

512K x 32 SRAM SRAM MEMORY ARRAY

AVAILABLE AS MILITARY SPECIFICATIONS

- SMD 5962-94611 & 5962-95624 (Military Pinout)
- MIL-STD-883

FEATURES

- Operation with single 5V supply
- High speed: 12, 15, 17, 20, 25, 35, 45 & 55ns
- Built in decoupling caps for low noise
- Organized as 512Kx32, byte selectable
- Low power CMOS
- TTL Compatible Inputs and Outputs

OPTIONS

MARKINGS

- Operating Temperature Ranges
 - Full Military (-55°C to +125°C) Q & 883
 - Military (-55°C to +125°C) XT
 - Industrial (-40°C to +85°C) IT
- Timing

| | |
|------|-----|
| 12ns | -12 |
| 15ns | -15 |
| 17ns | -17 |
| 20ns | -20 |
| 25ns | -25 |
| 35ns | -35 |
| 45ns | -45 |
| 55ns | -55 |
- Package

| | |
|-----------------------|------|
| Ceramic Quad Flatpack | Q |
| Ceramic Quad Flatpack | Q1 |
| Ceramic Quad Flatpack | Q2 |
| Ceramic Quad Flatpack | BQFP |
| Pin Grid Array | P |
- Low Power Data Retention Mode L
- Pinout

| | |
|------------|----------------|
| Military | (no indicator) |
| Commercial | A* |

*(available with Q package only)

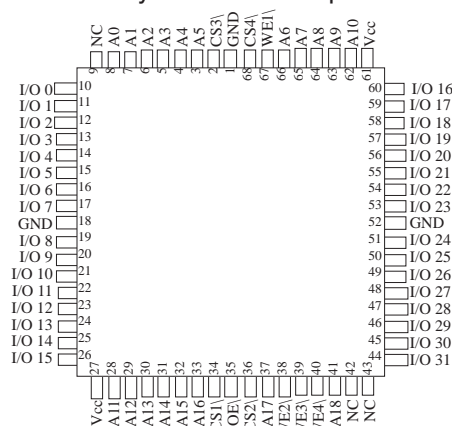
GENERAL DESCRIPTION

The AS8S512K32 and AS8S512K32A are 16 Megabit CMOS SRAM Modules organized as 512Kx32 bits. These devices achieve high speed access, low power consumption and high reliability by employing advanced CMOS memory technology.

This military temperature grade product is ideally suited for military applications.

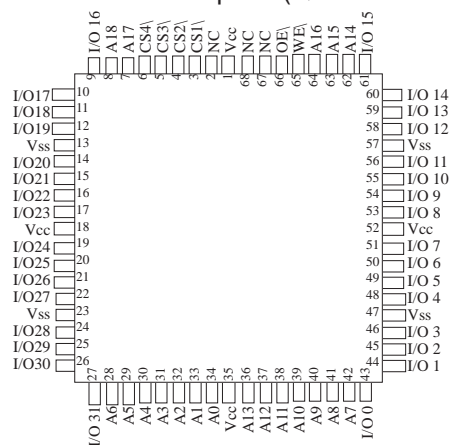
PIN ASSIGNMENT (Top View)

68 Lead CQFP (Q, Q1, Q2 & BQFP)
Military SMD Pinout Option



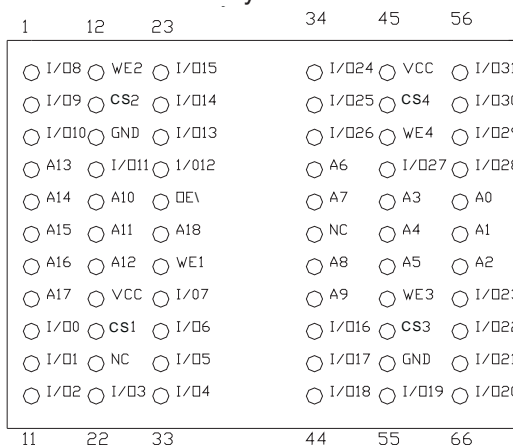
68 Lead CQFP

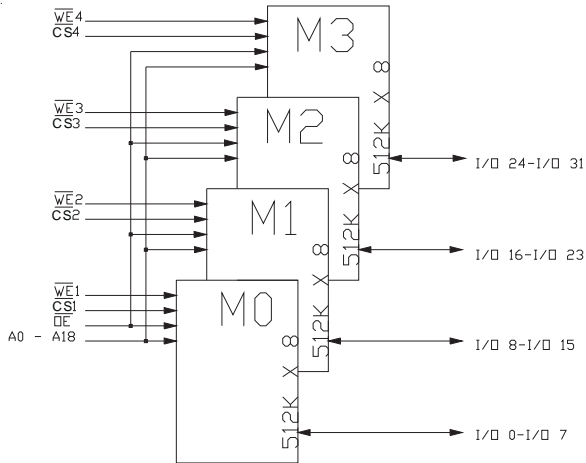
Commercial Pinout Option (Q with Pinout A)



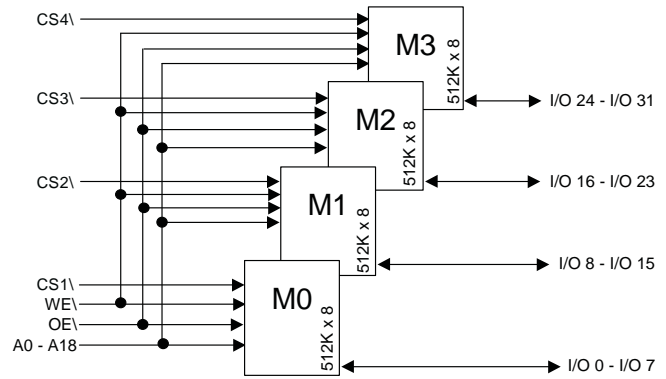
66 Lead PGA (P)

Military SMD Pinout





MILITARY PINOUT/BLOCK DIAGRAM



COMMERCIAL PINOUT/BLOCK DIAGRAM

TRUTH TABLE

| MODE | OE\ | CS\ | WE\ | I/O | POWER |
|---------|-----|-----|-----|------------------|---------|
| Read | L | L | H | D _{OUT} | ACTIVE |
| Write | X | L | L | D _{IN} | ACTIVE |
| Standby | X | H | X | High Z | STANDBY |

ABSOLUTE MAXIMUM RATINGS*

Voltage of Vcc Supply Relative to Vss.....-5V to +7V
 Storage Temperature.....-65°C to +150°C
 Short Circuit Output Current(per I/O).....20mA
 Voltage on Any Pin Relative to Vss.....-5V to Vcc+1V
 Maximum Junction Temperature**.....+150°C

*Stresses greater than those listed under “Absolute Maximum Ratings” may cause permanent damage to the device.

