

REVISIONS

LTR	DESCRIPTION	DATE (YR-MO-DA)	APPROVED
D	Table I; Changed the max limit for I _{CC} for device types 06 through 09 from 150 mA to 180 mA. Changed the max limit for I _{CCDR} for device types 06 through 09 from 6.4 mA to 7.0 mA. -sld	98-06-22	K.A. Cottongim
E	Added cage code 0EU86 for device types 05 through 08. Figure 1; case outline Y, changed dimension C (min) from 0.009 to 0.008 inches, dimension D (min) from 1.654 to 1.584 inches, dimension E (max) from 0.604 to 0.605 inches and dimension Q (max) from 0.047 to 0.060 inches. Added a monolithic block diagram to figure 6. -sld	99-11-01	Raymond Monnin

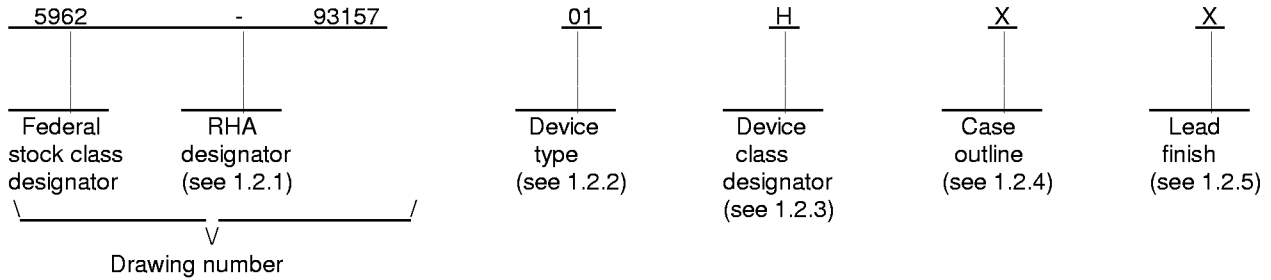
REV																				
SHEET																				
REV	E	E	E	E	E	E	E	E												
SHEET	15	16	17	18	19	20	21	22												
REV STATUS OF SHEETS	REV			E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
	SHEET			1	2	3	4	5	6	7	8	9	10	11	12	13	14			

PMIC N/A <p style="text-align: center;">STANDARD MICROCIRCUIT DRAWING</p> THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE AMSC N/A	PREPARED BY Steve Duncan CHECKED BY Michael Jones APPROVED BY Kendall A. Cottongim DRAWING APPROVAL DATE 93-04-01 REVISION LEVEL <p style="text-align: center;">E</p>	<p>DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000</p> <p>MICROCIRCUIT, MEMORY, HYBRID AND MONOLITHIC, DIGITAL, STATIC RANDOM ACCESS MEMORY, CMOS, 256K x 8-BIT</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">SIZE</td> <td style="border: none;">CAGE CODE</td> <td style="border: none;">5962-93157</td> </tr> <tr> <td style="border: none;">A</td> <td style="border: none;">67268</td> <td style="border: none;"></td> </tr> </table> <p>SHEET 1 OF 22</p>	SIZE	CAGE CODE	5962-93157	A	67268	
SIZE	CAGE CODE	5962-93157						
A	67268							

1. SCOPE

1.1 Scope. This drawing contains hybrid and monolithic devices. Five product assurance classes, class D (lowest reliability), class E, (exceptions), class G (lowest high reliability), class H (high reliability), and class K, (highest reliability) are documented by this drawing. A choice of case outlines and lead finishes are available and are reflected in the Part or Identifying Number (PIN). When available, a choice of radiation hardness assurance levels are reflected in the PIN.

1.2 PIN. The PIN shall be as shown in the following example:



1.2.1 Radiation hardness assurance (RHA) designator. RHA marked devices shall meet the MIL-PRF-38534 specified RHA levels and shall be marked with the appropriate RHA designator. A dash (-) indicates a non-RHA device.

1.2.2 Device type(s). The device type(s) shall identify the circuit function as follows:

<u>Device type</u>	<u>Generic number</u>	<u>Circuit function</u>	<u>Access time</u>
01	WS256K8-120CQ	SRAM, 256K x 8-bit	120 ns
02	WS256K8-100CQ	SRAM, 256K x 8-bit	100 ns
03	WS256K8-85CQ	SRAM, 256K x 8-bit	85 ns
04	WS256K8-70CQ	SRAM, 256K x 8-bit	70 ns
05	WS256K8-55CQ,AS5C2008CW-55/HQ	SRAM, 256K x 8-bit	55 ns
06	WS256K8-45CQ,AS5C2008CW-45/HQ	SRAM, 256K x 8-bit	45 ns
07	WS256K8-35CQ,AS5C2008CW-35/HQ	SRAM, 256K x 8-bit	35 ns
08	WS256K8-25CQ,AS5C2008CW-25/HQ	SRAM, 256K x 8-bit	25 ns
09	WS265K8-20CQ	SRAM, 256K x 8-bit	20 ns

1.2.3 Device class designator. This device class designator shall be a single letter identifying the product assurance level as follows:

<u>Device class</u>	<u>Device requirements documentation</u>
D, E, G, H, or K	Certification and qualification to MIL-PRF-38534

