

AK616256D

262,144 x 16 Bit CMOS/BiCMOS Static Random Access Memory

DESCRIPTION

The Accutek AK616256D SRAM Module consists of four fast high performance SRAMs mounted on a low profile 48 pin DIP Board. The module utilizes four 28 pin 256K x 4 SRAMs in SOJ packages and four decoupling capacitors mounted on a printed circuit board.

The SRAMs used have common I/O functions and single output enable functions. Also, four separate chip select (\overline{CS}) connections are used to independently enable the four chips. The modules can be supplied in a variety of access time values from 12nSEC to 45nSEC in CMOS or BiCMOS technology.

The Accutek module is designed to have a maximum seated height of 0.230 inch to provide for the lowest height off the board. Each conforms to JEDEC standard sizes and pin-out configurations.



FEATURES

- 262,144 x 16 bit organization
- JEDEC Standardized 48 Pin DIP
- Common I/O with four separate chip selects (\overline{CS})
- Low height 0.230 inch DIP maximum
- Fast access times range from 12 nSEC BiCMOS to 45nSEC CMOS
- TTL-compatible inputs and outputs
- Single 5 volt power supply - AK616256D
- Single 3.3 volt power supply - AK616256D-3.3
- Operating free air temperature 0°C to 70°C

ELECTRICAL SPECIFICATIONS

Timing diagrams and basic electrical characteristics are those of the standard 256K x 4 SRAMs used to construct these modules. Accutek's module design allows the flexibility of selecting industry-compatible 256K x 4 SRAMs from several semiconductor manufacturers.

PIN NOMENCLATURE

A ₀ - A ₁₇	Address Inputs
\overline{CS}_1 - \overline{CS}_4	Chip Select
DQ ₀ - DQ ₁₅	Data In/Date Out
\overline{WE}_L - \overline{WE}_U	Write Enable
V _{cc}	5v Supply
V _{ss}	Ground
NC	No Connect

MODULE OPTIONS

DIP: AK616256D

PIN ASSIGNMENT A16

PIN #	SYMBOL	PIN #	SYMBOL	PIN #	SYMBOL	PIN #	SYMBOL
1	GND	13	A ₉	25	GND	37	A ₈
2	NC	14	A ₁₀	26	NC	38	A ₇
3	A ₀	15	A ₁₁	27	A ₁₇	39	A ₆
4	A ₁	16	A ₁₂	28	A ₁₆	40	A ₅
5	A ₂	17	A ₁₃	29	A ₁₅	41	A ₄
6	\overline{WE}_L	18	\overline{WE}_U	30	A ₁₄	42	A ₃
7	\overline{CS}_2	19	\overline{CS}_4	31	\overline{CS}_3	43	\overline{CS}_1
8	D ₄	20	D ₁₂	32	D ₁₁	44	D ₃
9	D ₅	21	D ₁₃	33	D ₁₀	45	D ₂
10	D ₆	22	D ₁₄	34	D ₉	46	D ₁
11	D ₇	23	D ₁₅	35	D ₈	47	D ₀
12	GND	24	V _{cc}	36	V _{cc}	48	V _{cc}

EXAMPLES

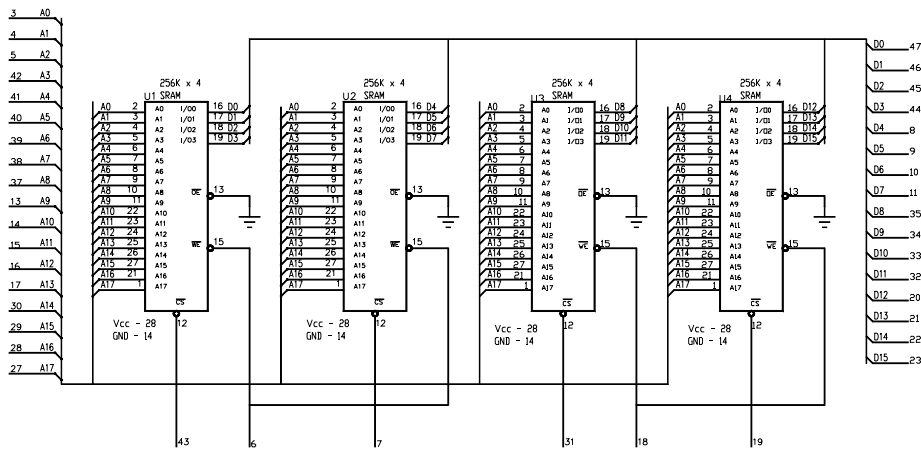
AK616256D-12

256K x 16, 12 nSEC SRAM Module, DIP

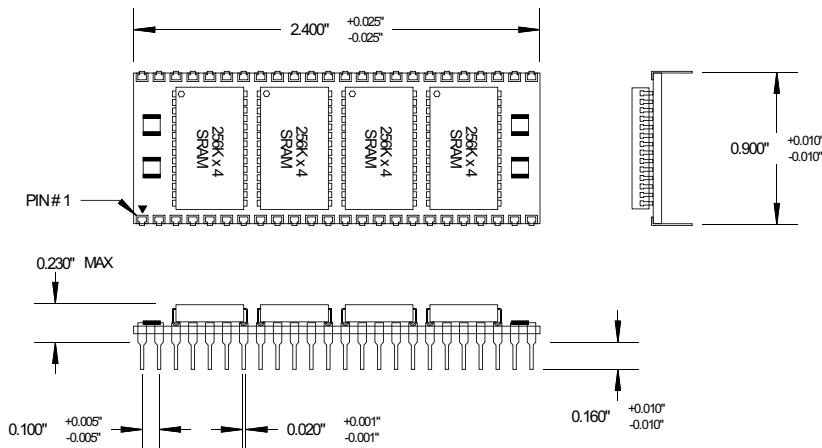
AK616256D-15

256K x 16, 15nSEC SRAM Module, DIP

FUNCTIONAL DIAGRAM



MECHANICAL DIMENSIONS



ORDER 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								

Position

1 2 3 4 5 6 7 8

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

8 Speed (first two significant digits)

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

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



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