This is a stress rating only and functional operation on the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect reliability.

**Junction temperature depends upon package type, cycle time, loading, ambient temperature and airflow. See the Application Information section at the end of this datasheet for more information.

ELECTRICAL CHARACTERISTICS AND RECOMMENDED DC OPERATING CONDITIONS

(-55°C ≤ T_A ≤ 125°C and -40°C to +85°C; Vcc = 5V ±10%)

| DESCRIPTION | CONDITIONS | SYMBOL | MIN | MAX | UNITS | NOTES |
|---|---|------------------|------|----------------------|-------|-------|
| Input High (logic 1) Voltage | | V _{IH} | 2.2 | V _{CC} +0.5 | V | 1 |
| Input Low (logic 1) Voltage | | V _{IL} | -0.5 | 0.8 | V | 1,2 |
| Input Leakage Current _{ADD,OE} | 0V < V _{IN} < V _{CC} | I _{LI1} | -10 | 10 | μA | |
| Input Leakage Current _{WE, CE} | | I _{LI2} | -10 | 10 | μA | |
| Output Leakage Current _{I/O} | Output(s) Disabled 0V < V _{OUT} < V _{CC} | I _{LO} | -10 | 10 | μA | |
| Output High Voltage | I _{OH} = -4.0mA | V _{OH} | 2.4 | | V | 1 |
| Output Low Voltage | I _{OL} = 8.0mA | V _{OL} | | 0.4 | V | 1 |
| Supply Voltage | | V _{CC} | 4.5 | 5.5 | V | 1 |

| DESCRIPTION | CONDITIONS | SYMBOL | MAX | | | | | | | | UNITS | NOTES |
|---------------------------------|---|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| | | | -12 | -15 | -17 | -20 | -25 | -35 | -45 | -55 | | |
| Power Supply Current: Operating | CS < V _{IL} ; V _{CC} = MAX f = MAX = 1/ tRC (MIN) Outputs Open | I _{CC} | 250 | 200 | 700 | 650 | 600 | 570 | 570 | 550 | mA | 3,13 |
| Power Supply Current: Standby | CS > V _{IH} ; V _{CC} = MAX f = MAX = 1/ tRC (MIN) Outputs Open | I _{SBT1} | 80 | 80 | 240 | 240 | 190 | 190 | 150 | 150 | mA | 3, 13 |
| CMOS Standby | V _{IN} = V _{CC} - 0.2V, or V _{SS} + 0.2V V _{CC} =Max; f = 0Hz | I _{SBT2} | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | mA | |

CAPACITANCE ($V_{IN} = 0V, f = 1MHz, T_A = 25^{\circ}C$)¹

| SYMBOL | PARAMETER | MAX | UNITS |
|------------------------|---------------------------|-----|-------|
| C_{ADD} | A0 - A18 Capacitance | 50 | pF |
| C_{OE} | OE\ Capacitance | 50 | pF |
| C_{WE}, C_{CS} | WE\ and CS\ Capacitance | 20 | pF |
| C_{IO} | I/O 0- I/O 31 Capacitance | 20 | pF |
| C_{WE} ("A" version) | WE\ Capacitance | 50 | pF |

NOTE:

1. This parameter is sampled.

AC TEST CONDITIONS

| Test Specifications | |
|------------------------------------|----------------|
| Input pulse levels..... | V_{SS} to 3V |
| Input rise and fall times..... | 5ns |
| Input timing reference levels..... | 1.5V |
| Output reference levels..... | 1.5V |
| Output load..... | See Figure 1 |

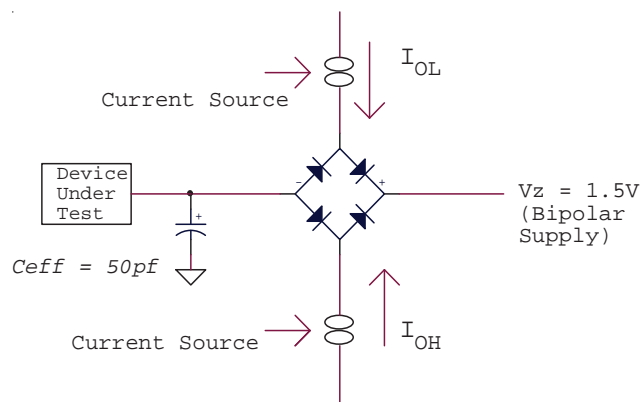


Figure 1

NOTES:

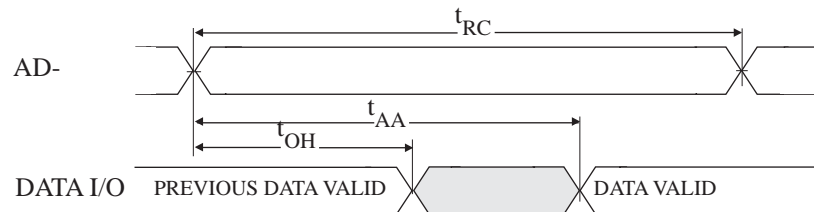
- V_z is programmable from -2V to + 7V.
- I_{OL} and I_{OH} programmable from 0 to 16 mA.
- V_z is typically the midpoint of V_{OH} and V_{OL} .
- I_{OL} and I_{OH} are adjusted to simulate a typical resistive load circuit.

