

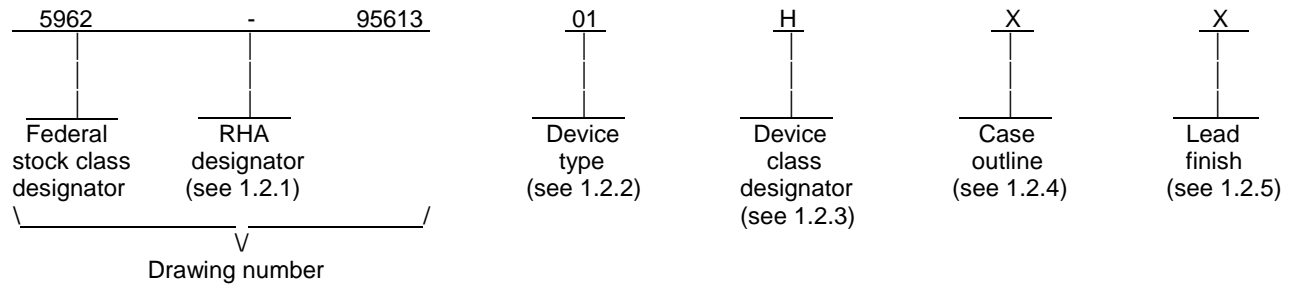
REVISIONS			
LTR	DESCRIPTION	DATE (YR-MO-DA)	APPROVED
A	Added device types 05 through 10. Added case outlines X, Z, and T. Redrew entire document.	96-08-23	K. A. Cottongim
B	Added device types 11 through 13. Added case outline U.	96-10-22	K. A. Cottongim
C	Made changes in accordance with NOR 5962-R289-97. -sld	97-04-28	K. A. Cottongim
D	Table I; Changed the max limit for the operating supply current I _{CC} for device types 05-10 from 130 mA to 135 mA. Table I; Changed the max limit for data retention current (I _{CCDR1}) for device types 05-10 from 3.0 mA to 7.0 mA. Add vendor cage 88379 for device types 11, 12, and 13 per letter dated 1 MAY 1997. -sld	98-02-18	
E	Add device type 14.	98-06-22	K. A. Cottongim
F	Changes to case outlines U and X.	99-04-30	K. A. Cottongim
G	Add: note to paragraph 1.2.2 and table I, conditions. Add device types 15 through 27, case outlines M, N, and 9, vendor CAGE code 0EU86, condition D to paragraphs 4.2.a.1 and 4.3.3.b.1. Changes to table I and dimensions to case outlines T, U, Y, and Z. Table I, add note 3 to C _{IN} and C _{OUT} .	01-02-08	Raymond Monnin
H	Table I; Changed the I _{OL} from 8 mA to 6 mA for device types 07-14 and 21-27 for the V _{OL} test. Added device types 28, 29, and 30. Editorial changes throughout. -sld	04-05-28	Raymond Monnin

REV																					
SHEET																					
REV	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H				
SHEET	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
REV STATUS				REV			H	H	H	H	H	H	H	H	H	H	H	H	H	H	
OF SHEETS				SHEET			1	2	3	4	5	6	7	8	9	10	11	12	13	14	
PMIC N/A	PREPARED BY Steve L. Duncan						DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43218-3990 http://www.dscc.dla.mil/														
STANDARD MICROCIRCUIT DRAWING THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE AMSC N/A	CHECKED BY Michael C. Jones																				
	APPROVED BY Kendall A. Cottongim						MICROCIRCUIT, MEMORY, DIGITAL, SRAM, 512K x 8-BIT, MONOLITHIC SILICON														
	DRAWING APPROVAL DATE 95-11-07																				
	REVISION LEVEL H						SIZE A	CAGE CODE 67268	5962-95613												
						SHEET 1 OF 31															

1. SCOPE

1.1 Scope. This drawing documents five product assurance classes as defined in paragraph 1.2.3 and MIL-PRF-38534. A choice of case outlines and lead finishes which 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:

Device type 1/ 2/	Generic number	Circuit function	Data retention	Access time
01	AS5C4009-120, WMS512K8-120	512K x 8 bit SRAM	Yes	120 ns
02	AS5C4009-100, WMS512K8-100	512K x 8 bit SRAM	Yes	100 ns
03	AS5C4009-85, WMS512K8-85	512K x 8 bit SRAM	Yes	85 ns
04	AS5C4009-70, WMS512K8-70	512K x 8 bit SRAM	Yes	70 ns
05	ACT-S512K8N-055, AS5C512K8-55, WMS512K8-55	512K x 8 bit SRAM	Yes	55 ns
06	ACT-S512K8N-045, AS5C512K8-45, WMS512K8-45	512K x 8 bit SRAM	Yes	45 ns
07	ACT-S512K8M-035, AS5C512K8-35, WMS512K8-35	512K x 8 bit SRAM	Yes	35 ns
08	ACT-S512K8N-025, AS5C512K8-25, WMS512K8-25	512K x 8 bit SRAM	Yes	25 ns
09	ACT-S512K8N-020, AS5C512K8-20, WMS512K8-20	512K x 8 bit SRAM	Yes	20 ns
10	ACT-S512K8N-017, AS5C512K8-17, WMS512K8-17	512K x 8 bit SRAM	Yes	17 ns
11	ACT-S512K8M-045, AS5C512K8-45, WMS512K8M-45	512K x 8 bit SRAM	Yes	45 ns
12	ACT-S512K8M-035, AS5C512K8-35, WMS512K8M-35	512K x 8 bit SRAM	Yes	35 ns
13	ACT-S512K8M-025, AS5C512K8-25, WMS512K8M-25	512K x 8 bit SRAM	Yes	25 ns
14	WMS512K8-15	512K x 8 bit SRAM	Yes	15 ns
15	AS5C4009-120L, WMS512K8L-120	512K x 8 bit SRAM	Yes	120 ns
16	AS5C4009-100L, WMS512K8L-100	512K x 8 bit SRAM	Yes	100 ns
17	AS5C4009-85L, WMS512K8L-85	512K x 8 bit SRAM	Yes	85 ns
18	AS5C4009-70L, WMS512K8L-70	512K x 8 bit SRAM	Yes	70 ns
19	AS5C512K8-55L, WMS512K8L-55	512K x 8 bit SRAM	Yes	55 ns
20	AS5C512K8-45L, WMS512K8L-45	512K x 8 bit SRAM	Yes	45 ns
21	AS5C512K8-35L, WMS512K8L-35	512K x 8 bit SRAM	Yes	35 ns
22	AS5C512K8-25L, WMS512K8L-25	512K x 8 bit SRAM	Yes	25 ns
23	AS5C512K8-20L, WMS512K8L-20	512K x 8 bit SRAM	Yes	20 ns
24	AS5C512K8-17L, WMS512K8L-17	512K x 8 bit SRAM	Yes	17 ns
25	AS5C512K8-45L	512K x 8 bit SRAM	Yes	45 ns
26	AS5C512K8-35L	512K x 8 bit SRAM	Yes	35 ns
27	AS5C512K8-25L	512K x 8 bit SRAM	Yes	25 ns
28	AS5C512K-12L, WMS512K8L-12	512K x 8 bit SRAM	Yes	12 ns
29	AS5C512K-12, WMS512K8-12	512K x 8 bit SRAM	No	12 ns
30	WMS512K8U-12	512K x 8 bit SRAM	Yes	12 ns

1/ Due to the nature of the 4 transistor design of the die used in these device types, topologically pure testing is important, particularly for high reliability applications. The device manufacturer should be consulted concerning their testing methods and algorithms.

2/ Device types and case outlines may be similar to the device types and case outlines listed on SMD 5962-95600.

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1.2.3 Device class designator. This device class designator shall be a single letter identifying the product assurance level. All levels are defined by the requirements of MIL-PRF-38534 and require QML Certification as well as qualification (Class H, K, and E) or QML Listing (Class G and D). The product assurance levels are as follows:

<u>Device class</u>	<u>Device performance documentation</u>
K	Highest reliability class available. This level is intended for use in space applications.
H	Standard military quality class level. This level is intended for use in applications where non-space high reliability devices are required.
G	Reduced testing version of the standard military quality class. This level uses the Class H screening and In-Process Inspections with a possible limited temperature range, manufacturer specified incoming flow, and the manufacturer guarantees (but may not test) periodic and conformance inspections (Group A, B, C and D).
E	Designates devices which are based upon one of the other classes (K, H, or G) with exception(s) taken to the requirements of that class. These exception(s) must be specified in the device acquisition document; therefore the acquisition document should be reviewed to ensure that the exception(s) taken will not adversely affect system performance.
D	Manufacturer specified quality class. Quality level is defined by the manufacturers internal, QML certified flow. This product may have a limited temperature range.

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>
M	See figure 1	32	Leadless chip carrier, ceramic
N	See figure 1	36	Leadless chip carrier, ceramic
T	See figure 1	32	SOJ, ceramic, evolutionary pinout
U	See figure 1	36	Flat pack, ceramic, with or without pedestal
X	See figure 1	36	Flat pack, ceramic, with non-conductive tie bar, with or without pedestal
Y	See figure 1	32	DIP, ceramic, single cavity
Z	See figure 1	36	SOJ, ceramic
9	See figure 1	32	Flat pack, ceramic

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

1.3 Absolute maximum ratings. ^{1/}

Supply voltage range (V_{CC}).....	-0.5 V dc to +7.0 V dc
Signal voltage range (V_g)	-0.5 V dc to $V_{CC} + 0.5$ V dc
Power dissipation (P_D).....	1.1 W maximum
Storage temperature range	-65°C to +150°C
Lead temperature (soldering, 10 seconds).....	+300°C
Junction temperature (T_J).....	150°C

^{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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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}).....	-0.3 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
Ambient operating temperature range (T_A).....	-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 cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATION

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

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-883 - Test Method Standard Microcircuits.
 MIL-STD-1835 - Interface Standard for Electronic Component Case Outlines.

DEPARTMENT OF DEFENSE HANDBOOKS

MIL-HDBK-103 - List of Standard Microcircuit Drawings.
 MIL-HDBK-780 - Standard Microcircuit Drawings.

(Copies of these documents are available online at <http://assist.daps.dla.mil/quicksearch/> or www.dodssp.daps.mil or 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, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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 shall 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. The manufacturer may eliminate, modify or optimize the tests and inspections herein, however the performance requirements as defined in MIL-PRF-38534 shall be met for the applicable device class. In addition, the modification in the QM plan shall not affect the form, fit, or function of the device 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.

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

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

3.2.6 Output load circuit. The output load circuit used to test product shall be equivalent to the circuit 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.

3.6 Marking of device(s). Marking of device(s) shall be in accordance with MIL-PRF-38534. The device shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's vendor similar 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 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. VERIFICATION

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 or D. 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 method 1015 of MIL-STD-883.

