Accutek Microcircuit Corporation

AK62464Z
65,536 x 24 Bit CMOS/BiCMOS Static Random Access Memory

DESCRIPTION

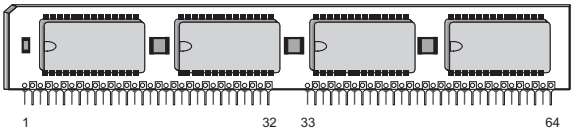
The Accutek AK62464 SRAM Module consists of fast high performance SRAMs mounted on a low profile, 64 pin ZIP Board. The module utilizes six 28 pin 64K x 4 SRAMs in 300 mil SOJ packages and three decoupling capacitors mounted on the top side and two 28 pin 64K x 4 SRAMs in 300 mil SOJ packages and three decoupling capacitors mounted on the bottom side of a printed circuit board.

The SRAMs used have common I/O functions and single output enable functions. Also, three separate chip select (CE) connections are used to independently enable the three bytes. The modules can be supplied in a variety of access time values from 8nSEC to 20nSEC in CMOS or BiCMOS technology.

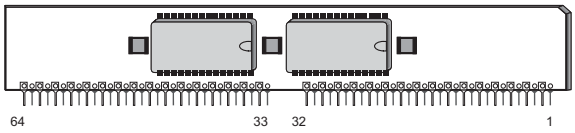
The Accutek module is designed to have a maximum seated height of 0.500 inch to provide for the lowest height off the board. The modules conform to JEDEC - standard sizes and pin-out configurations. Using two pins for module memory density identification, PD_0 and PD_1, minimizes interchangeability and design considerations when changing from one module size to the other in customer applications.

64-Pin ZIP

Front View



Rear View



FEATURES

- 65,536 x 24 bit organization
- JEDEC Standard 64 pin ZIP format
- Common I/O, single $\overline{OE}$ functions with four separate chip selects ($\overline{CE}$)
- Low height 0.500 inch maximum
- Upward compatible with
- Presence Detect, PD_0 and PD_1 for identifying module density
- Fast Access Times range from 8 nSEC BiCMOS to 20 nSEC CMOS
- TTL-compatible inputs and outputs
- Single 5 volt power supply - AK62464Z
- Single 3.3 volt power supply - AK62464Z/3.3
- Operating temperature range in free air, 0^0C to 70^0C
- Power
  900 mA Max Active (12 nS)
  840 mA Max Active (15 nS)
  780 mA Max Active (20 nS)
  240 mA Max Standby (Cycling)
  12 mA Max Standby (f=0MHZ)

PIN NOMENCLATURE

A_0 - A_{15}	Address Inputs
$\overline{CE}_1$ - $\overline{CE}_3$	Chip Enable
DQ_1 - DQ_{24}	Data In/Data Out
$\overline{OE}$	Output Enable
PD_0 - PD_1	Presence Detect
Vcc	Power Supply
Vss	Ground
$\overline{WE}$	Write Enable
NC	No Connect

MODULE OPTIONS

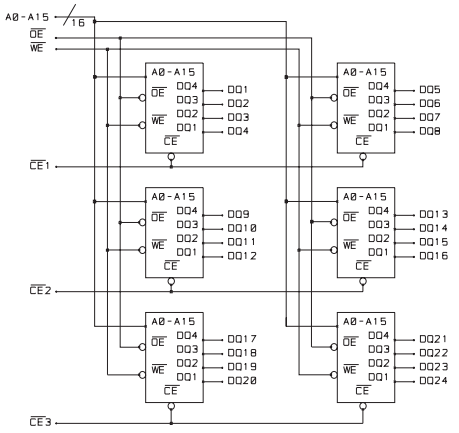
Leadless ZIP:	AK62464Z

PIN ASSIGNMENT

PIN #	SYMBOL	PIN #	SYMBOL	PIN #	SYMBOL	PIN #	SYMBOL
1	Vss	17	A2	33	NC	49	A4
2	PD0	18	A9	34	$\overline{CE}3$	50	A11
3	PD1	19	DQ9	35	NC	51	A5
4	DQ1	20	DQ5	36	NC	52	A12
5	NC	21	DQ10	37	$\overline{OE}$	53	Vcc
6	DQ2	22	DQ6	38	Vss	54	A_{13}
7	NC	23	DQ11	39	DQ13	55	A6
8	DQ3	24	DQ7	40	DQ17	56	DQ21
9	NC	25	DQ12	41	DQ14	57	NC
10	DQ4	26	DQ8	42	DQ18	58	DQ22
11	NC	27	Vss	43	DQ15	59	NC
12	Vcc	28	$\overline{WE}$	44	DQ19	60	DQ23
13	A0	29	A15	45	DQ16	61	NC
14	A7	30	A14	46	DQ20	62	DQ24
15	A1	31	$\overline{CE}2$	47	A3	63	NC
16	A8	32	$\overline{CE}1$	48	A10	64	Vss