Figure 1

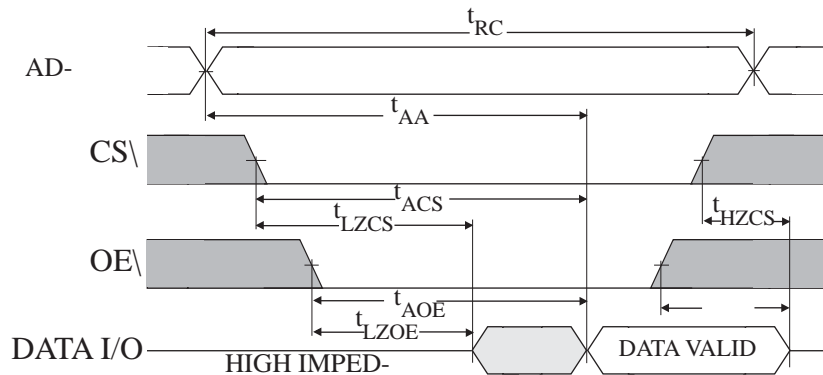
ELECTRICAL CHARACTERISTICS AND RECOMMENDED AC OPERATING CONDITIONS
 (NOTE 5) (-55°C ≤ T_A ≤ 125°C and -40°C to +85°C; V_{CC} = 5V ±10%)

| DESCRIPTION | SYMBOL | -12 | | -15 | | -17 | | -20 | | -25 | | -35 | | -45 | | -55 | | UNITS | NOTES |
|------------------------------------|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | | |
| READ CYCLE | | | | | | | | | | | | | | | | | | | |
| READ cycle time | ^t RC | 12 | | 15 | | 17 | | 20 | | 25 | | 35 | | 45 | | 55 | | ns | |
| Address access time | ^t AA | | 12 | | 15 | | 17 | | 20 | | 25 | | 35 | | 45 | | 55 | | ns |
| Chip select access time | ^t ACS | | 12 | | 15 | | 17 | | 20 | | 25 | | 35 | | 45 | | 55 | | ns |
| Output hold from address change | ^t OH | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | ns | |
| Chip select to output in Low-Z | ^t LZCS | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | ns | 4,6,7 |
| Chip select to output in High-Z | ^t HZCS | | 7 | | 8 | | 9 | | 10 | | 12 | | 15 | | 20 | | 20 | | ns |
| Output enable access time | ^t AOE | | 7 | | 8 | | 9 | | 10 | | 12 | | 15 | | 20 | | 20 | | ns |
| Output enable to output in Low-Z | ^t LZOE | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | ns | 4,6 |
| Output disable to output in High-Z | ^t HZOE | | | | | 12 | | 12 | | 12 | | 15 | | 20 | | 20 | | ns | 4,6 |
| WRITE CYCLE | | | | | | | | | | | | | | | | | | | |
| WRITE cycle time | ^t WC | 12 | | 15 | | 17 | | 20 | | 25 | | 35 | | 45 | | 55 | | ns | |
| Chip select to end of write | ^t CW | 10 | | 12 | | 15 | | 15 | | 17 | | 20 | | 25 | | 25 | | ns | |
| Address valid to end of write | ^t AW | 10 | | 12 | | 15 | | 15 | | 17 | | 20 | | 25 | | 25 | | ns | |
| Address setup time | ^t AS | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | ns | |
| Address hold from end of write | ^t AH | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | ns | |
| WRITE pulse width | ^t WP1 | 10 | | 12 | | 15 | | 15 | | 17 | | 20 | | 25 | | 25 | | ns | |
| WRITE pulse width | ^t WP2 | 10 | | 12 | | 15 | | 15 | | 17 | | 20 | | 25 | | 25 | | ns | |
| Data setup time | ^t DS | 8 | | 10 | | 12 | | 10 | | 12 | | 15 | | 20 | | 20 | | ns | |
| Data hold time | ^t DH | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | ns | |
| Write disable to output in Low-z | ^t LZWE | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | ns | 4,6,7 |
| Write enable to output in High-Z | ^t HZWE | 7 | | 8 | | 9 | | 11 | | 13 | | 15 | | 15 | | 15 | | ns | 4,6,7 |

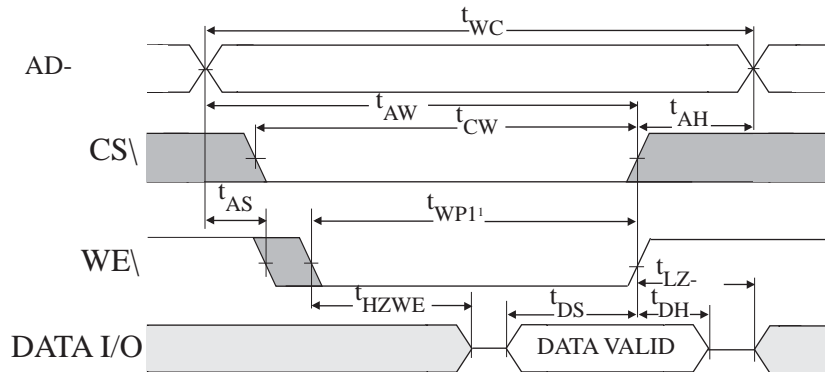
READ CYCLE NO. 1



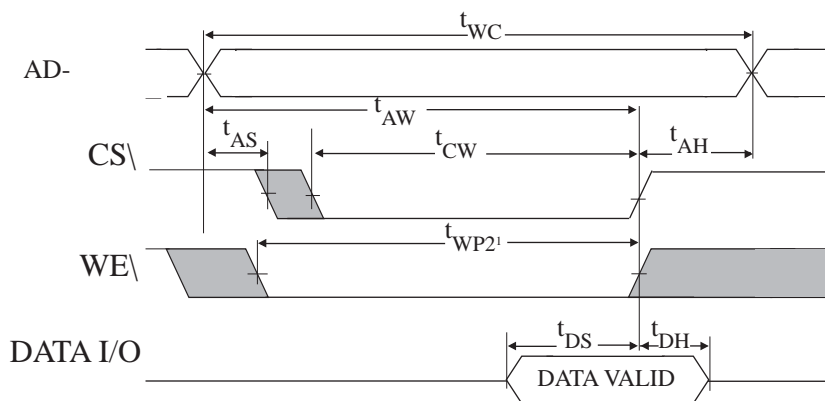
READ CYCLE NO. 2



WRITE CYCLE NO. 1 (Chip Select Controlled)