1.2.4 Case outline(s). The case outline(s) shall be as designated in MIL-STD-1835 and as follows:

<u>Outline letter</u>	<u>Descriptive designator</u>	<u>Terminals</u>	<u>Package style</u>
X	See figure 1	32	Dual-in-line, dual cavity
Y	See figure 1	32	Dual-in-line, single cavity

1.2.5 Lead finish. The lead finish shall be as specified in MIL-PRF-38534.

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1.3 Absolute maximum ratings. 1/

Supply voltage range (V_{CC})	-0.5 V dc to +7.0 V dc
Signal voltage range (any pin)	-0.5 V dc to +7.0 V dc
Power dissipation (P_D)	1 W
Storage temperature range	-65° C to +150° C
Lead temperature (soldering, 10 seconds)	+300° C

1.4 Recommended operating conditions.

Supply voltage range (V_{CC})	+4.5 V dc to +5.5 V dc
Input low voltage range (V_{IL})	-0.5 V dc to +0.8 V dc
Input high voltage range (V_{IH})	+2.2 V dc to $V_{CC} + 0.3$ V dc
Output low voltage, maximum (V_{OL})	+0.4 V dc
Output high voltage, minimum (V_{OH})	+2.4 V dc
Case operating temperature range (T_C)	-55° C to +125° C

2. APPLICABLE DOCUMENTS

2.1 Government specification, standards, and handbooks. The following specification, standards, and handbooks form a part of this drawing to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.

SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-38534 - Hybrid Microcircuits, General Specification for.

STANDARDS

DEPARTMENT OF DEFENSE

- MIL-STD-883 - Test Method Standard Microcircuits.
- MIL-STD-973 - Configuration Management.
- MIL-STD-1835 - Interface Standard for Microcircuit Case Outlines.

HANDBOOK

DEPARTMENT OF DEFENSE

- MIL-HDBK-103 - List of Standard Microcircuit Drawings (SMD's).
- MIL-HDBK-780 - Standard Microcircuit Drawings.

(Unless otherwise indicated, copies of the specification, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing takes precedence. Nothing in this document, however, supercedes applicable laws and regulations unless a specific exemption has been obtained.

1/ Stresses above the absolute maximum rating may cause permanent damage to the device. Extended operation at the maximum levels may degrade performance and affect reliability.

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3. REQUIREMENTS

3.1 Item requirements. The individual item performance requirements for device classes D, E, G, H, and K shall be in accordance with MIL-PRF-38534. Compliance with MIL-PRF-38534 may include the performance of all tests herein or as designated in the device manufacturer's Quality Management (QM) plan or as designated for the applicable device class. Therefore, the tests and inspections herein may not be performed for the applicable device class (see MIL-PRF-38534). Furthermore, the manufacturers may take exceptions or use alternate methods to the tests and inspections herein and not perform them. However, the performance requirements as defined in MIL-PRF-38534 shall be met for the applicable device class.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38534 and herein.

3.2.1 Case outline(s). The case outline(s) shall be in accordance with 1.2.4 herein and figure 1.

3.2.2 Terminal connections. The terminal connections shall be as specified on figure 2.

3.2.3 Truth table(s). The truth table(s) shall be as specified on figure 3.

3.2.4 Timing diagram(s). The Timing diagram(s) shall be as specified on figures 4 and 5.

3.2.5 Block diagram(s). The block diagram(s) shall be as specified on figure 6.

3.2.6 Output load circuit. The output load circuit shall be as specified on figure 7.

3.3 Electrical performance characteristics. Unless otherwise specified herein, the electrical performance characteristics are as specified in table I and shall apply over the full specified operating temperature range.

3.4 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table I.

3.5 Marking of (devices). Marking of (devices) shall be in accordance with MIL-PRF-38534. The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked.

3.6 Data. In addition to the general performance requirements of MIL-PRF-38534, the manufacturer of the device described herein shall maintain the electrical test data (variables format) from the initial quality conformance inspection group A lot sample, for each device type listed herein. Also, the data should include a summary of all parameters manually tested, and for those which, if any, are guaranteed. This data shall be maintained under document revision level control by the manufacturer and be made available to the preparing activity (DSCC-VA) upon request.

3.7 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to supply to this drawing. The certificate of compliance (original copy) submitted to DSCC-VA shall affirm that the manufacturer's product meets the requirements of MIL-PRF-38534 and the requirements herein.

3.8 Certificate of conformance. A certificate of conformance as required in MIL-PRF-38534 shall be provided with each lot of microcircuits delivered to this drawing.

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38534 or as modified in the device manufacturer's Quality Management (QM) plan. The modification in the QM plan shall not affect the form, fit, or function as described herein.

4.2 Screening. Screening shall be in accordance with MIL-PRF-38534. The following additional criteria shall apply:

a. Burn-in test, method 1015 of MIL-STD-883.

(1) Test condition B. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to either DSCC-VA or the acquiring activity upon request. Also, the test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1015 of MIL-STD-883.

(2) T_A as specified in accordance with table I of method 1015 of MIL-STD-883.

b. Interim and final electrical test parameters shall be as specified in table II herein, except interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.

