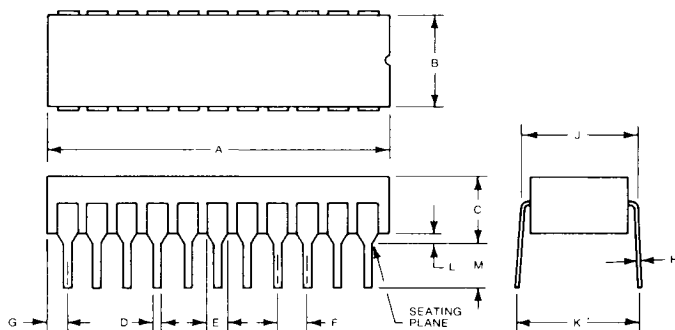
PIN CONFIGURATION

- A_n Address Inputs
- CS_n Chip Select Inputs
- OD Output Disable
- R/W Read/Write Control Input
- I/O_n Data Bus Pins
- V_{DD} +5 V Power Supply
- V_{SS} 0 V Power Supply



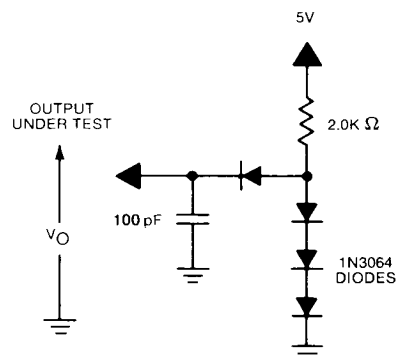
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PACKAGING DIMENSIONS



DIM.	PLASTIC				CERDIP			
	MILLIMETERS		INCHES		MILLIMETERS		INCHES	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
A	27.940	29.718	1.100	1.170	26.787	27.559	1.055	1.085
B	8.636	9.144	0.340	0.360	9.398	10.160	0.370	0.400
C	4.318	5.080	0.170	0.200	3.937	5.588	0.155	0.220
D	0.356	0.559	0.014	0.022	0.381	0.584	0.015	0.023
E	1.016	1.778	0.040	0.070	1.016	1.651	0.040	0.065
F	2.413	2.667	0.095	0.105	2.286	2.794	0.090	0.110
G	1.016	2.032	0.040	0.080	0.381	1.016	0.015	0.040
H	0.203	0.305	0.008	0.012	0.203	0.305	0.008	0.012
J	9.144	10.160	0.360	0.400	10.160	10.795	0.400	0.425
K	10.160	REF.	0.400	REF.	10.160	12.192	0.400	0.480
L	0.508	1.016	0.020	0.040	.381	1.016	0.015	0.040
M	2.540	3.937	0.100	0.155	2.540	4.445	0.100	0.160

TEST OUTPUT LOAD



ORDERING INFORMATION

Part Number	Access Time	Package	Temperature Range
3539UCD	650ns	Cerdip	0°C to +70°C
3539UCP	650ns	Plastic	0°C to +70°C
35392CD	500ns	Cerdip	0°C to +70°C
35392CP	500ns	Plastic	0°C to +70°C
35391CD	400ns	Cerdip	0°C to +70°C
35391CP	400ns	Plastic	0°C to +70°C

EMM/SEMI reserves the right to make changes at any time in order to improve design and to supply the best product possible.

WARNING:

MOS CIRCUITS ARE SUBJECT TO DAMAGE FROM STATIC DISCHARGE

Internal static discharge circuits are provided to minimize part damage due to environmental static electrical charge build-ups. Industry established recommendations for handling MOS circuits include:

1. Ship and store product in conductive shipping tubes or in conductive foam plastic. Never ship or store product in non-conductive plastic containers or non-conductive plastic foam material.
2. Handle MOS parts only at conductive work stations.
3. Ground all assembly and repair tools.

Represented in your area by:

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