WRITE CYCLE NO. 2 (Write Enable Controlled)



NOTES

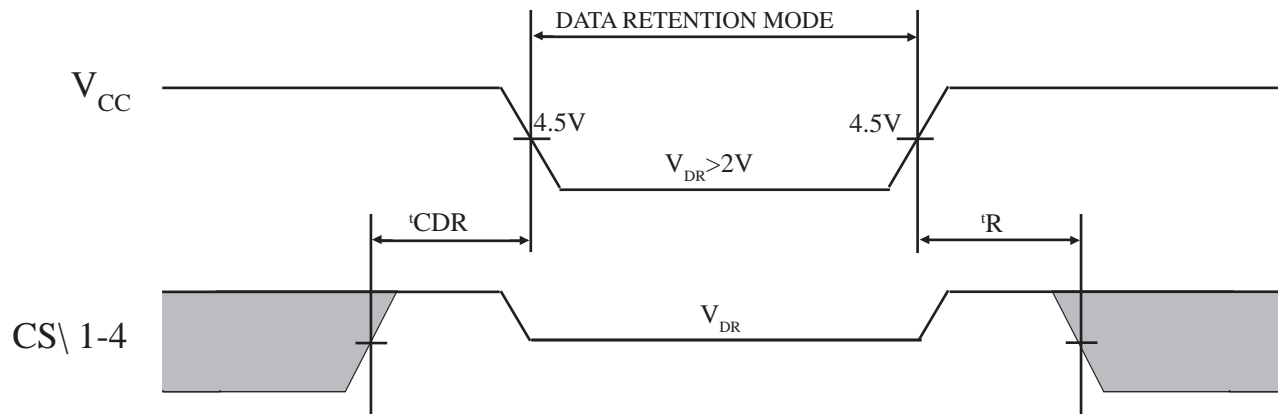
1. All voltages referenced to V_{SS} (GND).
2. -2V for pulse width <20ns.
3. I_{CC} is dependent on output loading and cycle rates.
The specified value applies with the outputs unloaded, and $f = \frac{1}{t_{RC(MIN)}}$ Hz.
4. This parameter guaranteed but not tested.
5. Test conditions as specified with output loading as shown in Fig. 1 unless otherwise noted.
6. t_{HZCS} , t_{HZOE} and t_{HZWE} are specified with $C_L = 5pF$ as in Fig. 2. Transition is measured +/- 200 mV typical from steady state voltage, allowing for actual tester RC time constant.
7. At any given temperature and voltage condition, t_{HZCS} , is less than t_{LZCS} , and t_{HZWE} is less than t_{LZWE} .
8. $WE\backslash$ is HIGH for READ cycle.
9. Device is continuously selected. Chip selects and output enable are held in their active state.
10. Address valid prior to or coincident with latest occurring chip enable.
11. t_{RC} = READ cycle time.
12. Chip enable ($CS\backslash$) and write enable ($WE\backslash$) can initiate and terminate a WRITE cycle.
13. I_{CC} is for 32 bit mode.

LOW POWER CHARACTERISTICS (L Version Only)

| DESCRIPTION | CONDITIONS | SYMBOL | MIN | MAX | UNITS | NOTES |
|--------------------------------------|--|---------------|----------|-----|-------|-------|
| V_{CC} for Retention Data | | V_{DR} | 2 | | V | |
| Data Retention Current | All Inputs @ $V_{CC} \pm 0.2V$ or $V_{SS} \pm 0.2V$, $CS\backslash = V_{CC} \pm 0.2V$ | $V_{CC} = 2V$ | | 20 | mA | |
| | | $V_{CC} = 3V$ | | 28* | mA | |
| Chip Deselect to Data Retention Time | | t_{CDR} | 0 | | ns | 4 |
| Operation Recovery Time | | t_R | t_{RC} | | ns | 4, 11 |

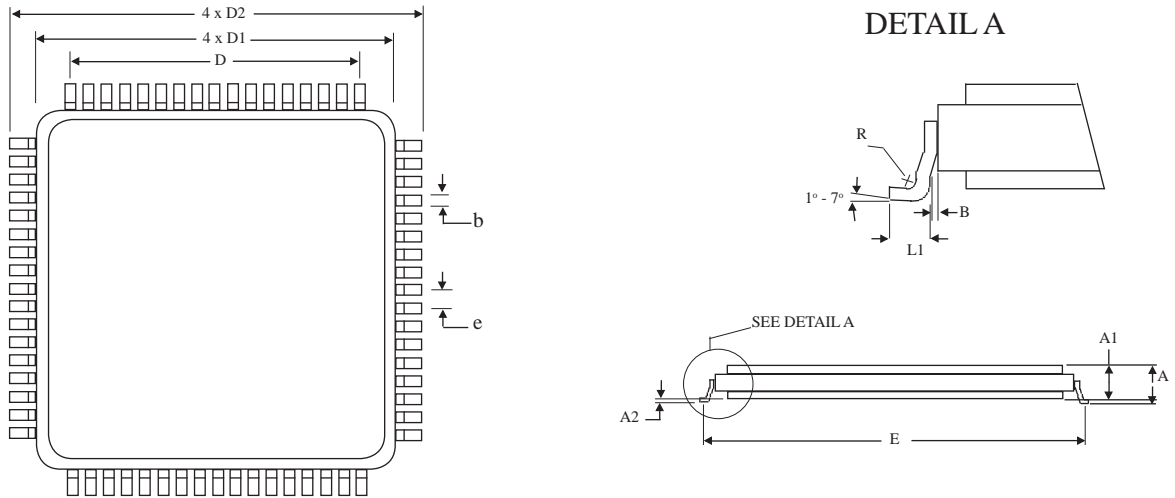
* -12 and -15 have a 32mA limit.