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TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions 1/ -55° C ≤ T _C ≤ +125° C V _{SS} = 0 V dc +4.5 V dc ≤ V _{CC} ≤ +5.5 V dc unless otherwise specified	Group A subgroups	Device types	Limits		Unit
					Min	Max	
DC PARAMETERS							
Supply current	I _{CC}	$\overline{CS} = V_{IL}, \overline{OE} = V_{IH},$ f = 5 MHz, V _{CC} = +5.5 V dc	1, 2, 3	01,02 03 04 05 06,07, 08,09		70 80 90 130 180	mA
Standby current	I _{SB}	$\overline{CS} = V_{CC}, \overline{OE} = V_{IH},$ f = 5 MHz, V _{CC} = +5.5 V dc	1, 2, 3	01,02 03 04 05-09		1.5 2.5 30 50	mA
Input leakage current	I _{LI}	V _{CC} = +5.5 V dc, V _{IN} = GND or V _{CC}	1, 2, 3	All		10	μA
Output leakage current	I _{LO}	$\overline{CS} = \overline{OE} = V_{IH}, V_{OUT} = \text{GND}$ to V _{CC} , V _{CC} = +5.5 V dc	1, 2, 3	All		10	μA
Input low voltage	V _{IL}		1, 2, 3	All		0.8	V
Input high voltage	V _{IH}		1, 2, 3	All	2.2		V
Output low voltage	V _{OL}	Device types 01 through 05, I _{OL} = +2.1 mA, V _{CC} = +4.5 V Device types 06, 07, 08, and 09 I _{OL} = +8.0 mA, V _{CC} = +4.5 V	1, 2, 3	All		0.4	V
Output high voltage	V _{OH}	Device types 01 through 05, I _{OH} = -1.0 mA, V _{CC} = +4.5 V Device types 06, 07, 08, and 09 I _{OH} = -4.0 mA, V _{CC} = +4.5 V	1, 2, 3	All	2.4		V
DATA RETENTION							
Data retention supply voltage	V _{DR}	$\overline{CS} \geq V_{CC} - 0.2 \text{ V}$	1,2,3	All	2.0	5.5	V

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/</u> -55° C ≤ T _C ≤ +125° C V _{SS} = 0 V dc +4.5 V dc ≤ V _{CC} ≤ +5.5 V dc unless otherwise specified	Group A subgroups	Device types	Limits		Unit
					Min	Max	
DATA RETENTION - Continued.							
Data retention current	I _{CCDR}	V _{CC} = 3.0 V	1, 2, 3	01-03 04		1.0 2.0	mA
				05,06,07, 08,09		7.0	
FUNCTIONAL TESTING							
Functional tests		See 4.3.1c	7,8A,8B	All			
READ CYCLE AC TIMING							
Input capacitance <u>2/</u>	C _{IN}	V _{IN} = 0 V dc, f = 1 MHz	4	All		40	pF
Output capacitance <u>2/</u>	C _{OUT}	V _{OUT} = 0 V dc, f = 1 MHz	4	All		40	pF
Read cycle time	t _{RC}	See figure 4	9,10,11	01 02 03 04 05 06 07 08 09	120 100 85 70 55 45 35 25 20		ns
Address access time	t _{AA}	See figure 4	9,10,11	01 02 03 04 05 06 07 08 09	120 100 85 70 55 45 35 25 20		ns
Chip select access time	t _{ACS}	See figure 4	9,10,11	01 02 03 04 05 06 07 08 09	120 100 85 70 55 45 35 25 20		ns
Output hold from address change	t _{OH}	See figure 4	9,10,11	01,02,03 04 05-09	15 5 3		ns

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions ^{1/} -55° C ≤ T _C ≤ +125° C V _{SS} = 0 V dc +4.5 V dc ≤ V _{CC} ≤ +5.5 V dc unless otherwise specified	Group A subgroups	Device types	Limits		Unit
					Min	Max	
READ CYCLE AC TIMING - Continued.							
Chip select to output in low impedance	t _{CLZ}	See figure 4	9,10,11	01,02,03	10		ns
				04,05,	5		
				06-09	3		
Chip select to output in high impedance	t _{CHZ}	See figure 4	9,10,11	01, 02		50	ns
				03		45	
				04		40	
				05		35	
				06		30	
				07		20	
				08		17	
				09		15	
				Output enable to output valid	t _{OE}	See figure 4	
03		55					
04		50					
05		40					
06		35					
07		25					
08		20					
09		10					
Output enable to output in low impedance	t _{OLZ}	See figure 4	9,10,11				01-04
				05-09	0		
Output enable to output in high impedance	t _{OHZ}	See figure 4	9,10,11	01, 02		50	ns
				03		45	
				04		40	
				05		30	
				06		25	
				07		20	
				08		15	
				09		12	

WRITE CYCLE AC TIMING

Address setup time	t _{AS}	See figure 5	9,10,11	All	2		ns
Write cycle time	t _{WC}	See figure 5	9,10,11	01	120		ns
				02	100		
				03	85		
				04	70		
				05	55		
				06	45		
				07	35		
				08	25		
				09	20		