(2) T_A as specified in accordance with table 1 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/ 2/ -55°C ≤ T _A ≤ +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							
Operating supply current	I _{CC}	$\overline{CS} = V_{IL}, \overline{OE} = V_{IH},$ f = 5 MHz, V _{CC} = 5.5 V dc	1,2,3	01-04, 15-18		50	mA
				05-10, 19-24		160	
				11-14, 25-27		200	
				28,29, 30		90	
Standby current	I _{SB}	$\overline{CS} = V_{IH}, \overline{OE} = V_{IH},$ f = 5 MHz, V _{CC} = 5.5 V dc	1,2,3	01-04, 15-18, 30		1	mA
				05-10, 19-24		20	
				11-14, 25-29		30	
Input leakage current	I _{LI}	V _{IN} = GND or V _{CC} , V _{CC} = 5.5 V dc	1,2,3	All		10	μA
Output leakage current	I _{LO}	$\overline{CS} = V_{IH}, \overline{OE} = V_{IH},$ V _{OUT} = GND or V _{CC}	1,2,3	All		10	μA
Output low voltage	V _{OL}	V _{CC} = +4.5 V dc, I _{OL} = 2.1 mA	1,2,3	01-06, 15-20		0.4	V
		V _{CC} = +4.5 V dc, I _{OL} = 6.0 mA		07-14, 21-30		0.4	
Output high voltage	V _{OH}	V _{CC} = +4.5 V dc, I _{OH} = -1 mA	1,2,3	01-06, 15-20	2.4		V
		V _{CC} = +4.5 V dc, I _{OH} = -4 mA		07-14, 21-30	2.4		

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/ 2/</u> -55°C ≤ T _A ≤ +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 characteristics.							
Data retention supply voltage	V _{DR}	$\overline{CS} \geq V_{CC} - 0.2$	1,2,3	All	2.0	5.5	V
Data retention current	I _{CCDR1}	V _{CC} = 2 V dc	1,2,3	15-18,30		0.2	mA
				19-27		2.6	
				28		7.0	
	V _{CC} = 3 V dc	1,2,3	01-04, 15-18,30		0.4	mA	
			05-10, 14		7.0		
			19-27		5.1		
			11,12,13, 28		10.0		
	Capacitance						
Input capacitance <u>3/</u>	C _{IN}	V _{IN} = 0 V dc, f = 1.0 MHz, T _A = +25°C Case outlines M, T, Y, and 9.	4	01-04, 15-18		12	pF
				05-14, 19-30		20	
		V _{IN} = 0 V dc, f = 1.0 MHz, T _A = +25°C Case outlines N, U, X, and Z.		01-04, 15-18		20	pF
				05-14, 19-30		12	
Output capacitance <u>3/</u>	C _{OUT}	V _{IN} = 0 V dc, f = 1.0 MHz, T _A = +25°C Case outlines M, T, Y, and 9.	4	01-04, 15-18		12	pF
				05-14, 19-30		20	
		V _{IN} = 0 V dc, f = 1.0 MHz, T _A = +25°C Case outlines N, U, X, and Z.		01-04, 15-18		20	pF
				05-14, 19-30		12	
See footnotes at end of table.							
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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ 2/ -55°C ≤ T _A ≤ +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	
Functional tests.							
Functional tests		See 4.3.1c	7,8A,8B	All			
Read cycle AC timing characteristics.							
Read cycle timing	t _{RC}	See figure 4	9,10,11	01,15	120		ns
				02,16	100		
				03,17	85		
				04,18	70		
				05,19	55		
				06,11, 20,25	45		
				07,12, 21,26	35		
				08,13, 22,27	25		
				09,23	20		
				10,24	17		
				14	15		
				28,29,30	12		
Address access timing	t _{AC}	See figure 4	9,10,11	01,15		120	ns
				02,16		100	
				03,17		85	
				04,18		70	
				05,19		55	
				06,11, 20,25		45	
				07,12, 21,26		35	
				08,13, 22,27		25	
				09,23		20	
				10,24		17	
				14		15	
				28,29,30		12	
Output hold from address change	t _{OH}	See figure 4	9,10,11	01-04, 14, 15-18	5		ns
				05-13, 19-30	0		
See footnotes at end of table.							
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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/ 2/</u> -55°C ≤ T _A ≤ +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 characteristics - Continued.							
Chip select access timing	t _{ACS}	See figure 4	9,10,11	01,15		120	ns
				02,16		100	
				03,17		85	
				04,18		70	
				05,19		55	
				06,11, 20,25		45	
				07,12, 21,26		35	
				08,13, 22,27		25	
				09,23		20	
				10,24		17	
				14		15	
				28,29,30		12	
				Output enable to output valid	t _{OE}	See figure 4	
02,16		50					
03,17		40					
04,11, 18,25		35					
05-07, 12,19, 20,21, 26		25					
08,13, 22,27		12					
09,23		10					
10,24		9					
14		8					
28,29,30		7					
Chip select to output in low impedance <u>3/</u>	t _{CLZ}	See figure 4	9,10,11	01-04, 15-18	10		ns
				05-07, 11,12, 19-21, 25,26	4		
				08-10, 13,14, 22-24, 27-30	2		

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/</u> <u>2/</u> -55°C ≤ T _A ≤ +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 characteristics - Continued.							
Output enable to output in low impedance <u>3/</u>	t _{OLZ}	See figure 4	9,10,11	01-04, 15-18	5		ns
				05-14, 19-30	0		
Chip select high to output in high impedance <u>3/</u>	t _{CHZ}	See figure 4	9,10,11	01,02, 15,16		35	ns
				03,04, 17,18		25	
				05,06, 19,20		20	
				07,11, 12,21, 25,26		15	
				08,13, 22,27		12	
				09,23		10	
				10,24		9	
				14 28,29,30		8 6.5	
Output enable high to output in high impedance <u>3/</u>	t _{OHZ}	See figure 4	9,10,11	01,02, 15,16		35	ns
				03,04, 17,18		25	
				05,06, 19,20		20	
				07,11, 12,21, 25,26		15	
				08,13, 22,27		12	
				09,23		10	
				10,24		9	
				14 28,29,30		8 6.5	

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/ 2/</u> -55°C ≤ T _A ≤ +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 characteristics.							
Write cycle timing	t _{wc}	See figure 5	9,10,11	01,15	120		ns
				02,16	100		
				03,17	85		
				04,18	70		
				05,19	55		
				06,11, 20,25	45		
				07,12, 21,26	35		
				08,13, 22,27	25		
				09,23	20		
				10,24	17		
				14	15		
				28,29,30	12		
Chip select to end of write	t _{cw}	See figure 5	9,10,11	01,15	100		ns
				02,16	80		
				03,17	75		
				04,18	60		
				05,19	50		
				06,11, 20,25	35		
				07,12, 21,26	25		
				08,22	15		
				09,10, 23,24	14		
				13,27	17		
				14	13		
				28,29,30	12		
See footnotes at end of table.							
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				H	11		

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/</u> <u>2/</u> -55°C ≤ T _A ≤ +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 characteristics - Continued.							
Address valid to end of write	t _{AW}	See figure 5	9,10,11	01,15	100		ns
				02,16	80		
				03,17	75		
				04,18	60		
				05,19	50		
				06,11, 20,25	35		
				07,12, 21,26	25		
				08,22	15		
				09,10, 23,24	14		
				13,27	17		
				14	13		
	28,29,30	12					
Data valid to end of write	t _{DW}	See figure 5	9,10,11	01,02, 15,16	40		ns
				03, 04, 11,17, 18,25	30		
				05,06, 19,20	25		
				07,12, 21,26	20		
				08,09, 22,23	10		
				10,24	9		
				13,27	15		
				14	8		
	28,29,30	6.5					
Address setup time	t _{AS}	See figure 5	9,10,11	All	2		ns
See footnotes at end of table.							
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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/ 2/</u> -55°C ≤ T _A ≤ +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 characteristics - Continued.							
Write pulse width	t _{WP}	See figure 5	9,10,11	01,02, 15,16	60		ns
				03, 04, 17,18	50		
				05,19	40		
				06,11, 20,25	35		
				07,12, 21,26	25		
				08,22	15		
				09,10, 23,24	14		
				13,27	17		
				14	13		
				28,29,30	12		
Write enable to output in high impedance <u>3/</u>	t _{WHZ}	See figure 5	9,10,11	01,02, 15,16		35	ns
				03-05, 17-19		25	
				06,20		15	
				07,21		20	
				11,12, 25,26		15	
				08,13,22 ,27		10	
				09,10, 23,24		9	
				14		8	
				28,29,30		6.5	

See footnotes at end of table.

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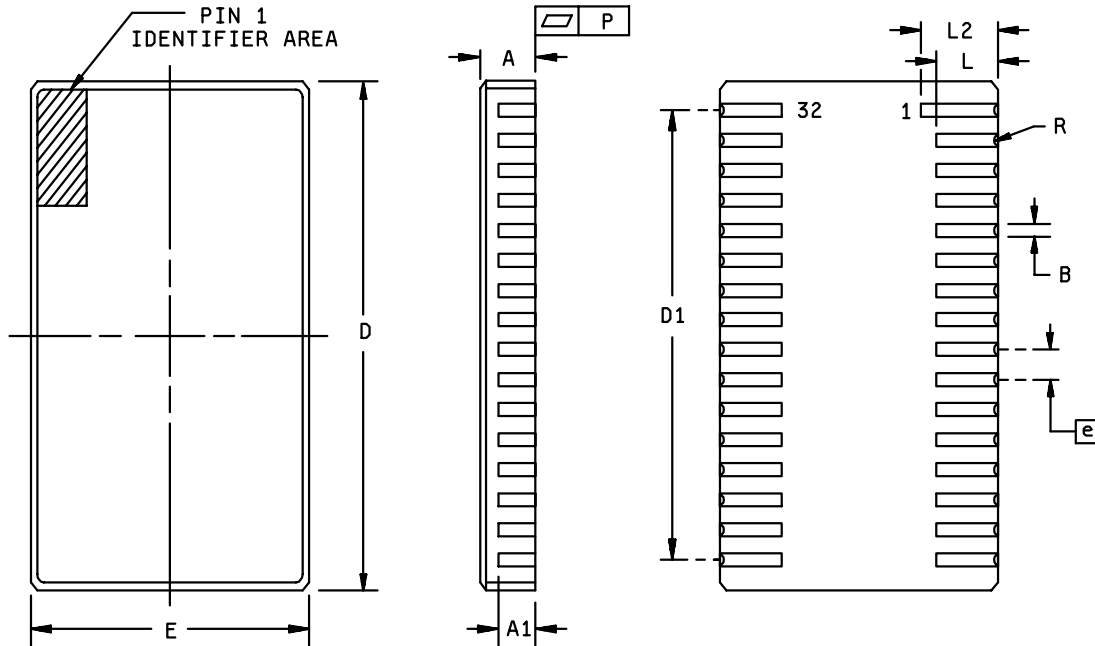
TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <u>1/</u> <u>2/</u> -55°C ≤ T _A ≤ +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 characteristics - Continued.							
Address hold time	t _{AH}	See figure 5	9,10,11	01-06, 15-20	5		ns
				07-14, 21-30	0		
Output active from end of write <u>3/</u>	t _{OW}	See figure 5	9,10,11	01-06, 15-20	5		ns
				07-14, 21-30	0		
Data hold time	t _{DH}	See figure 5	9,10,11	All	0		ns

- 1/ Due to the nature of the 4 transistor design of the die used in these device types, topologically pure testing is important, particularly for high reliability applications. The device manufacturer should be consulted concerning their testing methods and algorithms.
- 2/ Unless otherwise specified, the AC test conditions are as follows: Input pulse levels: V_{IL} = 0 V and V_{IH} = 3.0 V. Input rise and fall times: 5 nanoseconds. Input and output timing reference levels: 1.5 V, ± 0.5 V. Output loading: See paragraph 3.2.6 and figure 7. Unless otherwise specified the DC test conditions are as follows: V_{IL} = 0.3 V, V_{IH} = V_{CC} - 0.3 V.
- 3/ 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 M.