LOW V_{CC} DATA RETENTION WAVEFORM



MECHANICAL DEFINITIONS*

Micross Case #702 (Package Designator Q)
SMD 5962-94611, Case Outline M

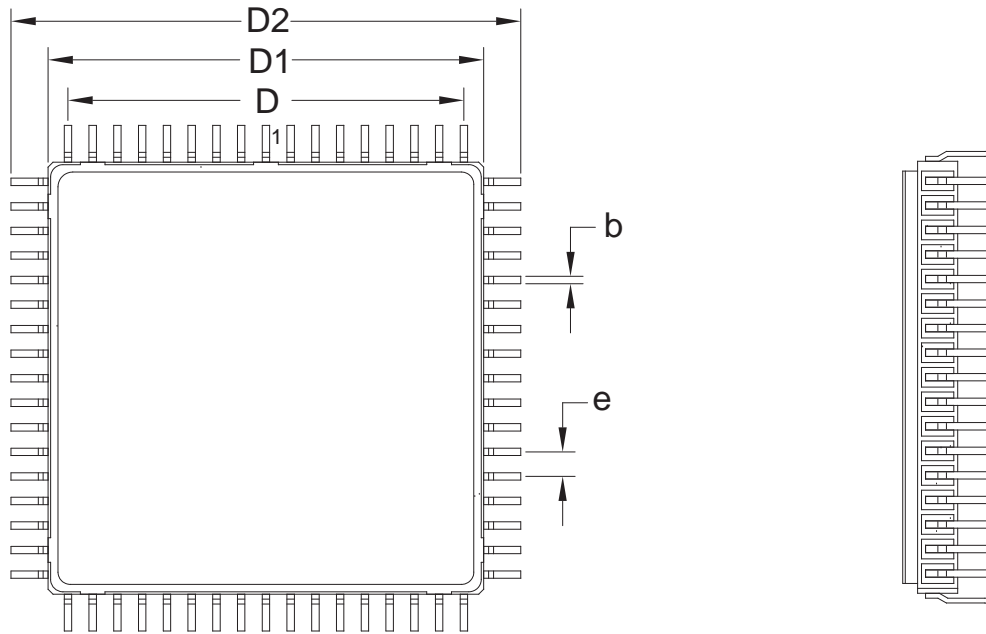


| SYMBOL | SMD SPECIFICATIONS | |
|--------|--------------------|-------|
| | MIN | MAX |
| A | 0.123 | 0.200 |
| A1 | 0.118 | 0.186 |
| A2 | 0.000 | 0.020 |
| B | 0.010 REF | |
| b | 0.013 | 0.017 |
| D | 0.800 BSC | |
| D1 | 0.870 | 0.890 |
| D2 | 0.980 | 1.000 |
| E | 0.936 | 0.956 |
| e | 0.050 BSC | |
| R | 0.005 | --- |
| L1 | 0.035 | 0.045 |

*All measurements are in inches.

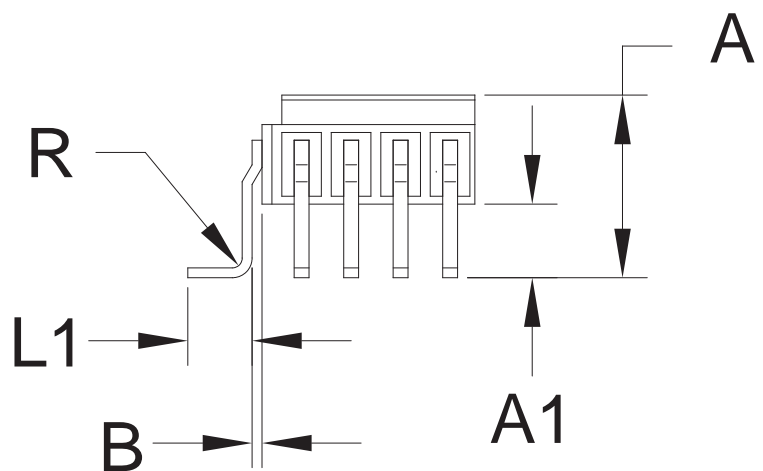
MECHANICAL DEFINITIONS*

Micross Package Designator Q2



| PACKAGE SPECIFICATION | | |
|-----------------------|----------|------|
| Symbol | Min | Max |
| A | | .200 |
| A1 | .070 | .080 |
| B | .013 | .017 |
| b | .010 REF | |
| D | .800 BSC | |
| D1 | .870 | .890 |
| D2 | .980 | 1.00 |
| e | .050 BSC | |
| R | .010 TYP | |
| L1 | .035 | .045 |

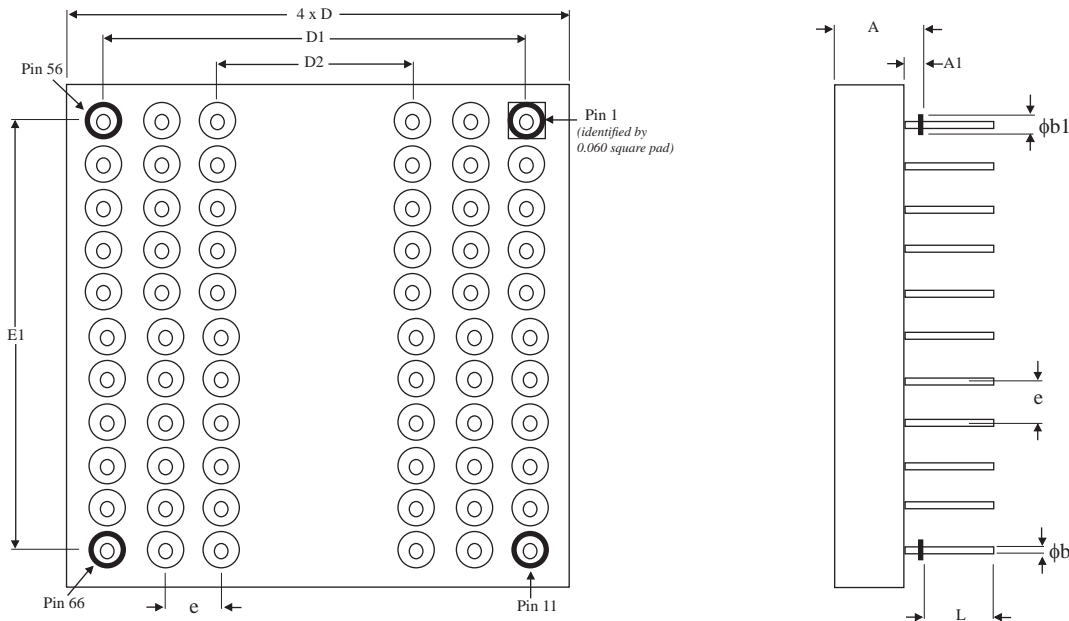
Dimensions are in inches.



