Accutek Microcircuit Corporation

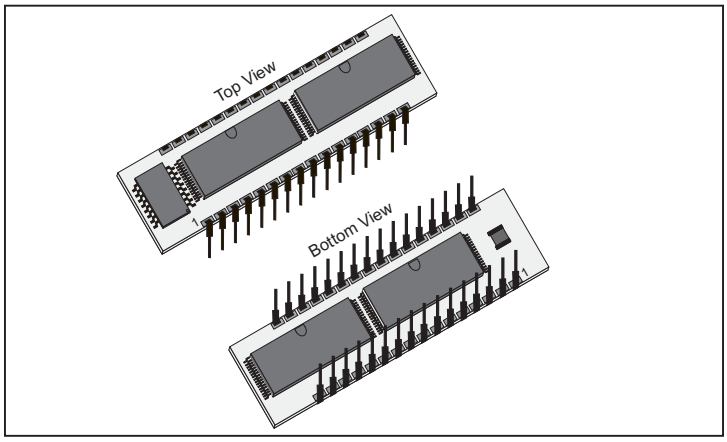
AK68512D
524,288 x 8 Bit CMOS
Static Random Access Memory

DESCRIPTION

The Accutek AK68512D high density memory module is a static random access memory organized in 512K x 8 bit words. The assembly consists of two medium speed 128K x 8 SRAMs in thin TSOP packages and a CMOS decoder logic IC mounted on the top side and two medium speed 128K x 8 SRAMs in thin TSOP packages mounted on the bottom surfaces of a printed circuit board. The module is supplied in a 600 mil wide,32 pin DIP (Dual In-Line Package) configuration. This pinout is completely compatible with forthcoming industry standard monolithic designs. These modules are intended for use in applications where limited board space dictates compact module designs.

The operation of the AK68512D is identical to standard monolithic 8 bit word wide SRAMs.

The AK68512D offers the features of low power and medium speed by using CMOS devices and makes high density mounting possible with no surface mount technology.



FEATURES

- 524,288 x 8 bit organization
- Fast access time: 85 - 120 nSEC
- Completely static RAM, no clock or timing strobe required
- Inputs and outputs TTL compatible
- Conventional 600 mil wide SIP package with industry compatible pinout
- Single 5 volt power supply - AK68512D
- Single 3.3 volt power supply - AK68512D/3.3
- Operating free air temperature 0^0 to 70^0C

ELECTRICAL SPECIFICATIONS

Timing diagrams and basic electrical characteristics are those of the standard 128K x 8 SRAMs used to construct these modules. Accutek's module design allows the flexibility of selecting industry-compatible 128K x 8 SRAMs from any of a number of semiconductor manufacturers.

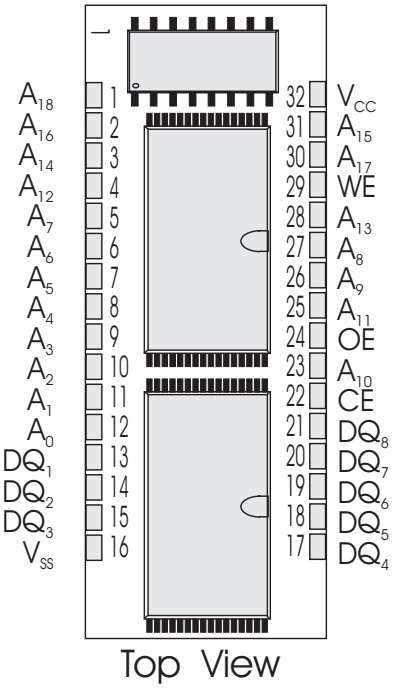
PIN NOMENCLATURE

DQ_1 - DQ_8	Data In/Data Out
A_0 - A_{18}	Adress Inputs
$\overline{CE}$	Chip Enable
$\overline{WE}$	Write Enable
Vcc	5v Supply
Vss	Ground
$\overline{OE}$	Output Enable

TIMING OPTIONS

70 nSEC Access Time
85 nSEC Access Time
100 nSEC Access Time
120 nSEC Access Time

PIN ASSIGNMENT



Top View

ORDERING INFORMATION

PART NUMBER CODING INTERPRETATION

Position	1	2	3	4	5	6	7	8

1 Product

AK = Accutek Memory

2 Type

4 = Dynamic RAM
5 = CMOS Dynamic RAM
6 = Static RAM

3 Organization/Word Width

1 = by 1 16 = by 16
4 = by 4 32 = by 32
8 = by 8 36 = by 36
9 = by 9

4 Size/Bits Depth

64	= 64K	4096	= 4 MEG
256	= 256K	8192	= 8 MEG
1024	= 1 MEG	16384	= 16 MEG

5 Package Type

G = Single In-Line Package (SIP)
S = Single In-Line Module (SIM)
D = Dual In-Line Package (DIP)
W = .050 inch Pitch Edge Connect
Z = Zig-Zag In-Line Package (ZIP)

6 Special Designation

P = Page Mode
N = Nibble Mode
K = Static Column Mode
W = Write Per Bit Mode
V = Video Ram

7 Separator

- = Commercial 0^0C to +70^0C
M = Military Equivalent Screened (-55^0C to +125^0C)
I = Industrial Temperature Tested (-45^0C to +85^0C)
X = Burned In

8 Speed (first two significant digits)

DRAMS		SRAMS	
50	= 50 nS	8	= 8 nS
60	= 60 nS	10	= 10 nS
70	= 70 nS	12	= 12 nS
80	= 80 nS	15	= 15 nS

The numbers and coding on this page do not include all variations available but are show as examples of the most widely used variations. Contact Accutek if other information is required.

EXAMPLES:

AK68512D-70

512K x 8, 70 nSEC SRAM Module, DIP Configuration

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MECHANICAL DIMENSIONS

Inches