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.03	2.54	.080	.100
A1	1.37	1.68	.054	.066
B	0.56	0.71	.022	.028
D	20.70	21.21	.815	.835
D1	18.80	19.30	.740	.760
E	11.18	11.68	.440	.460
e	1.27 BSC		.050 BSC	
L	2.54 REF		.100 REF	
L2	2.92	3.43	.115	.135
N	32			
P	---	0.15	---	.006
R	0.23 REF		.009 REF	

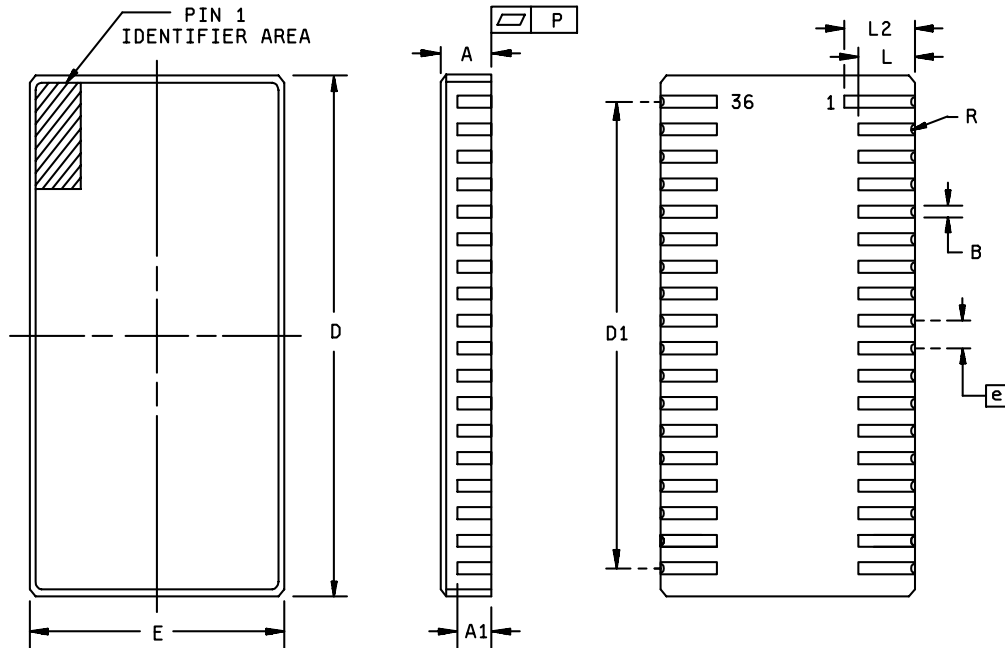
NOTES:

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).

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Case outline N.



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.03	2.54	.080	.100
A1	1.37	1.68	.054	.066
B	0.56	0.71	.022	.028
D	23.11	23.62	.910	.930
D1	21.34	21.84	.840	.860
E	11.30	11.68	.445	.460
e	1.27 BSC		.050 BSC	
L	2.54 TYP		.100 TYP	
L2	2.92	3.43	.115	.135
N	36			
P	---	0.15	---	.006
R	0.23 TYP		.009 TYP	

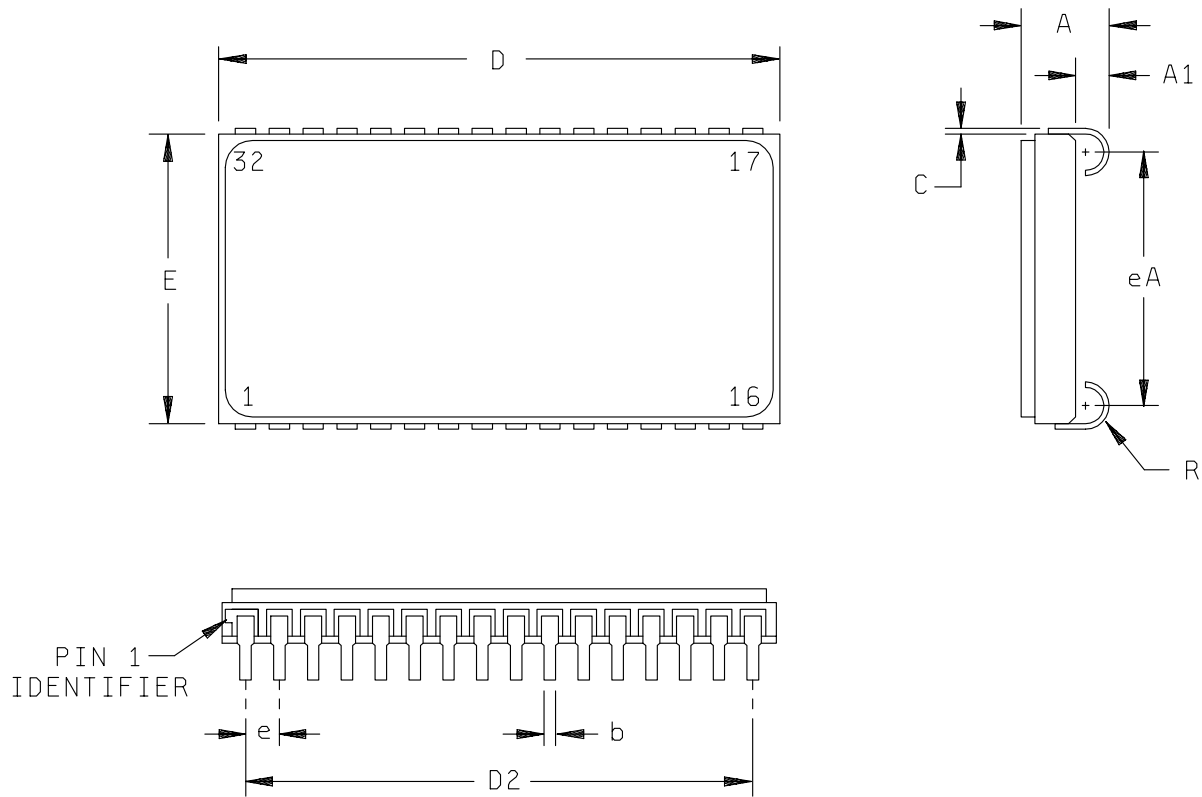
NOTES:

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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Case outline T.



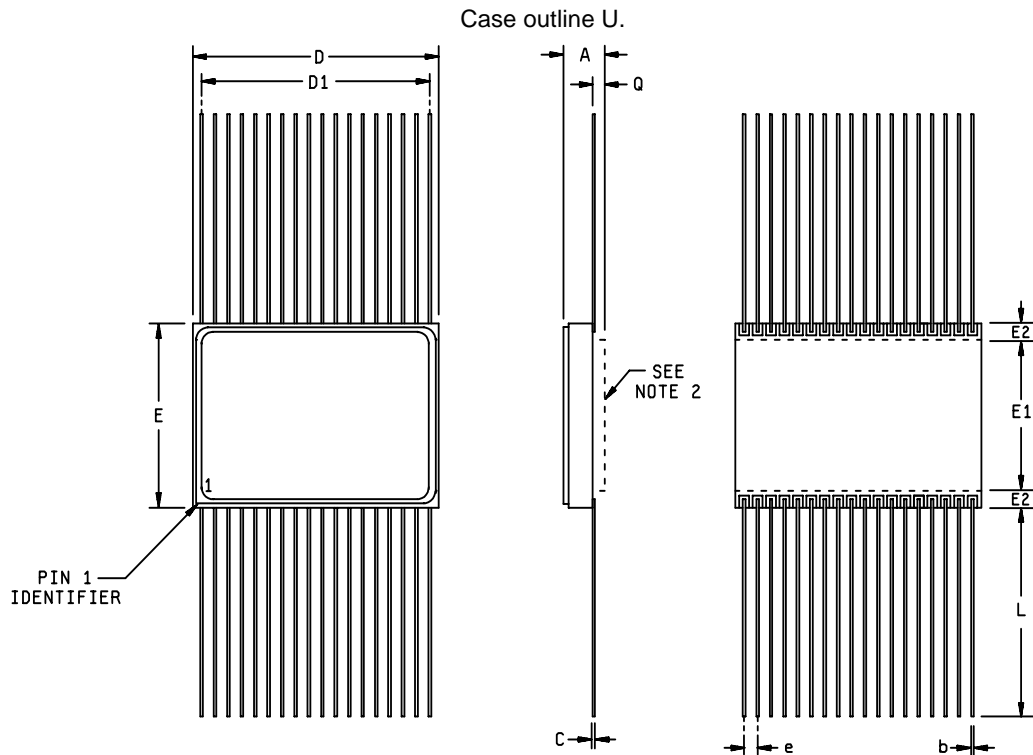
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.03	3.96	.080	.156
A1	1.02	1.60	.040	.063
b	0.38	0.51	.015	.020
C	0.15	0.30	.006	.012
D	20.70	21.34	.815	.840
D2	18.80	19.30	.740	.760
E	10.80	11.68	.425	.460
e	1.27 BSC		.050 BSC	
eA	9.30	10.41	.366	.410
R	0.89 TYP		.035 TYP	

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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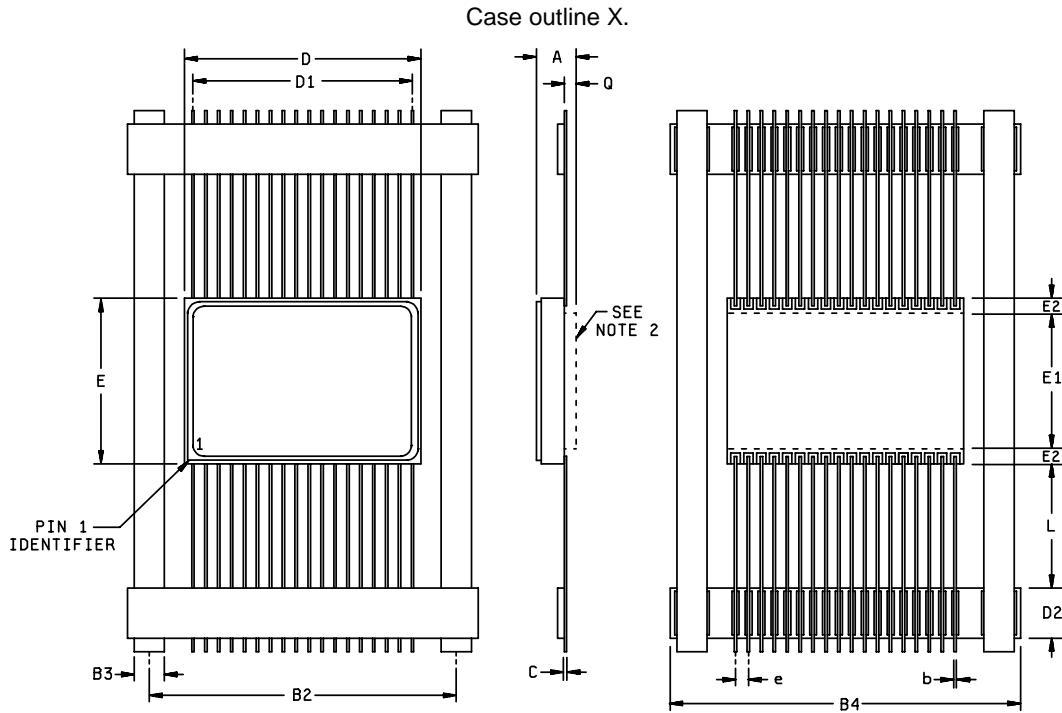
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.26	3.18	.089	.125
b	0.38	0.48	.015	.019
C	0.08	0.18	.003	.007
D	23.11	23.62	.910	.930
D1	21.34	21.84	.840	.860
E	12.83	13.08	.505	.515
E1	9.78	10.03	.385	.395
E2	1.40	1.65	.055	.065
e	1.27 BSC		.050 BSC	
L	7.62	8.89	.300	.350
Q	0.38	0.96	.015	.038

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. The case outline U is available in either a pedestal or non-pedestal package. The Q dimension only applies to the pedestal version of case outline U.
3. For solder lead finish, dimensions b and C will increase by +.003 inches (+0.08 mm).
4. Pin number are for reference only.

FIGURE 1. Case outline(s) - Continued.