*All measurements are in inches.

MECHANICAL DEFINITIONS*

Micross Case #904 (Package Designator P)
SMD 5962-94611, Case Outline T

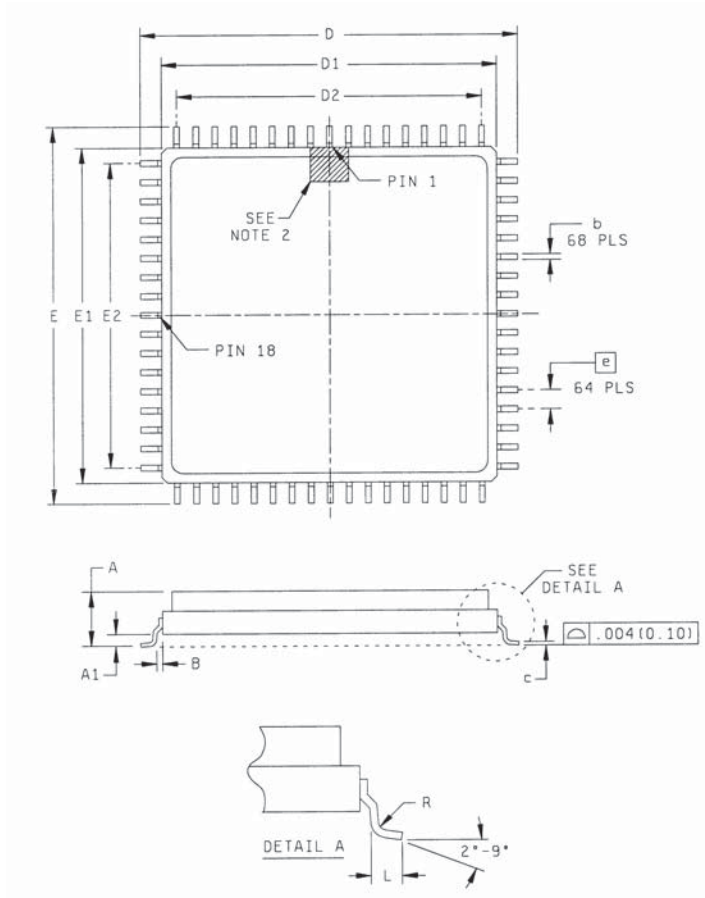


| SYMBOL | SMD SPECIFICATIONS | |
|-----------|--------------------|-------|
| | MIN | MAX |
| A | 0.144 | 0.181 |
| A1 | 0.025 | 0.035 |
| ϕb | 0.016 | 0.020 |
| $\phi b1$ | 0.045 | 0.055 |
| D | 1.065 | 1.085 |
| D1/E1 | 1.000 TYP | |
| D2 | 0.600 TYP | |
| e | 0.100 TYP | |
| L | 0.145 | 0.155 |

*All measurements are in inches.