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55° C ≤ T _C ≤ +125° C V _{SS} = 0 V dc +4.5 V dc ≤ V _{CC} ≤ +5.5 V dc unless otherwise specified	Group A subgroups	Device types	Limits		Unit
					Min	Max	
WRITE CYCLE AC TIMING - Continued.							
Write pulse width	t _{WP}	See figure 5	9,10,11	01 02 03 04, 05 06 07 08 09	80 70 65 40 30 25 20 16		ns
Write recovery time	t _{WR}	See figure 5	9,10,11	All	2		ns
Write enable to output in low impedance <u>2/</u>	t _{WLZ}	See figure 5	9,10,11	01-03 04-09	5 0		ns
Write enable to output in high impedance <u>2/</u>	t _{WHZ}	See figure 5	9,10,11	01, 02 03 04 05 06 07 08 09	0 0 0 0 0 0 0 0	50 45 40 30 25 20 15 12	ns
Data valid to end of write	t _{DW}	See figure 5	9,10,11	01, 02 03 04 05 06 07 08, 09	50 45 40 30 25 20 15		ns
Data hold time	t _{DH}	See figure 5	9,10,11	01-04 05-09	0 1		ns
Output active from end <u>2/</u> of WE	t _{OW}	See figure 5	9,10,11	01-04 05-08 09	10 5 4		ns
Address valid to end of write	t _{AW}	See figure 5	9,10,11	01 02, 03 04, 05 06 07 08 09	85 75 50 30 25 20 16		ns

See footnotes at end of table

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TABLE I. Electrical performance characteristics - Continued.

1/ Unless otherwise specified; the AC test conditions are as follows:

Input pulse levels: $V_{IL} = 0\text{ V}$ and $V_{IH} = 3.0\text{ V}$.

Input rise and fall times: 5 nanoseconds

Input and output timing reference levels: 1.5 V.

Output loading: See figure 7.

2/ Parameters shall be tested as part of device characterization and after design and process changes. Parameters shall be to the limits specified in table I for all lots not specifically tested.

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Case outline X

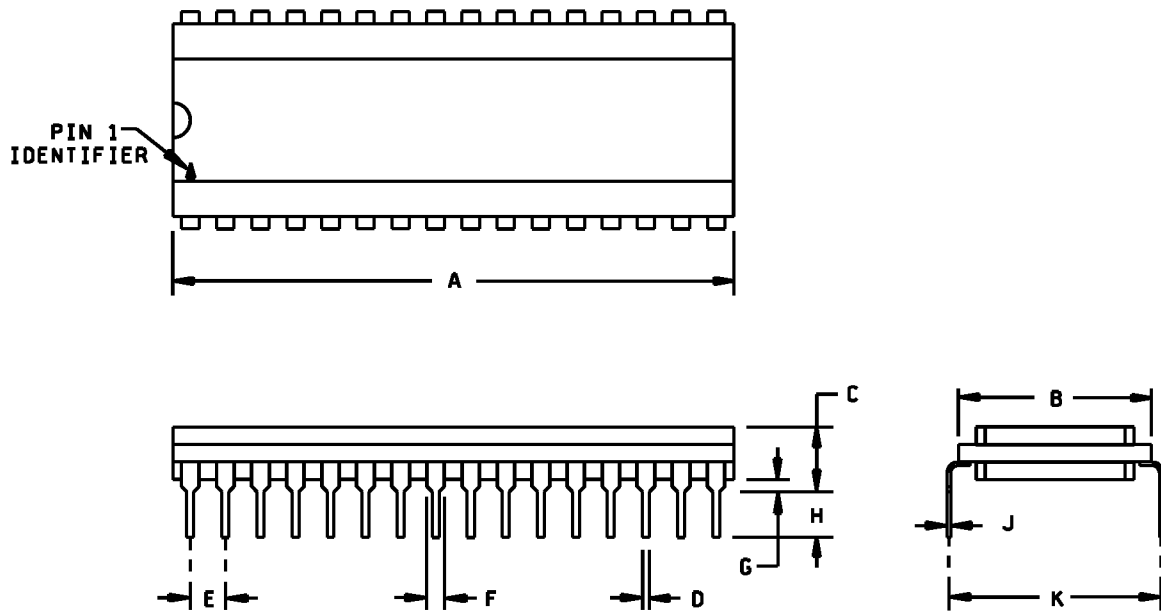


FIGURE 1. Case outlines.

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Case outline X - Continued

Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	40.23	41.05	1.584	1.616
B	13.81	14.12	0.544	0.556
C	3.68	5.08	0.145	0.200
D	0.40	0.51	0.016	0.020
E	2.54 TYP		0.100 TYP	
F	1.14	1.40	0.045	0.055
G	0.51	1.52	0.020	0.060
H	3.18 MIN		0.125 MIN	
J	0.23	0.30	0.009	0.012
K	14.99	15.49	0.590	0.610

FIGURE 1. Case outline - Continued.