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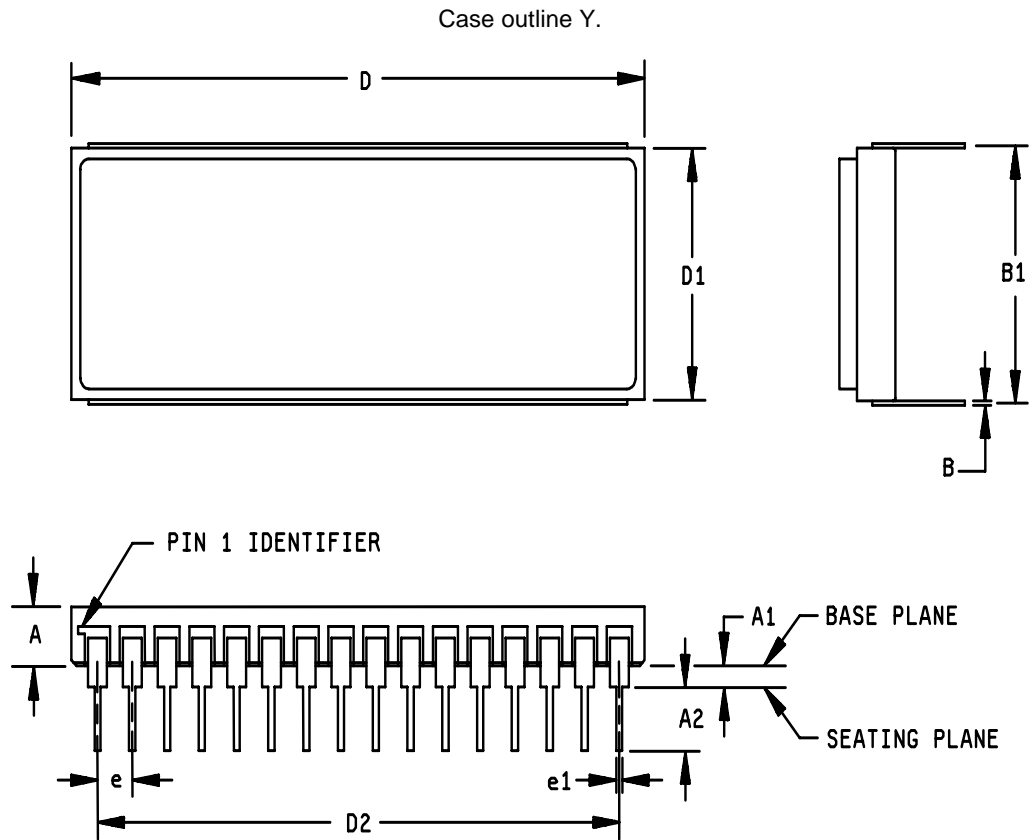
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.31	3.18	.091	.125
b	0.38	0.48	.015	.019
B2	32.64 TYP		1.285 TYP	
B3	3.81 TYP		.150 TYP	
B4	37.72	38.48	1.485	1.515
C	0.08	0.18	.003	.007
D	23.11	23.62	.910	.930
D1	21.46	21.72	.845	.855
D2	4.83	5.33	.190	.210
E	12.83	13.08	.505	.515
E1	9.78	10.03	.385	.395
E2	1.40	1.65	.055	.065
e	1.27 BSC		.050 BSC	
L	12.19	13.21	.480	.520
Q	0.38	0.64	.015	.025

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. The case outline X is available in either a pedestal or non-pedestal package. The Q dimension only applies to the pedestal version of case outline X.
3. For solder lead finish, dimensions b and C will increase by +.003 inches (+0.08 mm).
4. Pin number are for reference only.

FIGURE 1. Case outline(s) - Continued.

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Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.26	5.13	.089	.202
A1	0.48	1.52	.019	.060
A2	3.18		.125	
B	0.20	0.30	.008	.012
B1	14.99	15.49	.590	.610
D	40.23	42.82	1.584	1.686
D1	14.73	15.37	.580	.605
D2	37.90	38.30	1.492	1.508
e	2.41	2.67	.095	.105
e1	0.41	0.51	.016	.020

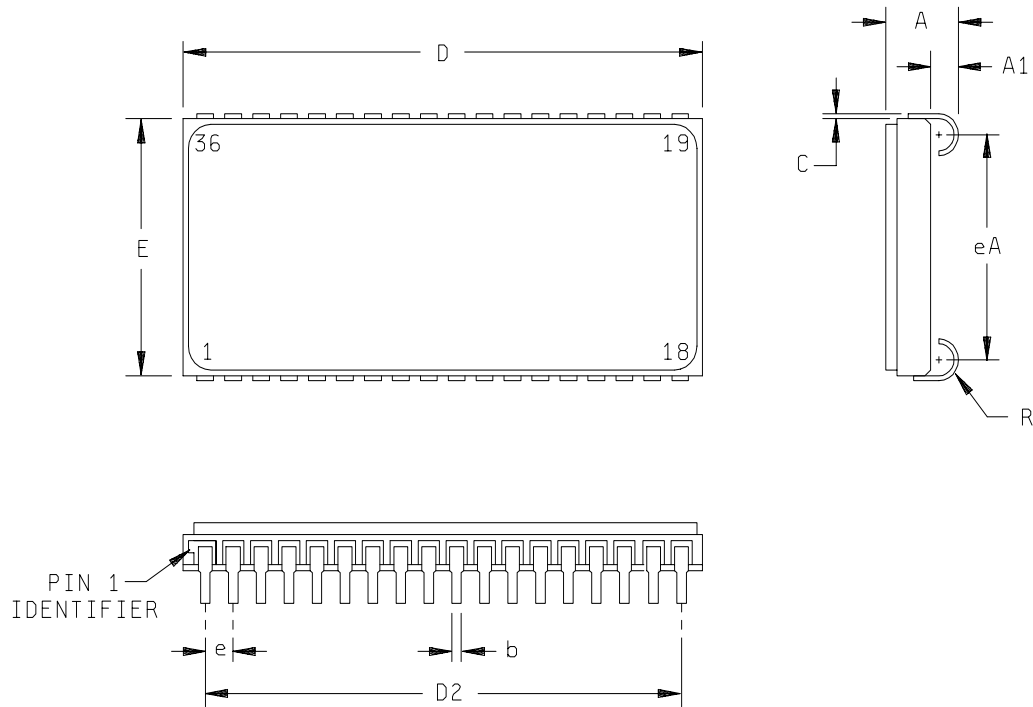
NOTES:

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. For solder lead finish, dimensions B and e1 will increase by +0.003" (+.008 mm).

Figure 1. Case outline(s) - Continued.

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Case outline Z.



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	3.54	4.67	.136	.184
A1	1.02	1.60	.040	.063
b	0.38	0.51	.015	.020
C	0.15	0.30	.006	.012
D	23.11	23.62	.910	.930
D2	21.46	21.84	.845	.860
E	10.80	11.05	.425	.435
e	1.27 BSC		0.050 BSC	
eA	9.30	9.80	.366	.386
R	0.89 TYP		.035 TYP	

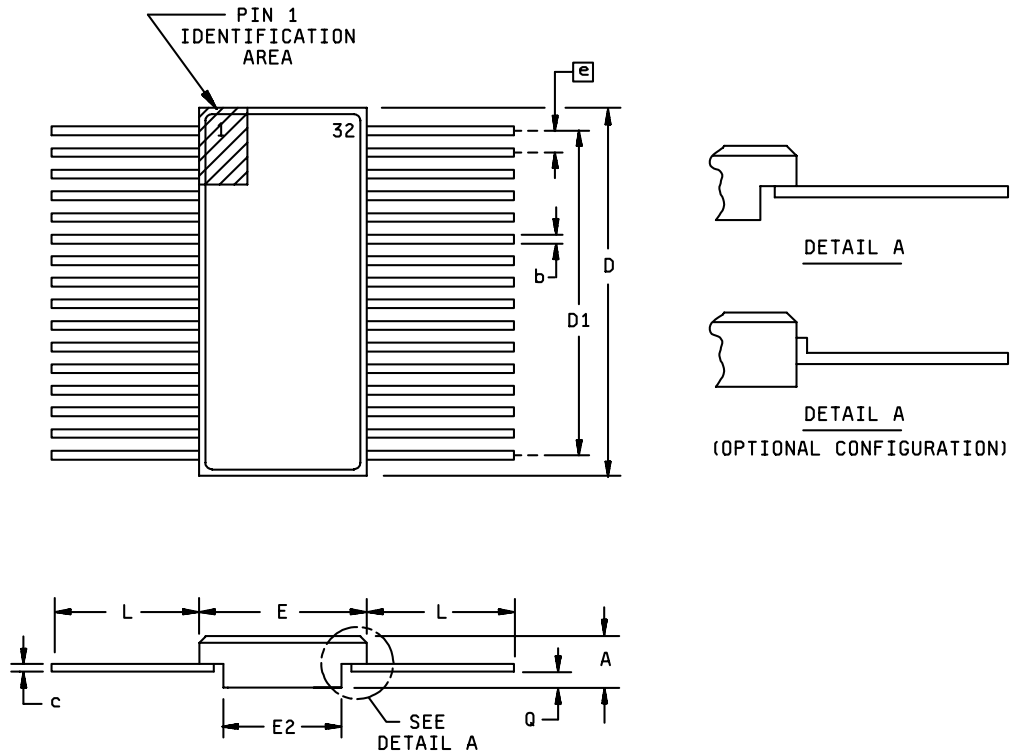
NOTES:

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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Case outline 9.



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.44	2.90	.096	.114
b	0.20	0.48	.008	.019
c	0.08	0.20	.003	.008
D	20.73	21.29	.816	.838
D1	18.85	19.25	.742	.758
E	10.64	11.68	.419	.460
E2	8.76	10.85	.345	.427
e	1.27 BSC		.050 BSC	
L	7.37	7.87	.290	.310
Q	0.61	0.97	.024	.038

NOTES:

1. The U.S. Government preferred system of measurement is the metric SI system. 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. Dimension E2 does not apply to optional configuration.

FIGURE 1. Case outline(s) - Continued.

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Device types	05-13 and 19-30 for case outlines M and 9. All for case outlines T and Y.		
Case outlines	M, T, Y, and 9	Case outlines	M, T, Y, and 9
Terminal number	Terminal symbol	Terminal number	Terminal symbol
1	A18	17	I/O3
2	A16	18	I/O4
3	A14	19	I/O5
4	A12	20	I/O6
5	A7	21	I/O7
6	A6	22	\overline{CS}
7	A5	23	A10
8	A4	24	\overline{OE}
9	A3	25	A11
10	A2	26	A9
11	A1	27	A8
12	A0	28	A13
13	I/O0	29	\overline{WE}
14	I/O1	30	A17
15	I/O2	31	A15
16	V _{SS}	32	V _{CC}

FIGURE 2. Terminal connections.

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Device types	05-13 and 19-30 for case outlines N, U, and Z. 05-10 and 19-24 for case outline X.		
Case outlines	N, U, X, and Z	Case outlines	N, U, X, and Z
Terminal number	Terminal symbol	Terminal number	Terminal symbol
1	A0	19	NC
2	A1	20	A10
3	A2	21	A11
4	A3	22	A12
5	A4	23	A13
6	\overline{CS}	24	A14
7	I/O0	25	I/O4
8	I/O1	26	I/O5
9	V _{cc}	27	V _{cc}
10	V _{ss}	28	V _{ss}
11	I/O2	29	I/O6
12	I/O3	30	I/O7
13	\overline{WE}	31	\overline{OE}
14	A5	32	A15
15	A6	33	A16
16	A7	34	A17
17	A8	35	A18
18	A9	36	NC

FIGURE 2. Terminal connections - Continued.