MECHANICAL DEFINITIONS*

Micross Case (Package Designator Q1)
SMD 5962-94611, Case Outline A

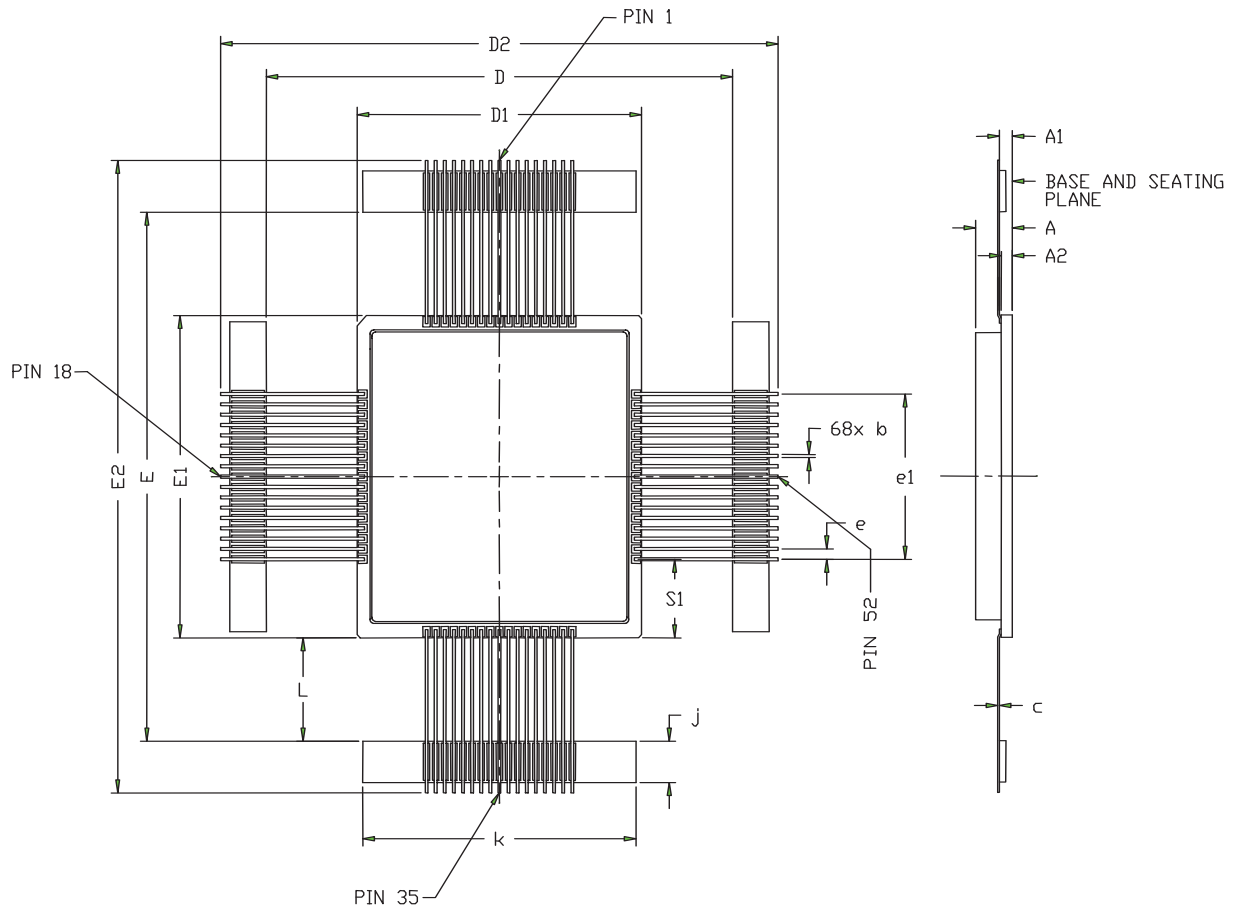


| SYMBOL | SMD SPECIFICATIONS | |
|--------|--------------------|-------|
| | MIN | MAX |
| A | --- | 0.200 |
| A1 | 0.054 | --- |
| b | 0.013 | 0.017 |
| B | 0.010 TYP | |
| c | 0.009 | 0.012 |
| D/E | 0.980 | 1.000 |
| D1/E1 | 0.870 | 0.890 |
| D2/E2 | 0.800 BSC | |
| e | 0.050 BSC | |
| L | 0.035 | 0.045 |
| R | 0.010 TYP | |

*All measurements are in inches.

MECHANICAL DEFINITIONS*

Micross Case (Package Designator BQFP)
SMD 5962-95624, Case Outline N



| Symbol | Millimeters | | Inches | |
|--------|-------------|-------|--------|-------|
| | Min | Max | Min | Max |
| A | 2.92 | 5.10 | .115 | .200 |
| A1 | 1.40 | 1.65 | .055 | .065 |
| A2 | 1.14 | 1.40 | .045 | .055 |
| b | 0.30 | 0.46 | .012 | .018 |
| C | 0.23 | 0.31 | .009 | .012 |
| D/E | 63.63 | 66.42 | 2.505 | 2.615 |
| D1/E1 | 39.24 | 40.01 | 1.545 | 1.575 |
| D2/E2 | 71.25 | 84.20 | 2.805 | 3.315 |
| e | 1.14 | 1.40 | .045 | .055 |
| e1 | 20.19 | 20.45 | .795 | .805 |
| j | 4.83 | 5.33 | .190 | .210 |
| k | 37.72 | 38.48 | 1.485 | 1.515 |
| L | 12.19 | 13.21 | .480 | .520 |
| S1 | 9.45 | 9.86 | .372 | .388 |

ORDERING INFORMATION

| Device Number | Package Type | Speed (ns) | Power Option | Process |
|---------------|----------------------|--|------------------------------------|---------|
| AS8S512K32 | Q, Q1, Q2, P or BQFP | -12, -15, -17, -20, -25, -35, -45 or -55 | L (Low Power) Blank (Std power) | /* |

Examples:

AS8S512K32Q-15/Q
AS8S512K32P-17L/Q
AS8S512K32P-25/XT
AS8S512K32Q1-55/IT
AS8S512K32BQFP-55/883C

***Available Processes**

IT = Industrial Temperature Range -40^oC to +85^oC
XT = Military Temperature Range -55^oC to +125^oC
Q & 883C = Full Military Processing -55^oC to +125^oC

MICROSS TO DSCC PART NUMBER CROSS REFERENCE

Package Designator Q

| <u>Micross Part#</u> | <u>SMD Part#</u> |
|----------------------|------------------|
| AS8S512K32Q-12/Q | 5962-9461118HMA |
| AS8S512K32Q-12/Q | 5962-9461118HMC |
| AS8S512K32Q-12L/Q | 5962-9461120HMA |
| AS8S512K32Q-12L/Q | 5962-9461120HMC |
| AS8S512K32Q-15/Q | 5962-9461117HMA |
| AS8S512K32Q-15/Q | 5962-9461117HMC |
| AS8S512K32Q-15L/Q | 5962-9461119HMA |
| AS8S512K32Q-15L/Q | 5962-9461119HMC |
| AS8S512K32Q-17/Q | 5962-9461116HMA |
| AS8S512K32Q-17/Q | 5962-9461116HMC |
| AS8S512K32Q-17L/Q | 5962-9461110HMA |
| AS8S512K32Q-17L/Q | 5962-9461110HMC |
| AS8S512K32Q-20/Q | 5962-9461115HMA |
| AS8S512K32Q-20/Q | 5962-9461115HMC |
| AS8S512K32Q-20L/Q | 5962-9461109HMA |
| AS8S512K32Q-20L/Q | 5962-9461109HMC |
| AS8S512K32Q-25/Q | 5962-9461114HMA |
| AS8S512K32Q-25/Q | 5962-9461114HMC |
| AS8S512K32Q-25L/Q | 5962-9461108HMA |
| AS8S512K32Q-25L/Q | 5962-9461108HMC |
| AS8S512K32Q-35/Q | 5962-9461113HMA |
| AS8S512K32Q-35/Q | 5962-9461113HMC |
| AS8S512K32Q-35L/Q | 5962-9461107HMA |
| AS8S512K32Q-35L/Q | 5962-9461107HMC |
| AS8S512K32Q-45/Q | 5962-9461112HMA |
| AS8S512K32Q-45/Q | 5962-9461112HMC |
| AS8S512K32Q-45L/Q | 5962-9461106HMA |
| AS8S512K32Q-45L/Q | 5962-9461106HMC |
| AS8S512K32Q-55/Q | 5962-9461111HMA |
| AS8S512K32Q-55/Q | 5962-9461111HMC |
| AS8S512K32Q-55L/Q | 5962-9461105HMA |
| AS8S512K32Q-55L/Q | 5962-9461105HMC |