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Case outline Y

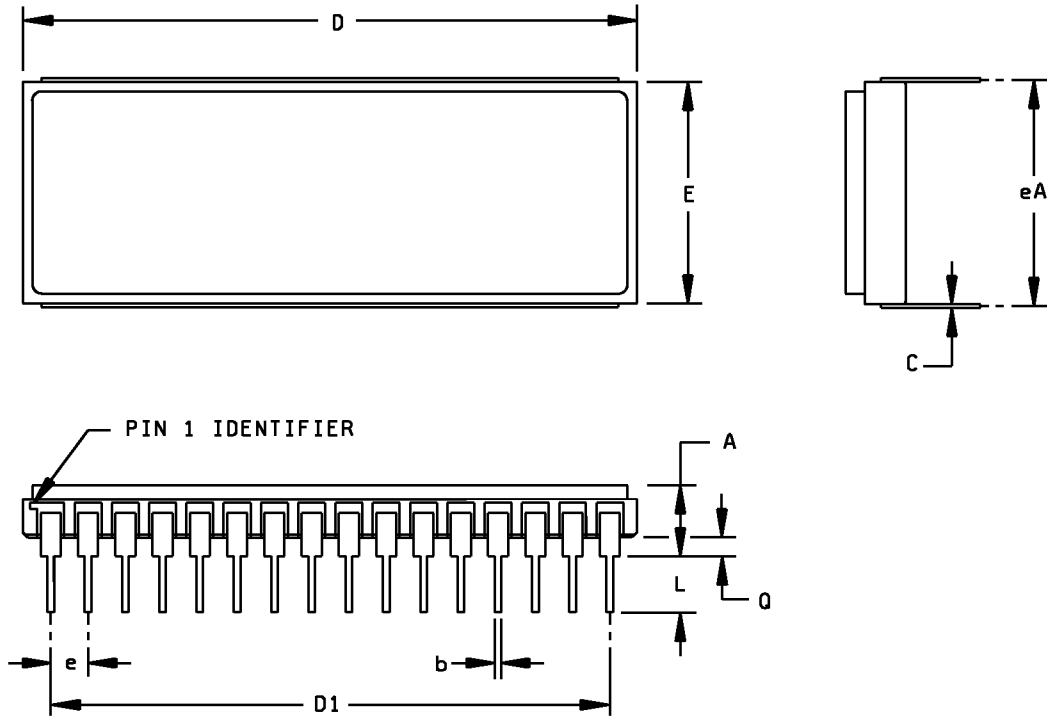


FIGURE 1. Case outline(s) - Continued.

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Case outline Y - Continued

Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	3.56	5.13	0.140	0.202
b	0.41	0.51	0.016	0.020
C	0.20	0.31	0.008	0.012
D	40.23	42.82	1.584	1.686
D1	37.90	38.30	1.492	1.508
E	14.73	15.37	0.580	0.605
e	2.54 BSC		0.100 BSC	
eA	14.99	15.49	0.590	0.610
L	3.18	4.90	0.125	0.193
Q	0.48	1.52	0.019	0.060

NOTES:

1. The U.S. preferred system of measurement is the metric SI. This item was designed using inch-pound units of measurement. In case of problems involving conflicts between the metric and inch-pound units, the inch-pound units shall rule.
2. Pin numbers are for reference only.

FIGURE 1. Case outline(s) - Continued.

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Device types	01-09
Case outlines	X and Y
Terminal number	Terminal connection
1	NC
2	A16
3	A14
4	A12
5	A7
6	A6
7	A5
8	A4
9	A3
10	A2
11	A1
12	A0
13	I/O 0
14	I/O 1
15	I/O 2
16	V _{ss}
17	I/O 3
18	I/O 4
19	I/O 5
20	I/O 6
21	I/O 7
22	CS
23	A10
24	OE
25	A11
26	A9
27	A8
28	A13
29	WE
30	A17
31	A15
32	V _{cc}

FIGURE 2. Terminal connections.

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\overline{CS}	\overline{OE}	\overline{WE}	AO-A17	Mode	Data I/O	Device
H	X	X	X	Standby	High Z	Standby
L	L	H	Stable	Read	Data out	Active
L	X	L	Stable	Write	Data in	Active
L	H	H	Stable	Output disable	High Z	Active

NOTES:

1. H = V_{IH} = High Logic Level
2. L = V_{IL} = Low Logic Level
3. X = Do not care (either high or low)
4. High Z = High Impedance State

FIGURE 3. Truth table.