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$\overline{\text{CS}}$	$\overline{\text{OE}}$	$\overline{\text{WE}}$	Mode	Data I/O	Power
H	X	X	Standby	High Z	Standby
L	L	H	Read	Data out	Active
L	H	H	Output disable	High Z	Active
L	X	L	Write	Data in	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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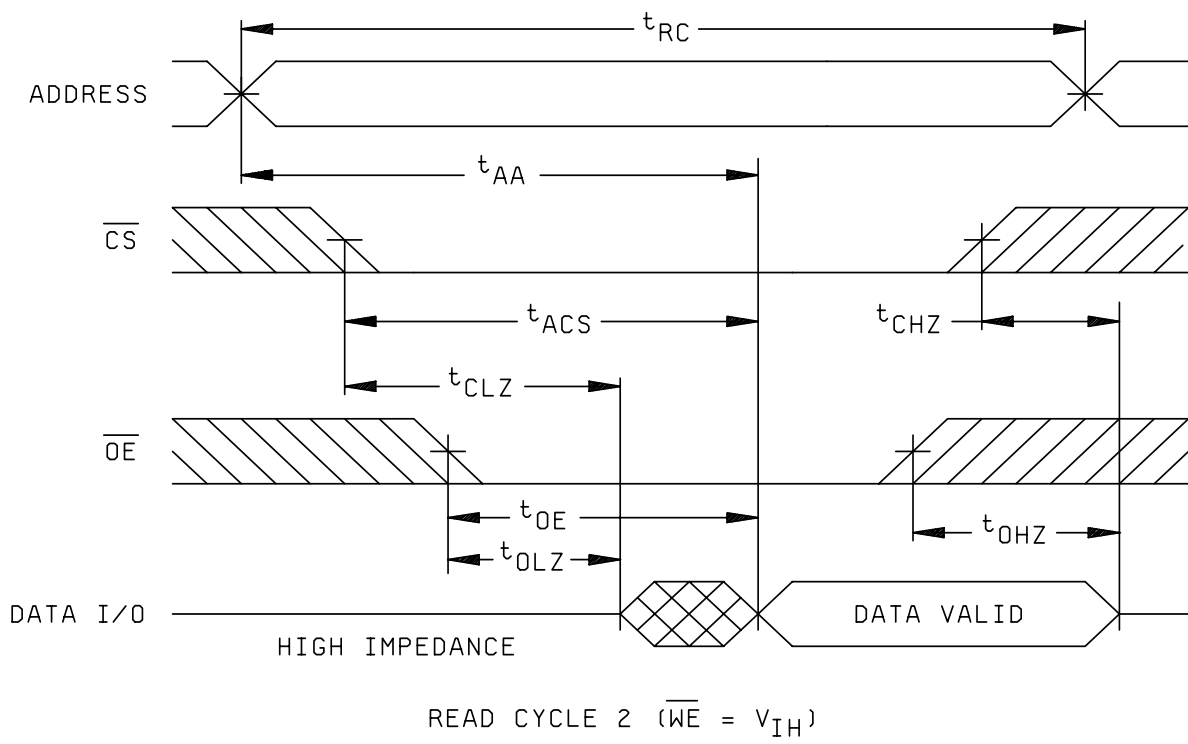
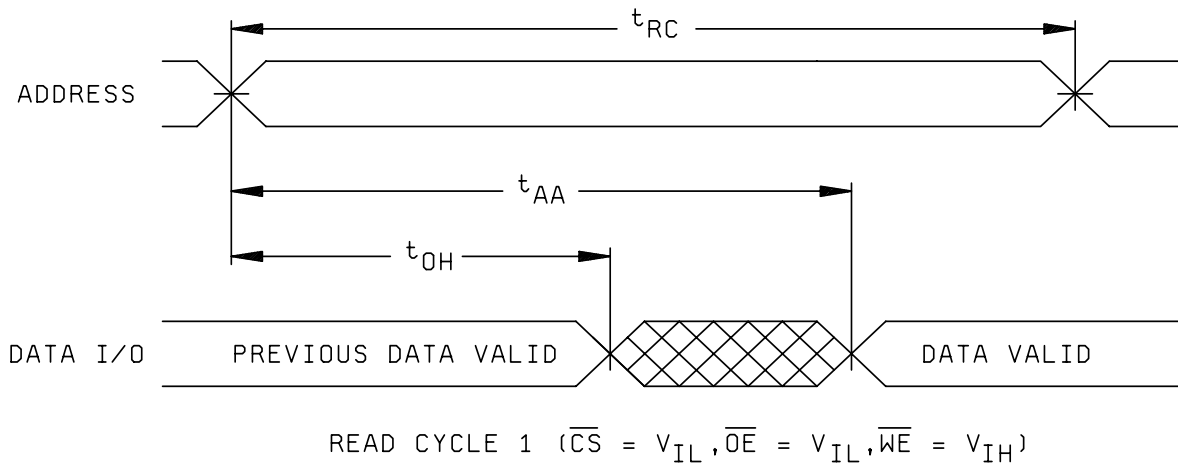
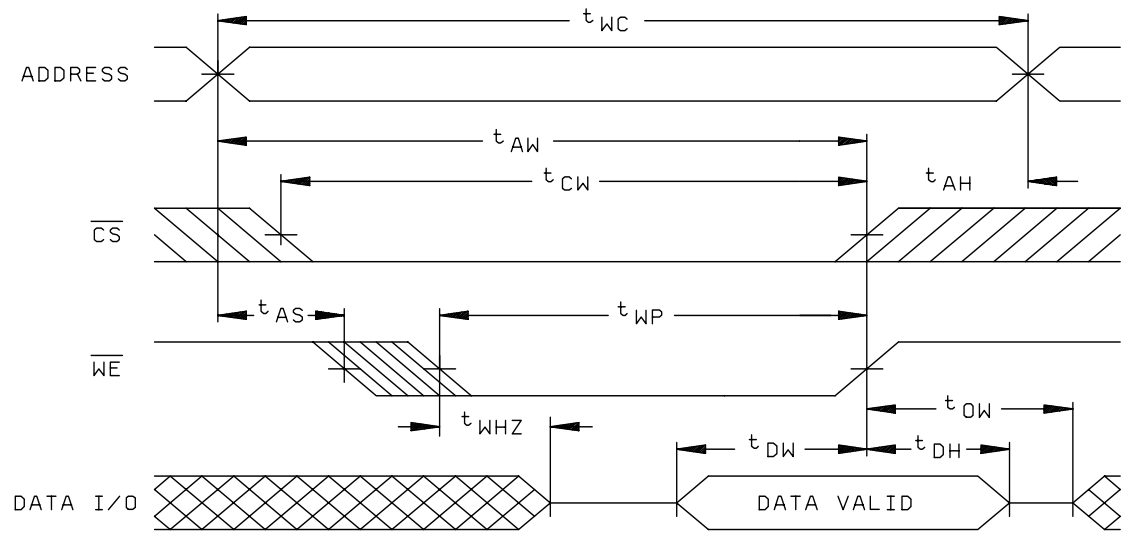
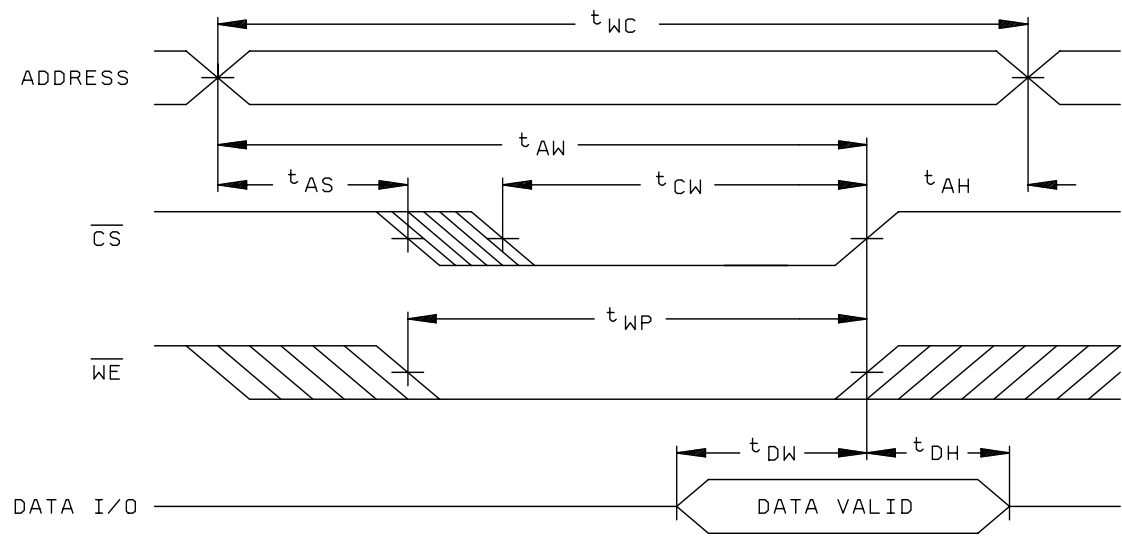


FIGURE 4. Read cycle timing diagram.

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WRITE CYCLE 1 \overline{WE} CONTROLLED



WRITE CYCLE 2 \overline{CS} CONTROLLED

FIGURE 5. Write cycle timing diagram.

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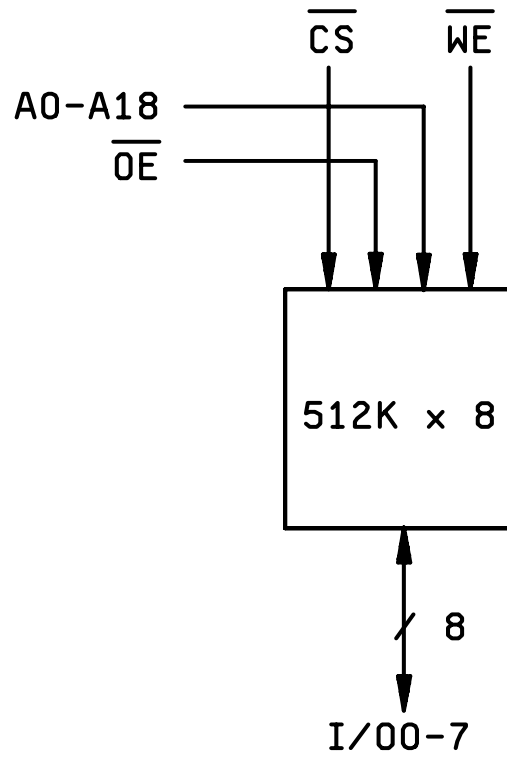
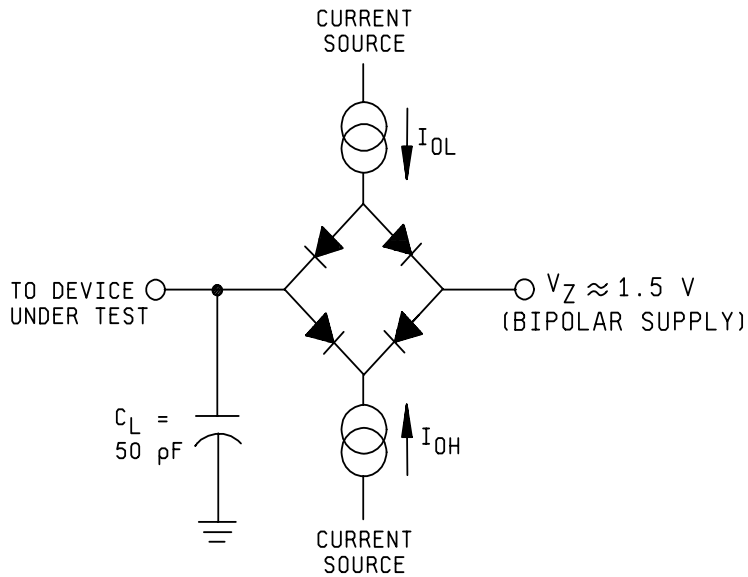


FIGURE 6. Block diagram.

