ACCUTEK
MICROCIRCUIT CORPORATION

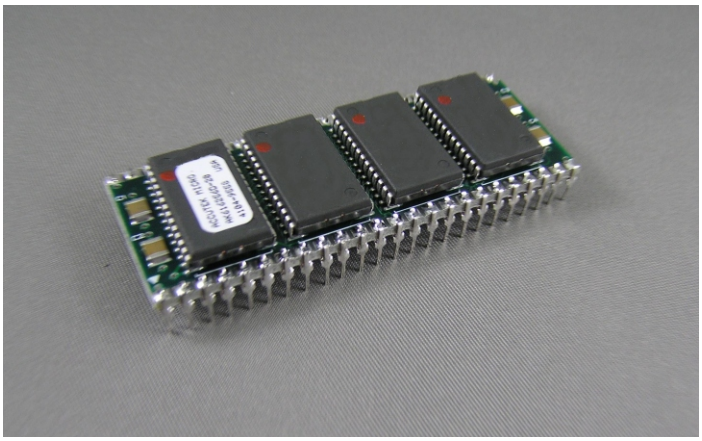
AK616256D
262,144 x 16 Bit CMOS/BiCMOS Static Random Access Memory

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 0^0C to 70^0C

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
Vcc	5v Supply
Vss	Ground
NC	No Connect

MODULE OPTIONS

DIP: AK616256D

PIN ASSIGNMENTA16

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	Vcc	36	Vcc	48	Vcc

EXAMPLES

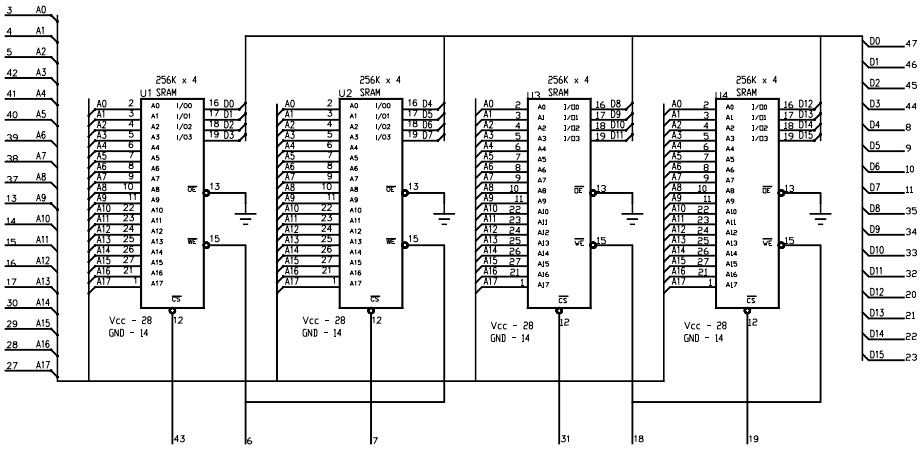
AK616256D-12

256K x 16, 12 nSEC SRAM Module, DIP

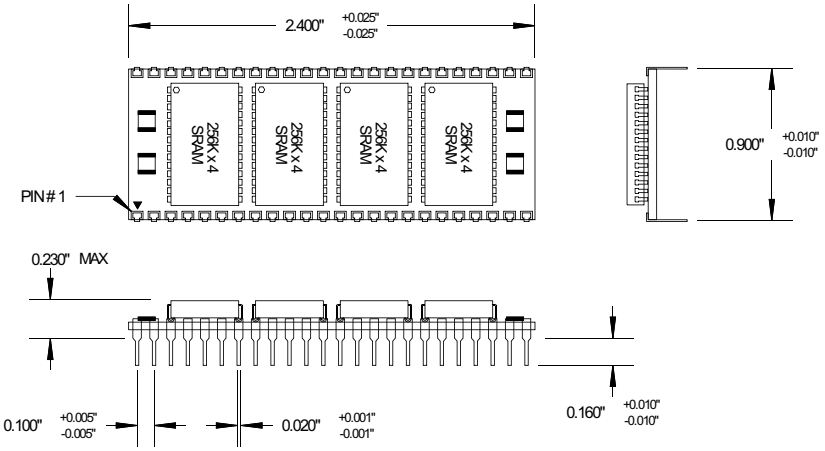
AK616256D-15

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 = b y 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

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.

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 0^0C 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	12	=	12 nS
70	=	70 nS	15	=	15 nS

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