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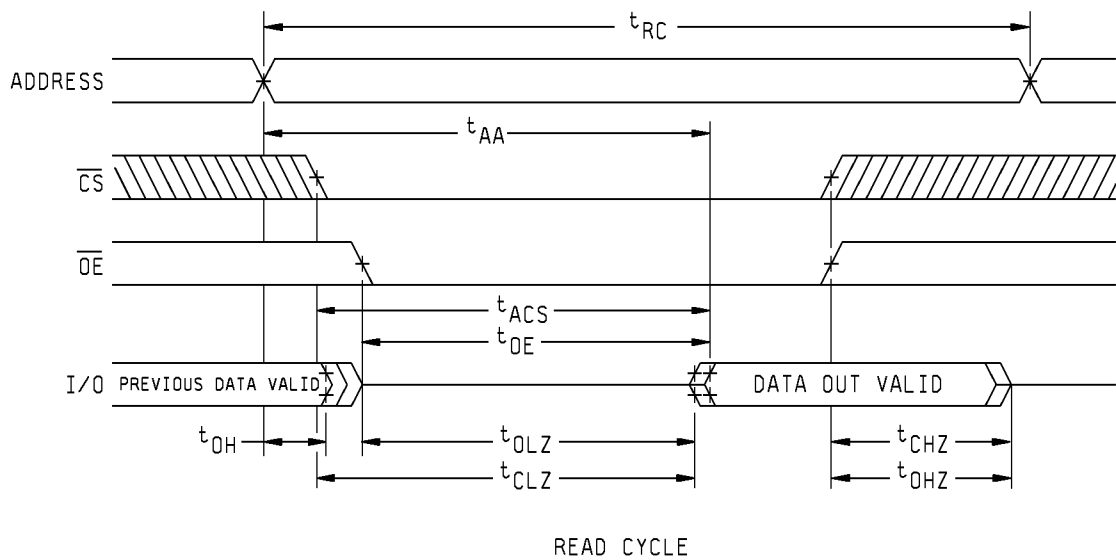
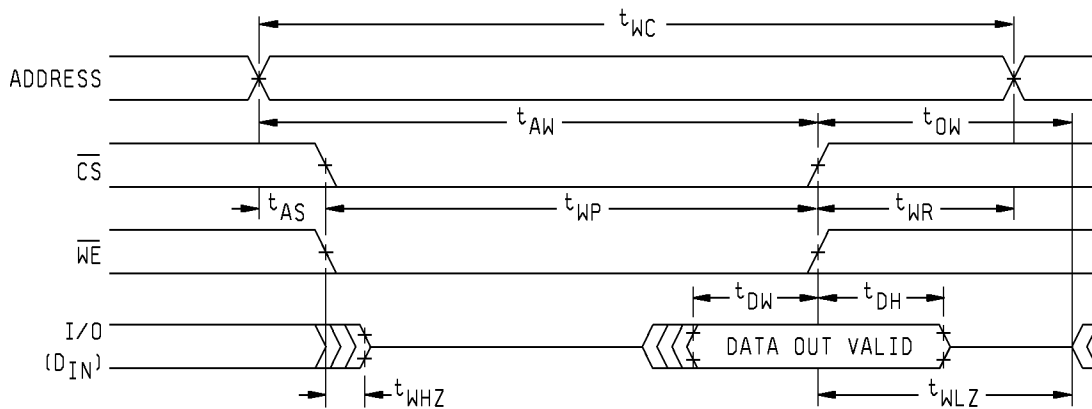


FIGURE 4. Read cycle timing diagram.

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WRITE CYCLE

FIGURE 5. Write cycle timing diagram.

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Hybrid configuration

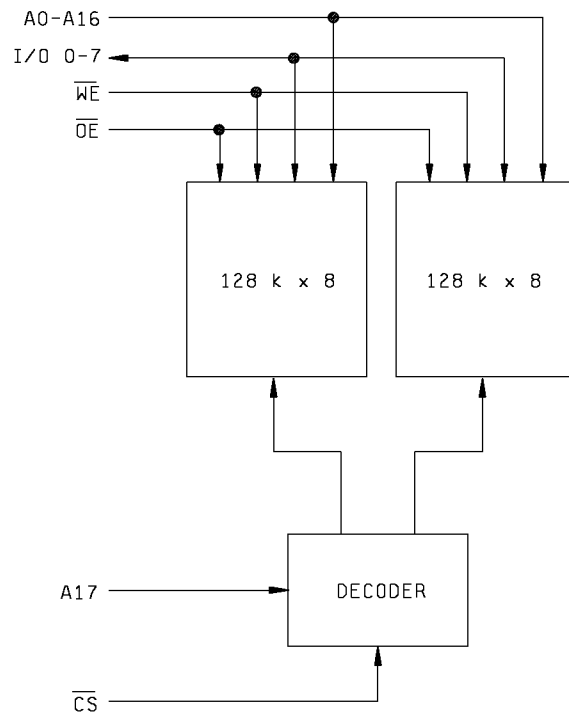


FIGURE 6. Block diagram.