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Parameter	Typical	Unit
Input pulse level	0 - 3.0	V
Input rise and fall	5	ns
Input and output reference level	1.5	V
Output load capacitance	50	pF

NOTES:

1. Use this output load circuit or equivalent for testing.
2. V_Z is programmable from -2 V to +7 V.
3. I_{OL} and I_{OH} are programmable from 0 to 16 mA.
4. Tester impedance is $Z_O = 75$ ohms.
5. V_Z is typically the midpoint of V_{OH} and V_{OL} .
6. I_{OL} and I_{OH} are adjusted to simulate a typical resistive load circuit.
7. ATE tester includes 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 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 subgroup 1.

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 and 8 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 or D. 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 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.

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 currently not applicable to this drawing.

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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 as specified in MIL-PRF-38534.

6.4 Record of users. Military and industrial users shall inform Defense Supply Center Columbus (DSCC) 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 43218-5000, or telephone (614) 692-1081.

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 BULLETIN

DATE: 04-05-28

Approved sources of supply for SMD 5962-95613 are listed below for immediate acquisition only and shall be added to MIL-HDBK-103 and QML-38534 during the next revision. MIL-HDBK-103 and 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 information bulletin is superseded by the next dated revision of MIL-HDBK-103 and QML-38534.

Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561301HYA 5962-9561301HYC 5962-9561301HTA 5962-9561301HTC 5962-9561301HYA 5962-9561301HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-120/H AS5C4009CW-120/H WMS512K8-120DE WMS512K8-120DE WMS512K8-120C WMS512K8-120C
5962-9561302HYA 5962-9561302HYC 5962-9561302HTA 5962-9561302HTC 5962-9561302HYA 5962-9561302HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-100/H AS5C4009CW-100/H WMS512K8-100DE WMS512K8-100DE WMS512K8-100C WMS512K8-100C
5962-9561303HYA 5962-9561303HYC 5962-9561303HTA 5962-9561303HTC 5962-9561303HYA 5962-9561303HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-85/H AS5C4009CW-85/H WMS512K8-85DE WMS512K8-85DE WMS512K8-85C WMS512K8-85C
5962-9561304HYA 5962-9561304HYC 5962-9561304HTA 5962-9561304HTC 5962-9561304HYA 5962-9561304HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-70/H AS5C4009CW-70/H WMS512K8-70DE WMS512K8-70DE WMS512K8-70C WMS512K8-70C

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

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Standard microcircuit drawing PIN <u>1</u> / <u>2</u> /	Vendor CAGE number	Vendor similar PIN <u>3</u> /
5962-9561305HMA	0EU86	AS5C4008EC-55/H
5962-9561305HMC	0EU86	AS5C4008EC-55/H
5962-9561305HNA	0EU86	AS5C512K8EC-55/H
5962-9561305HNC	0EU86	AS5C512K8EC-55/H
5962-9561305HTA	0EU86	AS5C4008ECJ-55/H
5962-9561305HTC	0EU86	AS5C4008ECJ-55/H
5962-9561305HTA	54230	WMS512K8-55DE
5962-9561305HTC	54230	WMS512K8-55DE
5962-9561305HUA	0EU86	AS5C512K8F-55/H
5962-9561305HUC	0EU86	AS5C512K8F-55/H
5962-9561305HUA	88379	ACT-S512K8N-055F3Q
5962-9561305HUC	88379	ACT-S512K8N-055F3Q
5962-9561305HUA	54230	WMS512K8-55FT
5962-9561305HUC	54230	WMS512K8-55FT
5962-9561305HXC	54230	WMS512K8-55F
5962-9561305HYA	0EU86	AS5C4008CW-55/H
5962-9561305HYC	0EU86	AS5C4008CW-55/H
5962-9561305HYA	54230	WMS512K8-55C
5962-9561305HYC	54230	WMS512K8-55C
5962-9561305HYA	88379	ACT-S512K8N-055P4Q
5962-9561305HYC	88379	ACT-S512K8N-055P4Q
5962-9561305HZA	0EU86	AS5C512K8ECJ-55/H
5962-9561305HZC	0EU86	AS5C512K8ECJ-55/H
5962-9561305HZA	54230	WMS512K8-55DJ
5962-9561305HZC	54230	WMS512K8-55DJ
5962-9561305HZA	88379	ACT-S512K8N-055F4Q
5962-9561305HZC	88379	ACT-S512K8N-055F4Q
5962-9561305H9A	0EU86	AS5C4008F-55/H
5962-9561305H9C	0EU86	AS5C4008F-55/H
5962-9561306HMA	0EU86	AS5C4008EC-45/H
5962-9561306HMC	0EU86	AS5C4008EC-45/H
5962-9561306HNA	0EU86	AS5C512K8EC-45/H
5962-9561306HNC	0EU86	AS5C512K8EC-45/H
5962-9561306HTA	0EU86	AS5C4008ECJ-45/H
5962-9561306HTC	0EU86	AS5C4008ECJ-45/H
5962-9561306HTA	54230	WMS512K8-45DE
5962-9561306HTC	54230	WMS512K8-45DE
5962-9561306HUA	0EU86	AS5C512K8F-45/H
5962-9561306HUC	0EU86	AS5C512K8F-45/H
5962-9561306HUA	88379	ACT-S512K8N-045F3Q
5962-9561306HUC	88379	ACT-S512K8N-045F3Q
5962-9561306HUA	54230	WMS512K8-45FT
5962-9561306HUC	54230	WMS512K8-45FT
5962-9561306HXC	54230	WMS512K8-45F
5962-9561306HYA	0EU86	AS5C4008CW-45/H
5962-9561306HYC	0EU86	AS5C4008CW-45/H
5962-9561306HYA	54230	WMS512K8-45C
5962-9561306HYC	54230	WMS512K8-45C
5962-9561306HYA	88379	ACT-S512K8N-045P4Q
5962-9561306HYC	88379	ACT-S512K8N-045P4Q
5962-9561306HZA	0EU86	AS5C512K8ECJ-45/H
5962-9561306HZC	0EU86	AS5C512K8ECJ-45/H
5962-9561306HZA	54230	WMS512K8-45DJ
5962-9561306HZC	54230	WMS512K8-45DJ
5962-9561306HZA	88379	ACT-S512K8N-045F4Q
5962-9561306HZC	88379	ACT-S512K8N-045F4Q
5962-9561306H9A	0EU86	AS5C4008F-45/H
5962-9561306H9C	0EU86	AS5C4008F-45/H

See footnotes at end of table.

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Standard microcircuit drawing PIN <u>1</u> / <u>2</u> /	Vendor CAGE number	Vendor similar PIN <u>3</u> /
5962-9561307HMA	0EU86	AS5C4008EC-35/H
5962-9561307HMC	0EU86	AS5C4008EC-35/H
5962-9561307HNA	0EU86	AS5C512K8EC-35/H
5962-9561307HNC	0EU86	AS5C512K8EC-35/H
5962-9561307HTA	0EU86	AS5C4008ECJ-35/H
5962-9561307HTC	0EU86	AS5C4008ECJ-35/H
5962-9561307HTA	54230	WMS512K8-35DE
5962-9561307HTC	54230	WMS512K8-35DE
5962-9561307HUA	0EU86	AS5C512K8F-35/H
5962-9561307HUC	0EU86	AS5C512K8F-35/H
5962-9561307HUA	88379	ACT-S512K8N-035F3Q
5962-9561307HUC	88379	ACT-S512K8N-035F3Q
5962-9561307HUA	54230	WMS512K8-35FT
5962-9561307HUC	54230	WMS512K8-35FT
5962-9561307HXC	54230	WMS512K8-35F
5962-9561307HYA	0EU86	AS5C4008CW-35/H
5962-9561307HYC	0EU86	AS5C4008CW-35/H
5962-9561307HYA	54230	WMS512K8-35C
5962-9561307HYC	54230	WMS512K8-35C
5962-9561307HYA	88379	ACT-S512K8N-035P4Q
5962-9561307HYC	88379	ACT-S512K8N-035P4Q
5962-9561307HZA	0EU86	AS5C512K8ECJ-35/H
5962-9561307HZC	0EU86	AS5C512K8ECJ-35/H
5962-9561307HZA	54230	WMS512K8-35DJ
5962-9561307HZC	54230	WMS512K8-35DJ
5962-9561307HZA	88379	ACT-S512K8N-035F4Q
5962-9561307HZC	88379	ACT-S512K8N-035F4Q
5962-9561307H9A	0EU86	AS5C4008F-35/H
5962-9561307H9C	0EU86	AS5C4008F-35/H
5962-9561308HMA	0EU86	AS5C4008EC-25/H
5962-9561308HMC	0EU86	AS5C4008EC-25/H
5962-9561308HNA	0EU86	AS5C512K8EC-25/H
5962-9561308HNC	0EU86	AS5C512K8EC-25/H
5962-9561308HTA	0EU86	AS5C4008ECJ-25/H
5962-9561308HTC	0EU86	AS5C4008ECJ-25/H
5962-9561308HTA	54230	WMS512K8-25DE
5962-9561308HTC	54230	WMS512K8-25DE
5962-9561308HUA	0EU86	AS5C512K8F-25/H
5962-9561308HUC	0EU86	AS5C512K8F-25/H
5962-9561308HUA	88379	ACT-S512K8N-025F3Q
5962-9561308HUC	88379	ACT-S512K8N-025F3Q
5962-9561308HUA	54230	WMS512K8-25FT
5962-9561308HUC	54230	WMS512K8-25FT
5962-9561308HXC	54230	WMS512K8-25F
5962-9561308HYA	0EU86	AS5C4008CW-25/H
5962-9561308HYC	0EU86	AS5C4008CW-25/H
5962-9561308HYA	54230	WMS512K8-25C
5962-9561308HYC	54230	WMS512K8-25C
5962-9561308HYA	88379	ACT-S512K8N-025P4Q
5962-9561308HYC	88379	ACT-S512K8N-025P4Q
5962-9561308HZA	0EU86	AS5C512K8ECJ-25/H
5962-9561308HZC	0EU86	AS5C512K8ECJ-25/H
5962-9561308HZA	54230	WMS512K8-25DJ
5962-9561308HZC	54230	WMS512K8-25DJ
5962-9561308HZA	88379	ACT-S512K8N-025F4Q
5962-9561308HZC	88379	ACT-S512K8N-025F4Q
5962-9561308H9A	0EU86	AS5C4008F-25/H
5962-9561308H9C	0EU86	AS5C4008F-25/H

See footnotes at end of table.

