

**DESCRIPTION**

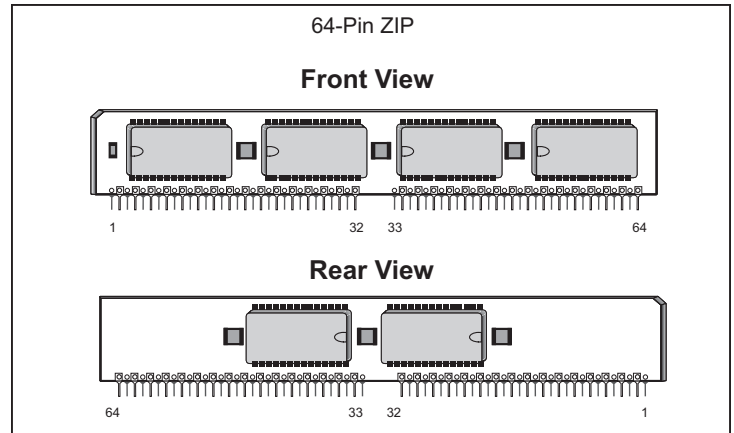
The Accuthek AK62464 SRAM Module consists of fast high performance SRAMs mounted on a low profile, 64 pin ZIP Board. The module utilizes six 28 pin 64K x 4 SRAMs in 300 mil SOJ packages and three decoupling capacitors mounted on the top side and two 28 pin 64K x 4 SRAMs in 300 mil SOJ packages and three 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 Accuthek 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<sub>0</sub> and PD<sub>1</sub>, minimizes interchangeability and design considerations when changing from one module size to the other in customer applications.

**FEATURES**

- 65,536 x 24 bit organization
- JEDEC Standard 64 pin ZIP format
- Common I/O, single OE functions with four separate chip selects (CE)
- Low height 0.500 inch maximum
- Upward compatible with



- Presence Detect, PD<sub>0</sub> and PD<sub>1</sub> 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°C to 70°C
- 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**

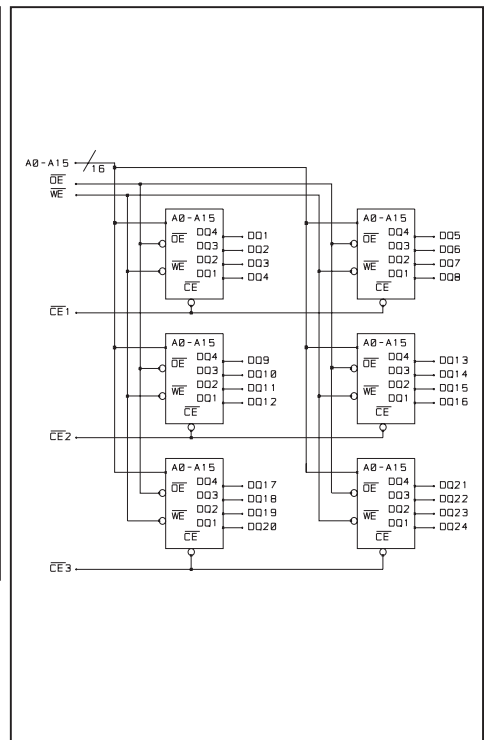
A <sub>0</sub> - A <sub>15</sub>	Address Inputs
CE <sub>1</sub> - CE <sub>3</sub>	Chip Enable
DQ <sub>1</sub> - DQ <sub>24</sub>	Data In/Data Out
OE	Output Enable
PD <sub>0</sub> - PD <sub>1</sub>	Presence Detect
V <sub>cc</sub>	Power Supply
V <sub>ss</sub>	Ground
WE	Write Enable
NC	No Connect

**PIN ASSIGNMENT**

PIN #	SYMBOL	PIN #	SYMBOL	PIN #	SYMBOL	PIN #	SYMBOL
1	V <sub>ss</sub>	17	A <sub>2</sub>	33	NC	49	A <sub>4</sub>
2	PD <sub>0</sub>	18	A <sub>9</sub>	34	CE <sub>3</sub>	50	A <sub>11</sub>
3	PD <sub>1</sub>	19	DQ <sub>9</sub>	35	NC	51	A <sub>5</sub>
4	DQ <sub>1</sub>	20	DQ <sub>5</sub>	36	NC	52	A <sub>12</sub>
5	NC	21	DQ <sub>10</sub>	37	OE	53	V <sub>cc</sub>
6	DQ <sub>2</sub>	22	DQ <sub>6</sub>	38	V <sub>ss</sub>	54	A <sub>13</sub>
7	NC	23	DQ <sub>11</sub>	39	DQ <sub>13</sub>	55	A <sub>6</sub>
8	DQ <sub>3</sub>	24	DQ <sub>7</sub>	40	DQ <sub>17</sub>	56	DQ <sub>21</sub>
9	NC	25	DQ <sub>12</sub>	41	DQ <sub>14</sub>	57	NC
10	DQ <sub>4</sub>	26	DQ <sub>8</sub>	42	DQ <sub>18</sub>	58	DQ <sub>22</sub>
11	NC	27	V <sub>ss</sub>	43	DQ <sub>15</sub>	59	NC
12	V <sub>cc</sub>	28	WE	44	DQ <sub>19</sub>	60	DQ <sub>23</sub>
13	A <sub>0</sub>	29	A <sub>15</sub>	45	DQ <sub>16</sub>	61	NC
14	A <sub>7</sub>	30	A <sub>14</sub>	46	DQ <sub>20</sub>	62	DQ <sub>24</sub>
15	A <sub>1</sub>	31	CE <sub>2</sub>	47	A <sub>3</sub>	63	NC
16	A <sub>8</sub>	32	CE <sub>1</sub>	48	A <sub>10</sub>	64	V <sub>ss</sub>

