

The Accutek AK68512D1C high density memory module is a static random access memory organized in  $512K \times 8$  bit words. The assembly consists of one medium speed  $512K \times 8$  SRAM in a TSOP Type 2 package. The module is supplied in a 600 mil wide, 32 pin DIP (Dual In-Line Package) configuration. This pinout is completely compatible with industry standard monolithic designs. These modules are intended for use in applications where limited board space dictates compact module designs.

The operation of the AK68512D1C is identical to standard monolithic 8 bit word wide SRAMs.

The AK68512D1C 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: 55 70 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 AK68512D1C
- Single 3.3 volt power supply AK68512D1C/3.3
- Operating free air temperature 0<sup>0</sup> to 70<sup>0</sup>C

# **PIN NOMENCLATURE**

DQ1 - DQ8	Data In/Data Out
A <sub>0</sub> - A <sub>18</sub>	Adress Inputs
CE	Chip Enable
WE	Write Enable
Vcc	5v Supply
Vss	Ground
OE	Output Enable

## **TIMING OPTIONS**





**PIN ASSIGNMENT** 

# AK68512D1C 524,288 x 8 Bit CMOS Static Random Access Memory



#### **ELECTRICAL SPECIFICATIONS**

Timing diagrams and basic electrical characteristics are those of the standard 512K x 8 SRAMs used to construct these modules. Accutek's module design allows the flexibility of selecting industry-compatible 512K x 8 SRAMs from any of a number of semiconductor manufacturers.

#### FUNCTIONAL DIAGRAM



#### ORDERING INFORMATION

PART NUMBER CODING INTERPRETATION			
Po	sition 1 2 3 4 5 6 7		
1	Product		
	AK = Accutek Memory		
2	Туре		
	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		
6	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) Special Designation P = Page Mode N = Nibble Mode		
	K = Static Column Mode W = Write Per Bit Mode		
	V = Video Ram		
7	Separator		
	<ul> <li>- = Commercial 0<sup>0</sup>C to +70<sup>0</sup>C</li> <li>M = Military Equivalent Screened (-55<sup>0</sup>C to +125<sup>0</sup>C)</li> <li>I = Industrial Temperature Tested (-45<sup>0</sup>C to +85<sup>0</sup>C)</li> <li>X = Burned In</li> </ul>		
8	Speed (first two significant digits)DRAMSSRAMS $50 = 50 \text{ nS}$ $8 = 8 \text{ nS}$ $60 = 60 \text{ nS}$ $12 = 12 \text{ nS}$ $70 = 70 \text{ nS}$ $55 = 55 \text{ nS}$ $80 = 80 \text{ nS}$ $70 = 70 \text{ nS}$		

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:**

#### AK68512D1C-70

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



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#### **MECHANICAL DIMENSIONS**

Inches

8



Accutek reserves the right to make changes in specifications at any time and without notice. Accutek does not assume any responsibility for the use of any circuitry described; no circuit patent licenses are implied. Preliminary data sheets contain minimum and maximum limits based upon design objectives, which are subject to change upon full characterization over the specific operating conditions.