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Standard microcircuit drawing PIN <u>1</u> / <u>2</u> /	Vendor CAGE number	Vendor similar PIN <u>3</u> /
5962-9561309HMA	0EU86	AS5C4008EC-20/H
5962-9561309HMC	0EU86	AS5C4008EC-20/H
5962-9561309HNA	0EU86	AS5C512K8EC-20/H
5962-9561309HNC	0EU86	AS5C512K8EC-20/H
5962-9561309HTA	0EU86	AS5C4008ECJ-20/H
5962-9561309HTC	0EU86	AS5C4008ECJ-20/H
5962-9561309HTA	54230	WMS512K8-20DE
5962-9561309HTC	54230	WMS512K8-20DE
5962-9561309HUA	0EU86	AS5C512K8F-20/H
5962-9561309HUC	0EU86	AS5C512K8F-20/H
5962-9561309HUA	88379	ACT-S512K8N-020F3Q
5962-9561309HUC	88379	ACT-S512K8N-020F3Q
5962-9561309HUA	54230	WMS512K8-20FT
5962-9561309HUC	54230	WMS512K8-20FT
5962-9561309HXC	54230	WMS512K8-20F
5962-9561309HYA	0EU86	AS5C4008CW-20/H
5962-9561309HYC	0EU86	AS5C4008CW-20/H
5962-9561309HYA	54230	WMS512K8-20C
5962-9561309HYC	54230	WMS512K8-20C
5962-9561309HYA	88379	ACT-S512K8N-020P4Q
5962-9561309HYC	88379	ACT-S512K8N-020P4Q
5962-9561309HZA	0EU86	AS5C512K8ECJ-20/H
5962-9561309HZC	0EU86	AS5C512K8ECJ-20/H
5962-9561309HZA	54230	WMS512K8-20DJ
5962-9561309HZC	54230	WMS512K8-20DJ
5962-9561309HZA	88379	ACT-S512K8N-020F4Q
5962-9561309HZC	88379	ACT-S512K8N-020F4Q
5962-9561309H9A	0EU86	AS5C4008F-20/H
5962-9561309H9C	0EU86	AS5C4008F-20/H
5962-9561310HMA	0EU86	AS5C4008EC-17/H
5962-9561310HMC	0EU86	AS5C4008EC-17/H
5962-9561310HNA	0EU86	AS5C512K8EC-17/H
5962-9561310HNC	0EU86	AS5C512K8EC-17/H
5962-9561310HTA	0EU86	AS5C4008ECJ-17/H
5962-9561310HTC	0EU86	AS5C4008ECJ-17/H
5962-9561310HTA	54230	WMS512K8-17DE
5962-9561310HTC	54230	WMS512K8-17DE
5962-9561310HUA	0EU86	AS5C512K8F-17/H
5962-9561310HUC	0EU86	AS5C512K8F-17/H
5962-9561310HUA	88379	ACT-S512K8N-017F3Q
5962-9561310HUC	88379	ACT-S512K8N-017F3Q
5962-9561310HUA	54230	WMS512K8-17FT
5962-9561310HUC	54230	WMS512K8-17FT
5962-9561310HXC	54230	WMS512K8-17F
5962-9561310HYA	0EU86	AS5C4008CW-17/H
5962-9561310HYC	0EU86	AS5C4008CW-17/H
5962-9561310HYA	54230	WMS512K8-17C
5962-9561310HYC	54230	WMS512K8-17C
5962-9561310HYA	88379	ACT-S512K8N-017P4Q
5962-9561310HYC	88379	ACT-S512K8N-017P4Q
5962-9561310HZA	0EU86	AS5C512K8ECJ-17/H
5962-9561310HZC	0EU86	AS5C512K8ECJ-17/H
5962-9561310HZA	54230	WMS512K8-17DJ
5962-9561310HZC	54230	WMS512K8-17DJ
5962-9561310HZA	88379	ACT-S512K8N-017F4Q
5962-9561310HZC	88379	ACT-S512K8N-017F4Q
5962-9561310H9A	0EU86	AS5C4008F-17/H
5962-9561310H9C	0EU86	AS5C4008F-17/H

See footnotes at end of table.

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Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561311HMA	0EU86	AS5C4008EC-45/H
5962-9561311HMC	0EU86	AS5C4008EC-45/H
5962-9561311HNA	0EU86	AS5C512K8EC-45/H
5962-9561311HNC	0EU86	AS5C512K8EC-45/H
5962-9561311HTA	0EU86	AS5C4008ECJ-45/H
5962-9561311HTC	0EU86	AS5C4008ECJ-45/H
5962-9561311HTA	54230	WMS512K8M-45DE
5962-9561311HTC	54230	WMS512K8M-45DE
5962-9561311HUA	0EU86	AS5C512K8F-45/H
5962-9561311HUC	0EU86	AS5C512K8F-45/H
5962-9561311HYA	0EU86	AS5C4008CW-45/H
5962-9561311HYC	0EU86	AS5C4008CW-45/H
5962-9561311HYA	54230	WMS512K8M-45C
5962-9561311HYC	54230	WMS512K8M-45C
5962-9561311HYA	88379	ACT-S512K8M-045P4Q
5962-9561311HYC	88379	ACT-S512K8M-045P4Q
5962-9561311HZA	0EU86	AS5C512K8ECJ-45/H
5962-9561311HZC	0EU86	AS5C512K8ECJ-45/H
5962-9561311H9A	0EU86	AS5C4008F-45/H
5962-9561311H9C	0EU86	AS5C4008F-45/H
5962-9561312HMA	0EU86	AS5C4008EC-35/H
5962-9561312HMC	0EU86	AS5C4008EC-35/H
5962-9561312HNA	0EU86	AS5C512K8EC-35/H
5962-9561312HNC	0EU86	AS5C512K8EC-35/H
5962-9561312HTA	0EU86	AS5C4008ECJ-35/H
5962-9561312HTC	0EU86	AS5C4008ECJ-35/H
5962-9561312HTA	54230	WMS512K8M-35DE
5962-9561312HTC	54230	WMS512K8M-35DE
5962-9561312HUA	0EU86	AS5C512K8F-35/H
5962-9561312HUC	0EU86	AS5C512K8F-35/H
5962-9561312HYA	0EU86	AS5C4008CW-35/H
5962-9561312HYC	0EU86	AS5C4008CW-35/H
5962-9561312HYA	54230	WMS512K8M-35C
5962-9561312HYC	54230	WMS512K8M-35C
5962-9561312HYA	88379	ACT-S512K8M-035P4Q
5962-9561312HYC	88379	ACT-S512K8M-035P4Q
5962-9561312HZA	0EU86	AS5C512K8ECJ-35/H
5962-9561312HZC	0EU86	AS5C512K8ECJ-35/H
5962-9561312H9A	0EU86	AS5C4008F-35/H
5962-9561312H9C	0EU86	AS5C4008F-35/H

See footnotes at end of table.

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Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561313HMA 5962-9561313HMC 5962-9561313HNA 5962-9561313HNC 5962-9561313HTA 5962-9561313HTC 5962-9561313HTA 5962-9561313HTC 5962-9561313HUA 5962-9561313HUC 5962-9561313HYA 5962-9561313HYC 5962-9561313HYA 5962-9561313HYC 5962-9561313HYA 5962-9561313HYC 5962-9561313HZA 5962-9561313HZC 5962-9561313H9A 5962-9561313H9C	0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 54230 54230 0EU86 0EU86 0EU86 0EU86 54230 54230 88379 88379 0EU86 0EU86 0EU86 0EU86	AS5C4008EC-25/H AS5C4008EC-25/H AS5C512K8EC-25/H AS5C512K8EC-25/H AS5C4008ECJ-25/H AS5C4008ECJ-25/H WMS512K8M-25DE WMS512K8M-25DE AS5C512K8F-25/H AS5C512K8F-25/H AS5C4008CW-25/H AS5C4008CW-25/H WMS512K8M-25C WMS512K8M-25C ACT-S512K8M-025P4Q ACT-S512K8M-025P4Q AS5C512K8ECJ-25/H AS5C512K8ECJ-25/H AS5C4008F-25/H AS5C4008F-25/H
5962-9561314HTA 5962-9561314HTC 5962-9561314HYA 5962-9561314HYC	54230 54230 54230 54230	WMS512K8-15DE WMS512K8-15DE WMS512K8-15C WMS512K8-15C
5962-9561315HYA 5962-9561315HYC 5962-9561315HTA 5962-9561315HTC 5962-9561315HYA 5962-9561315HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-120L/H AS5C4009CW-120L/H WMS512K8L-120DE WMS512K8L-120DE WMS512K8L-120C WMS512K8L-120C
5962-9561316HYA 5962-9561316HYC 5962-9561316HTA 5962-9561316HTC 5962-9561316HYA 5962-9561316HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-100L/H AS5C4009CW-100L/H WMS512K8L-100DE WMS512K8L-100DE WMS512K8L-100C WMS512K8L-100C
5962-9561317HYA 5962-9561317HYC 5962-9561317HTA 5962-9561317HTC 5962-9561317HYA 5962-9561317HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-85L/H AS5C4009CW-85L/H WMS512K8L-85DE WMS512K8L-85DE WMS512K8L-85C WMS512K8L-85C
5962-9561318HYA 5962-9561318HYC 5962-9561318HTA 5962-9561318HTC 5962-9561318HYA 5962-9561318HYC	0EU86 0EU86 54230 54230 54230 54230	AS5C4009CW-70L/H AS5C4009CW-70L/H WMS512K8L-70DE WMS512K8L-70DE WMS512K8L-70C WMS512K8L-70C

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

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Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561319HMA	0EU86	AS5C4008EC-55L/H
5962-9561319HMC	0EU86	AS5C4008EC-55L/H
5962-9561319HNA	0EU86	AS5C512K8EC-55L/H
5962-9561319HNC	0EU86	AS5C512K8EC-55L/H
5962-9561319HTA	0EU86	AS5C4008ECJ-55L/H
5962-9561319HTC	0EU86	AS5C4008ECJ-55L/H
5962-9561319HTA	54230	WMS512K8L-55DE
5962-9561319HTC	54230	WMS512K8L-55DE
5962-9561319HUA	0EU86	AS5C512K8F-55L/H
5962-9561319HUC	0EU86	AS5C512K8F-55L/H
5962-9561319HUA	54230	WMS512K8L-55FT
5962-9561319HUC	54230	WMS512K8L-55FT
5962-9561319HXC	54230	WMS512K8L-55F
5962-9561319HYA	0EU86	AS5C4008CW-55L/H
5962-9561319HYC	0EU86	AS5C4008CW-55L/H
5962-9561319HYA	54230	WMS512K8L-55C
5962-9561319HYC	54230	WMS512K8L-55C
5962-9561319HZA	0EU86	AS5C512K8ECJ-55L/H
5962-9561319HZA	0EU86	AS5C512K8ECJ-55L/H
5962-9561319HZA	54230	WMS512K8L-55DJ
5962-9561319HZA	54230	WMS512K8L-55DJ
5962-9561319H9A	0EU86	AS5C4008F-55L/H
5962-9561319H9C	0EU86	AS5C4008F-55L/H
5962-9561320HMA	0EU86	AS5C4008EC-45L/H
5962-9561320HMC	0EU86	AS5C4008EC-45L/H
5962-9561320HNA	0EU86	AS5C512K8EC-45L/H
5962-9561320HNC	0EU86	AS5C512K8EC-45L/H
5962-9561320HTA	0EU86	AS5C4008ECJ-45L/H
5962-9561320HTC	0EU86	AS5C4008ECJ-45L/H
5962-9561320HTA	54230	WMS512K8L-45DE
5962-9561320HTC	54230	WMS512K8L-45DE
5962-9561320HUA	0EU86	AS5C512K8F-45L/H
5962-9561320HUC	0EU86	AS5C512K8F-45L/H
5962-9561320HUA	54230	WMS512K8L-45FT
5962-9561320HUC	54230	WMS512K8L-45FT
5962-9561320HXC	54230	WMS512K8L-45F
5962-9561320HYA	0EU86	AS5C4008CW-45L/H
5962-9561320HYC	0EU86	AS5C4008CW-45L/H
5962-9561320HYA	54230	WMS512K8L-45C
5962-9561320HYC	54230	WMS512K8L-45C
5962-9561320HZA	0EU86	AS5C512K8ECJ-45L/H
5962-9561320HZA	0EU86	AS5C512K8ECJ-45L/H
5962-9561320HZA	54230	WMS512K8L-45DJ
5962-9561320HZA	54230	WMS512K8L-45DJ
5962-9561320H9A	0EU86	AS5C4008F-45L/H
5962-9561320H9C	0EU86	AS5C4008F-45L/H