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Monolithic configuration

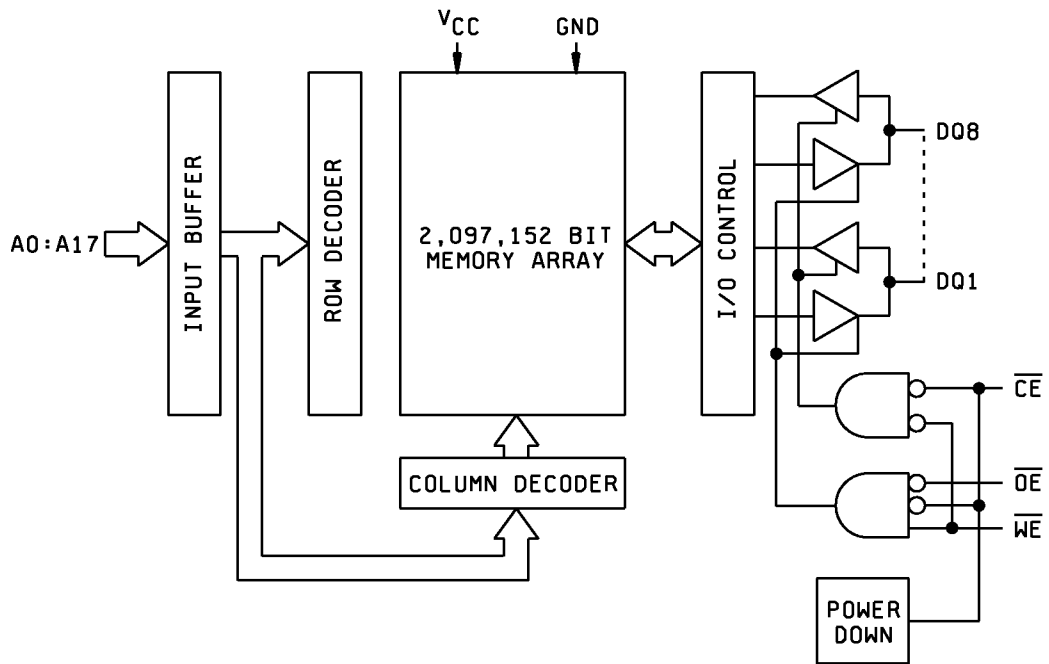
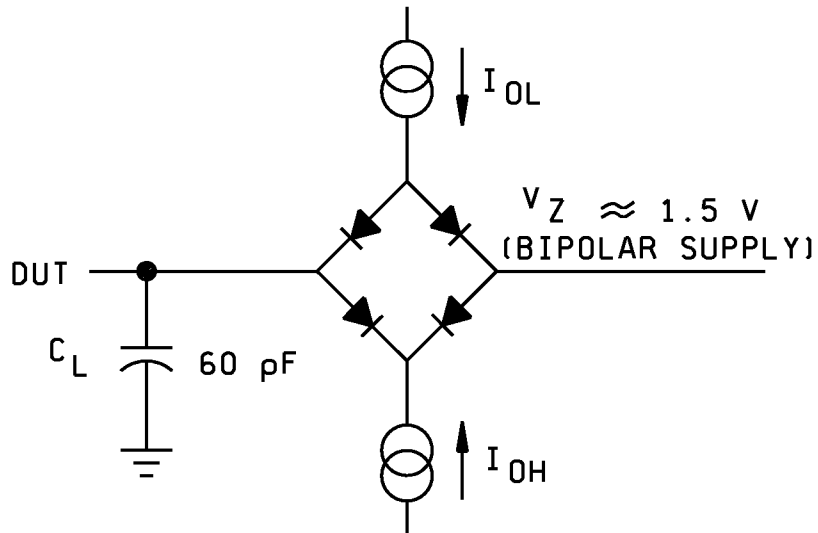


FIGURE 6. Block diagram - Continued.

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NOTES:

1. V_Z is programmable from -2 V to + 7 V. I_{OH} and I_{OL} are programmable from 0 to 16 mA.
2. Tester impedance, $Z_O = 75$ ohms.
3. V_Z is typically the midpoint of V_{OH} and V_{OL} , approximately 1.5 V.
4. C_L includes tester jig capacitance.

FIGURE 7. Output load circuit.

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TABLE II. Electrical test requirements.

MIL-PRF-38534 test requirements	Subgroups (in accordance with MIL-PRF-38534, group A test table)
Interim electrical parameters	1, 4, 7, 9
Final electrical test parameters	1*, 2, 3, 4, 7*, 8A, 8B, 9, 10, 11
Group A test requirements	1, 2, 3, 4, 7, 8A, 8B, 9, 10, 11
Group C end-point electrical parameters	1, 2, 3, 4, 7, 8A, 8B, 9, 10, 11
End-point electrical parameters for Radiation Hardness Assurance (RHA) devices	Not applicable

* PDA applies to subgroups 1 and 7.

4.3 Conformance and periodic inspections. Conformance inspection (CI) and periodic inspection (PI) shall be in accordance with MIL-PRF-38534 and as specified herein.

4.3.1 Group A inspection (CI). Group A inspection shall be in accordance with MIL-PRF-38534 and as follows:

- a. Tests shall be as specified in table II herein.
- b. Subgroups 5 and 6 shall be omitted.
- c. Subgroups 7, 8A, and 8B shall include verification of the truth table on figure 3.

4.3.2 Group B inspection (PI). Group B inspection shall be in accordance with MIL-PRF-38534.

4.3.3 Group C inspection (PI). Group C inspection shall be in accordance with MIL-PRF-38534 and as follows:

- a. End-point electrical parameters shall be as specified in table II herein.
- b. Steady-state life test, method 1005 of MIL-STD-883.
 - (1) Test condition B. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to either DSCC-VA or the acquiring activity upon request. Also, the test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1005 of MIL-STD-883.
 - (2) T_A as specified in accordance with table I of method 1005 of MIL-STD-883.
 - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

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4.3.4 Group D inspection (PI). Group D inspection shall be in accordance with MIL-PRF-38534.

4.3.5 Radiation Hardness Assurance (RHA) inspection. RHA inspection is not currently applicable to this drawing.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38534.

6. NOTES

6.1 Intended use. Microcircuits conforming to this drawing are intended for use for Government microcircuit applications (original equipment), design applications, and logistics purposes.

6.2 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.

6.3 Configuration control of SMD's. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished in accordance with MIL-STD-973 using DD Form 1692, Engineering Change Proposal.