PD_0 = Open
PD_1 = Vss

FUNCTIONAL DIAGRAM



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	12	= 12 nS
60	= 60 nS	15	= 15 nS
70	= 70 nS	20	= 20 nS
80	= 80 nS	25	= 25 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.

EXAMPLES:

AK62464Z-12

64K x 24, 12 nSEC SRAM Module, ZIP Configuration

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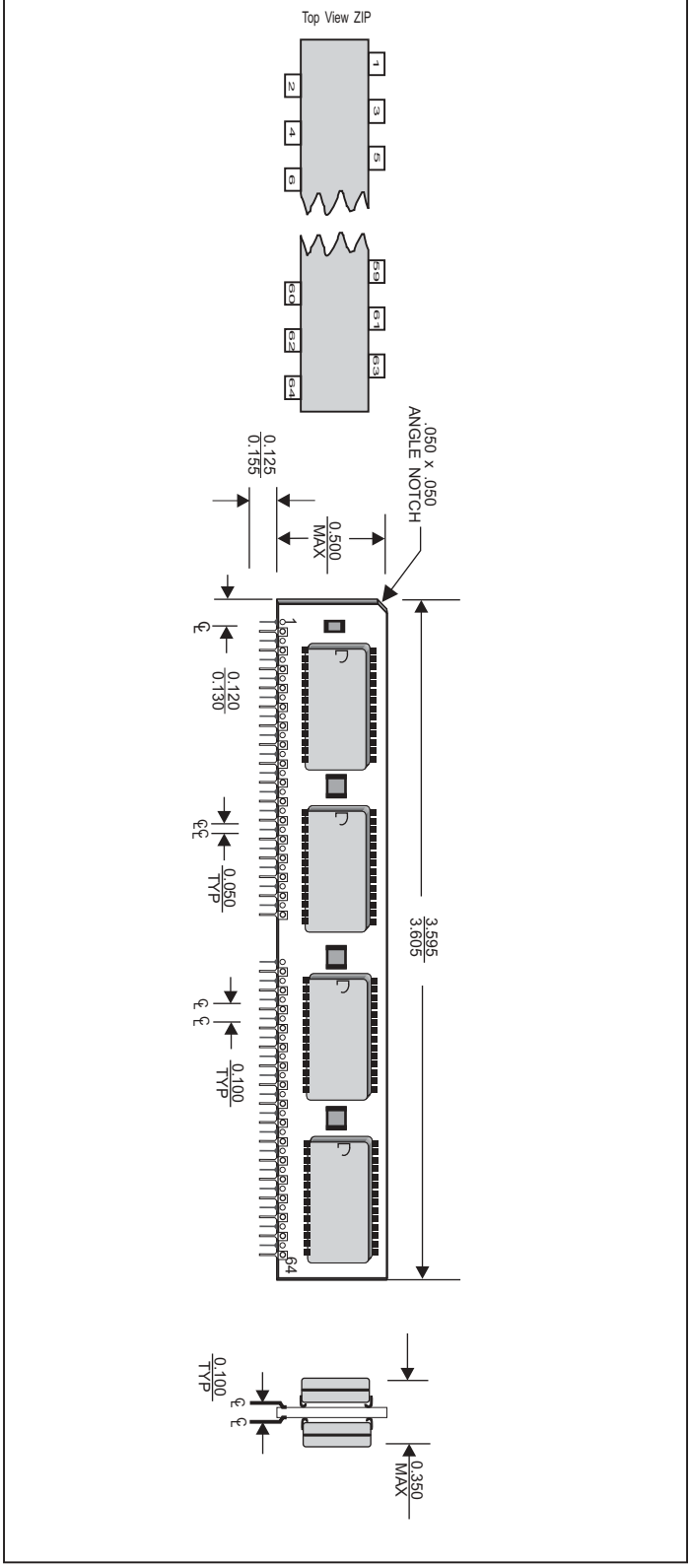
MECHANICAL DIMENSIONS

Inches



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