Tech Info Library

Apple 256K, 1 MB SIMMs: Specifications

Article Created: 3 August 1988
Article Last Reviewed: 23 June 1992
Article Last Updated:

TOPIC ---

What are Apple's specifications for 256K and 1 MB SIMMs?

DISCUSSION ---

Here are the Apple specifications for 256 KB and 1 MB SIMMs:

Description: A Dynamic Random Access Memory Module organized by 8 bits in a 30 pin Single-in-Line-Package, comprised of:

- 256K X 1 bit Dynamic RAMs in Plastic Leaded Chip Carriers mounted on a PCB substrate.

- 1 MB X 1 bit Dynamic RAMs in SOJ packages mounted on a PCB substrate.

Pin #	Func.	Pin #	Func.	Pin #	Func.
1	Vcc	11	A4	21	/WE
2	/CAS	12	A5	22	Vss
3	D0	13	D3	23	D6
4	A0	14	A6	24	NC
5	A1	15	A7	25	D7
6	D1	16	D4	26	NC
7	A2	17	A8	27	/RAS
8	A3	18	NC*	28	NC
9	Vss	19	NC	29	NC
10	D2	20	D5	30	Vcc

Pin #18 is A9 on 1MB SIMM boards.

PIN NOMENCLATURE

Ax = Address input

/CAS = Column Address Strobe
Dx = Data Inputs/Data Outputs
NC = No Connection
/RAS = Row Adress Strobe
Vcc = +5VDC
Vss = 0 VCD
/WE = Write Enable

Coarse pcb dimensions*:

1.27 mm thick
5.08 mm thick (incl. RAM)
16.8 mm tall
88.9 mm overall width
2.54 mm between pin centers

(*more specific dimensions available on request)

DYNAMIC PARAMETERS

256Kb X 8, 150ns

TA = 0 TO 70 degrees C, Vcc = 5V +/- 10 percent, Vss = 0V

Symbol	Min.	Max.	Unit	Symbol	Min.	Max.	Unit
tRAC		150	ns	tRP	100		ns
tCAC		75	ns	tRAS	150	10K	ns
tOFF		40	ns	tCAS	75	10K	ns
tT	3	35	ns	tRCD	25	75	ns
tRC	230		ns	tRSH	75		ns

256Kb X 8, 120ns

TA = 0 TO 70 degrees C, Vcc = 5V +/- 10 percent, Vss = 0V

Symbol	Min.	Max.	Unit	Symbol	Min.	Max.	Unit
tRAC		120	ns	tRP	100		ns
tCAC		60	ns	tRAS	120	10K	ns
tOFF		35	ns	tCAS	90	10K	ns
tT	3	50	ns	tRCD	25	50	ns
tRC	240		ns	tRSH	60		ns

1Mb X 8, 120ns

TA = 0 TO 70 degrees C, Vcc = 5V +/- 10 percent, Vss = 0V

Symbol	Min.	Max.	Unit	Symbol	Min.	Max.	Unit
tRAC		120	ns	tRP	100		ns
tCAC		60	ns	tRAS	120	10K	ns

tOFF		35	ns	tCAS	90	10K	ns
tT	3	50	ns	tRCD	25	50	ns
tRC	240		ns	tRSH	60		ns

PARAMETERS NOMENCLATURE

tRAC = Access Time from /RAS
tCAC = Access Time from /CAS
tOFF = Output buffer Turn off Delay
tT = Transition Time (Rise and Fall)
tRC = Random Read and Write Cycle Time
tRP = /RAS Recharge Time
tRAS = /RAS Pulse Width
tCAS = /CAS Pulse Width
tRCD = /RAS to CAS Delay Time
tRSH = /RAS Hold Time

For more information, search under: "SIMMs" and "Macintosh".

Keywords: SPECSHT

==========

This information is from the Apple Technical Information Library.

19960215 11:05:19.00
Tech Info Library Article Number: 3160