Package Designator Q1

| <u>Micross Part#</u> | <u>SMD Part#</u> |
|----------------------|------------------|
| AS8S512K32Q1-12/883C | 5962-9461118HAA |
| AS8S512K32Q1-12/883C | 5962-9461118HAC |
| AS8S512K32Q1-12L/883 | 5962-9461120HAA |
| AS8S512K32Q1-12L/883 | 5962-9461120HAC |
| AS8S512K32Q1-15/883C | 5962-9461117HAA |
| AS8S512K32Q1-15/883C | 5962-9461117HAC |
| AS8S512K32Q1-15L/883 | 5962-9461119HAA |
| AS8S512K32Q1-15L/883 | 5962-9461119HAC |
| AS8S512K32Q1-17/883C | 5962-9461116HAA |
| AS8S512K32Q1-17/883C | 5962-9461116HAC |
| AS8S512K32Q1-17L/883 | 5962-9461110HAA |
| AS8S512K32Q1-17L/883 | 5962-9461110HAC |
| AS8S512K32Q1-20/883C | 5962-9461115HAA |
| AS8S512K32Q1-20/883C | 5962-9461115HAC |
| AS8S512K32Q1-20L/883 | 5962-9461109HAA |
| AS8S512K32Q1-20L/883 | 5962-9461109HAC |
| AS8S512K32Q1-25/883C | 5962-9461114HAA |
| AS8S512K32Q1-25/883C | 5962-9461114HAC |
| AS8S512K32Q1-25L/883 | 5962-9461108HAA |
| AS8S512K32Q1-25L/883 | 5962-9461108HAC |
| AS8S512K32Q1-35/883C | 5962-9461113HAA |
| AS8S512K32Q1-35/883C | 5962-9461113HAC |
| AS8S512K32Q1-35L/883 | 5962-9461107HAA |
| AS8S512K32Q1-35L/883 | 5962-9461107HAC |
| AS8S512K32Q1-45/883C | 5962-9461112HAA |
| AS8S512K32Q1-45/883C | 5962-9461112HAC |
| AS8S512K32Q1-45L/883 | 5962-9461106HAA |
| AS8S512K32Q1-45L/883 | 5962-9461106HAC |
| AS8S512K32Q1-55/883C | 5962-9461111HAA |
| AS8S512K32Q1-55/883C | 5962-9461111HAC |
| AS8S512K32Q1-55L/883 | 5962-9461105HAA |
| AS8S512K32Q1-55L/883 | 5962-9461105HAC |

Package Designator P

| <u>Micross Part#</u> | <u>SMD Part#</u> |
|----------------------|------------------|
| AS8S512K32P-12/Q | 5962-9461118HTA |
| AS8S512K32P-12/Q | 5962-9461118HTC |
| AS8S512K32P-12L/Q | 5962-9461120HTA |
| AS8S512K32P-12L/Q | 5962-9461120HTC |
| AS8S512K32P-15/Q | 5962-9461117HTA |
| AS8S512K32P-15/Q | 5962-9461117HTC |
| AS8S512K32P-15L/Q | 5962-9461119HTA |
| AS8S512K32P-15L/Q | 5962-9461119HTC |
| AS8S512K32P-17/Q | 5962-9461116HTA |
| AS8S512K32P-17/Q | 5962-9461116HTC |
| AS8S512K32P-17L/Q | 5962-9461110HTA |
| AS8S512K32P-17L/Q | 5962-9461110HTC |
| AS8S512K32P-20/Q | 5962-9461115HTA |
| AS8S512K32P-20/Q | 5962-9461115HTC |
| AS8S512K32P-20L/Q | 5962-9461109HTA |
| AS8S512K32P-20L/Q | 5962-9461109HTC |
| AS8S512K32P-25/Q | 5962-9461114HTA |
| AS8S512K32P-25/Q | 5962-9461114HTC |
| AS8S512K32P-25L/Q | 5962-9461108HTA |
| AS8S512K32P-25L/Q | 5962-9461108HTC |
| AS8S512K32P-35/Q | 5962-9461113HTA |
| AS8S512K32P-35/Q | 5962-9461113HTC |
| AS8S512K32P-35L/Q | 5962-9461107HTA |
| AS8S512K32P-35L/Q | 5962-9461107HTC |
| AS8S512K32P-45/Q | 5962-9461112HTA |
| AS8S512K32P-45/Q | 5962-9461112HTC |
| AS8S512K32P-45L/Q | 5962-9461106HTA |
| AS8S512K32P-45L/Q | 5962-9461106HTC |
| AS8S512K32P-55/Q | 5962-9461111HTA |
| AS8S512K32P-55/Q | 5962-9461111HTC |
| AS8S512K32P-55L/Q | 5962-9461105HTA |
| AS8S512K32P-55L/Q | 5962-9461105HTC |

Package Designator BQFP

| <u>Micross Part#</u> | <u>SMD Part#</u> |
|------------------------|------------------|
| AS8S512K32BQFP-20/883C | 5962-9562409HNC |
| AS8S512K32BQFP-25/883C | 5962-9562408HNC |
| AS8S512K32BQFP-25/883C | 5962-9562412HNC |
| AS8S512K32BQFP-35/883C | 5962-9562407HNC |
| AS8S512K32BQFP-35/883C | 5962-9562411HNC |
| AS8S512K32BQFP-45/883C | 5962-9562406HNC |
| AS8S512K32BQFP-45/883C | 5962-9562410HNC |
| AS8S512K32BQFP-55/883C | 5962-9562405HNC |

DOCUMENT TITLE

512K x 32 SRAM MEMORY ARRAY

| <u>Rev #</u> | <u>History</u> | <u>Release Date</u> | <u>Status</u> |
|---------------------|---|----------------------------|----------------------|
| 6.5 | Updated Features, Temp Range & General Description - Page 1, Updated Order Chart - Page 13, Removed Space Processing - Page 13 | April 2010 | Release |
| 6.6 | Updated Ordering Table, Page 14 Updated DSCC Cross Reference, Page 15 Added SMD 5962-95624, Page 1 Added BQFP Package, Page 1 and added BQFP drawing on page 13 (BQFP package is listed on SMD 5962-95624) | June 2010 | Release |
| 6.7 | Updated Q2 Spec, Page 10 | July 2010 | Release |