6.4 Record of users. Military and industrial users shall inform Defense Supply Center Columbus when a system application requires configuration control and the applicable SMD. DSCC will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronic devices (FSC 5962) should contact DSCC-VA, telephone (614) 692-0544.

6.5 Comments. Comments on this drawing should be directed to DSCC-VA, Columbus, Ohio 43216-5000 or telephone (614) 692-0512.

6.6 Sources of supply. Sources of supply are listed in MIL-HDBK-103 and QML-38534. The vendors listed in MIL-HDBK-103 and QML-38534 have submitted a certificate of compliance (see 3.7 herein) to DSCC-VA and have agreed to this drawing.

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STANDARD MICROCIRCUIT DRAWING SOURCE APPROVAL BULLETIN

DATE: 99-11-01

Approved sources of supply for SMD 5962-93157 are listed below for immediate acquisition only and shall be added to QML-38534 during the next revision. QML-38534 will be revised to include the addition or deletion of sources. The vendors listed below have agreed to this drawing and a certificate of compliance has been submitted to and accepted by DSCC-VA. This bulletin is superseded by the next dated revision of QML-38534.

Standard <u>1</u> / microcircuit drawing PIN	Vendor CAGE number	Vendor similar PIN <u>2</u> /
5962-9315701HXA	54230	WS256K8-120CQA
5962-9315701HXC	54230	WS256K8-120CQ
5962-9315701HYA	54230	WS256K8-120CQA
5962-9315701HYC	54230	WS256K8-120CQ
5962-9315702HXA	54230	WS256K8-100CQA
5962-9315702HXC	54230	WS256K8-100CQ
5962-9315702HYA	54230	WS256K8-100CQA
5962-9315702HYC	54230	WS256K8-100CQ
5962-9315703HXA	54230	WS256K8-85CQA
5962-9315703HXC	54230	WS256K8-85CQ
5962-9315703HYA	54230	WS256K8-85CQA
5962-9315703HYC	54230	WS256K8-85CQ
5962-9315704HXA	54230	WS256K8-70CQA
5962-9315704HXC	54230	WS256K8-70CQ
5962-9315704HYA	54230	WS256K8-70CQA
5962-9315704HYC	54230	WS256K8-70CQ
5962-9315705HXA	54230	WS256K8-55CQA
5962-9315705HXC	54230	WS256K8-55CQ
5962-9315705HYA	0EU86	AS5C2008CW-55/HQ
5962-9315705HYA	54230	WS256K8-55CQA
5962-9315705HYC	0EU86	AS5C2008CW-55/HQ
5962-9315705HYC	54230	WS256K8-55CQ
5962-9315706HXA	54230	WS256K8-45CQA
5962-9315706HXC	54230	WS256K8-45CQ
5962-9315706HYA	0EU86	AS5C2008CW-45/HQ
5962-9315706HYA	54230	WS256K8-45CQA
5962-9315706HYC	0EU86	AS5C2008CW-45/HQ
5962-9315706HYC	54230	WS256K8-45CQ
5962-9315707HXA	54230	WS256K8-35CQA
5962-9315707HXC	54230	WS256K8-35CQ
5962-9315707HYA	0EU86	AS5C2008CW-35/HQ
5962-9315707HYA	54230	WS256K8-35CQA
5962-9315707HYC	0EU86	AS5C2008CW-35/HQ
5962-9315707HYC	54230	WS256K8-35CQ

STANDARD MICROCIRCUIT DRAWING SOURCE APPROVAL BULLETIN - CONTINUED

DATE: 99-11-01

Approved sources of supply for SMD 5962-93157 are listed below for immediate acquisition only and shall be added to QML-38534 during the next revision. QML-38534 will be revised to include the addition or deletion of sources. The vendors listed below have agreed to this drawing and a certificate of compliance has been submitted to and accepted by DSCC-VA. This bulletin is superseded by the next dated revision of QML-38534.

Standard <u>1/</u> microcircuit drawing PIN	Vendor CAGE number	Vendor similar PIN <u>2/</u>
5962-9315708HXA	54230	WS256K8-25CQA
5962-9315708HXC	54230	WS256K8-25CQ
5962-9315708HYA	0EU86	AS5C2008CW-25/HQ
5962-9315708HYA	54230	WS256K8-25CQA
5962-9315708HYC	0EU86	AS5C2008CW-25/HQ
5962-9315708HYC	54230	WS256K8-25CQ
5962-9315709HXA	54230	WS256K8-20CQA
5962-9315709HXC	54230	WS256K8-20CQ
5962-9315709HYA	54230	WS256K8-20CQA
5962-9315709HYC	54230	WS256K8-20CQ

- 1/ The lead finish shown for each PIN representing a hermetic package is the most readily available from the manufacturer listed for that part. If the desired lead finish is not listed contact the vendor to determine its availability
- 2/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

<u>Vendor CAGE number</u>	<u>Vendor name and address</u>
0UE86	Austin Semiconductor Incorporated 8701 Cross Park Drive Austin, TX 78754-4566
54230	White Electronic Designs Corporation 3601 East University Drive Phoenix, AZ 85034-7217

The information contained herein is disseminated for convenience only and the Government assumes no liability whatsoever for any inaccuracies in this information bulletin.