PD<sub>0</sub> = Open  
PD<sub>1</sub> = V<sub>ss</sub>

**FUNCTIONAL DIAGRAM**



**MODULE OPTIONS**

Leadless ZIP:	AK62464Z
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## ORDERING INFORMATION

## PART NUMBER CODING INTERPRETATION

Position	1	2	3	4	5	6	7	8										
<b>1 Product</b>	<b>AK = Accuthek Memory</b>																	
<b>2 Type</b>	4 = Dynamic RAM 5 = CMOS Dynamic RAM 6 = Static RAM																	
<b>3 Organization/Word Width</b>	1 = by 1    16 = by 16 4 = by 4    32 = by 32 8 = by 8    36 = by 36 9 = by 9																	
<b>4 Size/Bits Depth</b>	64 = 64K    4096 = 4 MEG 256 = 256K    8192 = 8 MEG 1024 = 1 MEG    16384 = 16 MEG																	
<b>5 Package Type</b>	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)																	
<b>6 Special Designation</b>	P = Page Mode N = Nibble Mode K = Static Column Mode W = Write Per Bit Mode V = Video Ram																	
<b>7 Separator</b>	- = 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																	
<b>8 Speed (first two significant digits)</b>	<table border="0"> <tr> <td>DRAMS</td> <td>SRAMS</td> </tr> <tr> <td>50 = 50 nS</td> <td>12 = 12 nS</td> </tr> <tr> <td>60 = 60 nS</td> <td>15 = 15 nS</td> </tr> <tr> <td>70 = 70 nS</td> <td>20 = 20 nS</td> </tr> <tr> <td>80 = 80 nS</td> <td>25 = 25 nS</td> </tr> </table>								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
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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 Accuthek if other information is required.

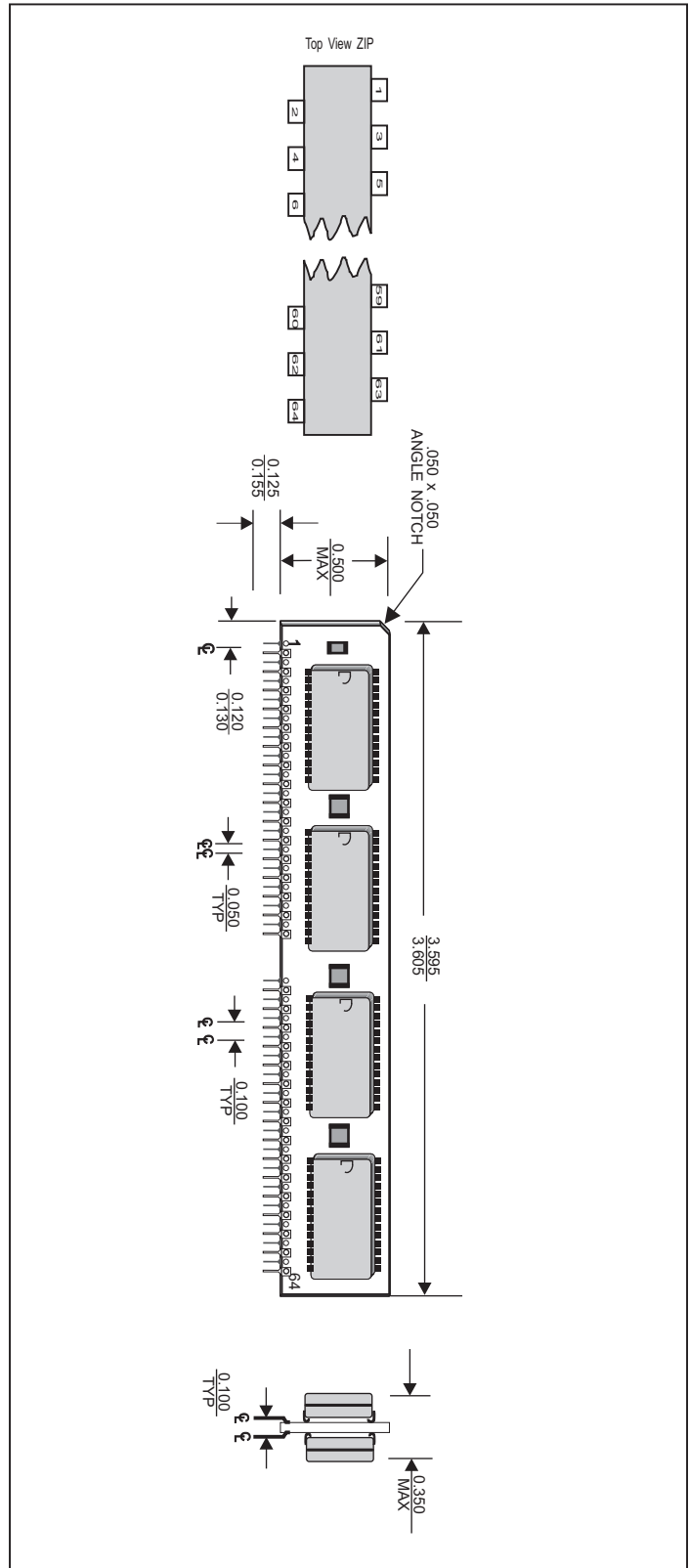
### EXAMPLES:

**AK62464Z-12**

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

## MECHANICAL DIMENSIONS

Inches



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