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

DATE: 04-05-28

Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561321HMA	0EU86	AS5C4008EC-35L/H
5962-9561321HMC	0EU86	AS5C4008EC-35L/H
5962-9561321HNA	0EU86	AS5C512K8EC-35L/H
5962-9561321HNC	0EU86	AS5C512K8EC-35L/H
5962-9561321HTA	0EU86	AS5C4008ECJ-35L/H
5962-9561321HTC	0EU86	AS5C4008ECJ-35L/H
5962-9561321HTA	54230	WMS512K8L-35DE
5962-9561321HTC	54230	WMS512K8L-35DE
5962-9561321HUA	0EU86	AS5C512K8F-35L/H
5962-9561321HUC	0EU86	AS5C512K8F-35L/H
5962-9561321HUA	54230	WMS512K8L-35FT
5962-9561321HUC	54230	WMS512K8L-35FT
5962-9561321HXC	54230	WMS512K8L-35F
5962-9561321HYA	0EU86	AS5C4008CW-35L/H
5962-9561321HYC	0EU86	AS5C4008CW-35L/H
5962-9561321HYA	54230	WMS512K8L-35C
5962-9561321HYC	54230	WMS512K8L-35C
5962-9561321HZA	0EU86	AS5C512K8ECJ-35L/H
5962-9561321HZA	0EU86	AS5C512K8ECJ-35L/H
5962-9561321HZA	54230	WMS512K8L-35DJ
5962-9561321HZA	54230	WMS512K8L-35DJ
5962-9561321H9A	0EU86	AS5C4008F-35L/H
5962-9561321H9C	0EU86	AS5C4008F-35L/H
5962-9561322HMA	0EU86	AS5C4008EC-25L/H
5962-9561322HMC	0EU86	AS5C4008EC-25L/H
5962-9561322HNA	0EU86	AS5C512K8EC-25L/H
5962-9561322HNC	0EU86	AS5C512K8EC-25L/H
5962-9561322HTA	0EU86	AS5C4008ECJ-25L/H
5962-9561322HTC	0EU86	AS5C4008ECJ-25L/H
5962-9561322HTA	54230	WMS512K8L-25DE
5962-9561322HTC	54230	WMS512K8L-25DE
5962-9561322HUA	0EU86	AS5C512K8F-25L/H
5962-9561322HUC	0EU86	AS5C512K8F-25L/H
5962-9561322HUA	54230	WMS512K8L-25FT
5962-9561322HUC	54230	WMS512K8L-25FT
5962-9561322HXC	54230	WMS512K8L-25F
5962-9561322HYA	0EU86	AS5C4008CW-25L/H
5962-9561322HYC	0EU86	AS5C4008CW-25L/H
5962-9561322HYA	54230	WMS512K8L-25C
5962-9561322HYC	54230	WMS512K8L-25C
5962-9561322HZA	0EU86	AS5C512K8ECJ-25L/H
5962-9561322HZA	0EU86	AS5C512K8ECJ-25L/H
5962-9561322HZA	54230	WMS512K8L-25DJ
5962-9561322HZA	54230	WMS512K8L-25DJ
5962-9561322H9A	0EU86	AS5C4008F-25L/H
5962-9561322H9C	0EU86	AS5C4008F-25L/H

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

DATE: 04-05-28

Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561323HMA	0EU86	AS5C4008EC-20L/H
5962-9561323HMC	0EU86	AS5C4008EC-20L/H
5962-9561323HNA	0EU86	AS5C512K8EC-20L/H
5962-9561323HNC	0EU86	AS5C512K8EC-20L/H
5962-9561323HTA	0EU86	AS5C4008ECJ-20L/H
5962-9561323HTC	0EU86	AS5C4008ECJ-20L/H
5962-9561323HTA	54230	WMS512K8L-20DE
5962-9561323HTC	54230	WMS512K8L-20DE
5962-9561323HUA	0EU86	AS5C512K8F-20L/H
5962-9561323HUC	0EU86	AS5C512K8F-20L/H
5962-9561323HUA	54230	WMS512K8L-20FT
5962-9561323HUC	54230	WMS512K8L-20FT
5962-9561323HXC	54230	WMS512K8L-20F
5962-9561323HYA	0EU86	AS5C4008CW-20L/H
5962-9561323HYC	0EU86	AS5C4008CW-20L/H
5962-9561323HYA	54230	WMS512K8L-20C
5962-9561323HYC	54230	WMS512K8L-20C
5962-9561323HZA	0EU86	AS5C512K8ECJ-20L/H
5962-9561323HZA	0EU86	AS5C512K8ECJ-20L/H
5962-9561323HZA	54230	WMS512K8L-20DJ
5962-9561323HZA	54230	WMS512K8L-20DJ
5962-9561323H9A	0EU86	AS5C4008F-20L/H
5962-9561323H9C	0EU86	AS5C4008F-20L/H
5962-9561324HMA	0EU86	AS5C4008EC-17L/H
5962-9561324HMC	0EU86	AS5C4008EC-17L/H
5962-9561324HNA	0EU86	AS5C512K8EC-17L/H
5962-9561324HNC	0EU86	AS5C512K8EC-17L/H
5962-9561324HTA	0EU86	AS5C4008ECJ-17L/H
5962-9561324HTC	0EU86	AS5C4008ECJ-17L/H
5962-9561324HTA	54230	WMS512K8L-17DE
5962-9561324HTC	54230	WMS512K8L-17DE
5962-9561324HUA	0EU86	AS5C512K8F-17L/H
5962-9561324HUC	0EU86	AS5C512K8F-17L/H
5962-9561324HUA	54230	WMS512K8L-17FT
5962-9561324HUC	54230	WMS512K8L-17FT
5962-9561324HXC	54230	WMS512K8L-17F
5962-9561324HYA	0EU86	AS5C4008CW-17L/H
5962-9561324HYC	0EU86	AS5C4008CW-17L/H
5962-9561324HYA	54230	WMS512K8L-17C
5962-9561324HYC	54230	WMS512K8L-17C
5962-9561324HZA	0EU86	AS5C512K8ECJ-17L/H
5962-9561324HZA	0EU86	AS5C512K8ECJ-17L/H
5962-9561324HZA	54230	WMS512K8L-17DJ
5962-9561324HZA	54230	WMS512K8L-17DJ
5962-9561324H9A	0EU86	AS5C4008F-17L/H
5962-9561324H9C	0EU86	AS5C4008F-17L/H

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

DATE: 04-05-28

Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561325HMA 5962-9561325HMC 5962-9561325HNA 5962-9561325HNC 5962-9561325HTA 5962-9561325HTC 5962-9561325HUA 5962-9561325HUC 5962-9561325HYA 5962-9561325HYC 5962-9561325HZA 5962-9561325HZC 5962-9561325H9A 5962-9561325H9C	0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86	AS5C4008EC-45L/H AS5C4008EC-45L/H AS5C512K8EC-45L/H AS5C512K8EC-45L/H AS5C4008ECJ-45L/H AS5C4008ECJ-45L/H AS5C512K8F-45L/H AS5C512K8F-45L/H AS5C4008CW-45L/H AS5C4008CW-45L/H AS5C512K8ECJ-45L/H AS5C512K8ECJ-45L/H AS5C4008F-45L/H AS5C4008F-45L/H
5962-9561326HMA 5962-9561326HMC 5962-9561326HNA 5962-9561326HNC 5962-9561326HTA 5962-9561326HTC 5962-9561326HUA 5962-9561326HUC 5962-9561326HYA 5962-9561326HYC 5962-9561326HZA 5962-9561326HZC 5962-9561326H9A 5962-9561326H9C	0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86	AS5C4008EC-35L/H AS5C4008EC-35L/H AS5C512K8EC-35L/H AS5C512K8EC-35L/H AS5C4008ECJ-35L/H AS5C4008ECJ-35L/H AS5C512K8F-35L/H AS5C512K8F-35L/H AS5C4008CW-35L/H AS5C4008CW-35L/H AS5C512K8ECJ-35L/H AS5C512K8ECJ-35L/H AS5C4008F-35L/H AS5C4008F-35L/H
5962-9561327HMA 5962-9561327HMC 5962-9561327HNA 5962-9561327HNC 5962-9561327HTA 5962-9561327HTC 5962-9561327HUA 5962-9561327HUC 5962-9561327HYA 5962-9561327HYC 5962-9561327HZA 5962-9561327HZC 5962-9561327H9A 5962-9561327H9C	0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86 0EU86	AS5C4008EC-25L/H AS5C4008EC-25L/H AS5C512K8EC-25L/H AS5C512K8EC-25L/H AS5C4008ECJ-25L/H AS5C4008ECJ-25L/H AS5C512K8F-25L/H AS5C512K8F-25L/H AS5C4008CW-25L/H AS5C4008CW-25L/H AS5C512K8ECJ-25L/H AS5C512K8ECJ-25L/H AS5C4008F-25L/H AS5C4008F-25L/H

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

DATE: 04-05-28

Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561328HMA	0EU86	AS5C4008EC-12L/H
5962-9561328HMC	0EU86	AS5C4008EC-12L/H
5962-9561328HNA	0EU86	AS5C512K8EC-12L/H
5962-9561328HNC	0EU86	AS5C512K8EC-12L/H
5962-9561328HTA	0EU86	AS5C4008ECJ-12L/H
5962-9561328HTC	0EU86	AS5C4008ECJ-12L/H
5962-9561328HTA	54230	WMS512K8L-12DE
5962-9561328HTC	54230	WMS512K8L-12DE
5962-9561328HUA	0EU86	AS5C512K8F-12L/H
5962-9561328HUC	0EU86	AS5C512K8F-12L/H
5962-9561328HUA	54230	WMS512K8L-12FT
5962-9561328HUC	54230	WMS512K8L-12FT
5962-9561328HXC	54230	WMS512K8L-12F
5962-9561328HYA	0EU86	AS5C4008CW-12L/H
5962-9561328HYC	0EU86	AS5C4008CW-12L/H
5962-9561328HYA	54230	WMS512K8L-12C
5962-9561328HYC	54230	WMS512K8L-12C
5962-9561328HZA	0EU86	AS5C512K8ECJ-12L/H
5962-9561328HZC	0EU86	AS5C512K8ECJ-12L/H
5962-9561328HZA	54230	WMS512K8L-12DJ
5962-9561328HZC	54230	WMS512K8L-12DJ
5962-9561328H9A	0EU86	AS5C4008F-12L/H
5962-9561328H9C	0EU86	AS5C4008F-12L/H
5962-9561329HMA	0EU86	AS5C4008EC-12/H
5962-9561329HMC	0EU86	AS5C4008EC-12/H
5962-9561329HNA	0EU86	AS5C512K8EC-12/H
5962-9561329HNC	0EU86	AS5C512K8EC-12/H
5962-9561329HTA	0EU86	AS5C4008ECJ-12/H
5962-9561329HTC	0EU86	AS5C4008ECJ-12/H
5962-9561329HTA	54230	WMS512K8-12DE
5962-9561329HTC	54230	WMS512K8-12DE
5962-9561329HUA	0EU86	AS5C512K8F-12/H
5962-9561329HUC	0EU86	AS5C512K8F-12/H
5962-9561329HUA	54230	WMS512K8-12FT
5962-9561329HUC	54230	WMS512K8-12FT
5962-9561329HXC	54230	WMS512K8-12F
5962-9561329HYA	0EU86	AS5C4008CW-12/H
5962-9561329HYC	0EU86	AS5C4008CW-12/H
5962-9561329HYA	54230	WMS512K8-12C
5962-9561329HYC	54230	WMS512K8-12C
5962-9561329HZA	0EU86	AS5C512K8ECJ-12/H
5962-9561329HZC	0EU86	AS5C512K8ECJ-12/H
5962-9561329HZA	54230	WMS512K8-12DJ
5962-9561329HZC	54230	WMS512K8-12DJ
5962-9561329H9A	0EU86	AS5C4008F-12/H
5962-9561329H9C	0EU86	AS5C4008F-12/H

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

DATE: 04-05-28

Standard microcircuit drawing PIN <u>1/</u> <u>2/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-9561330HTA	54230	WMS512K8U-12DE
5962-9561330HTC	54230	WMS512K8U-12DE
5962-9561330HUA	54230	WMS512K8U-12FT
5962-9561330HUC	54230	WMS512K8U-12FT
5962-9561330HXC	54230	WMS512K8U-12F
5962-9561330HYA	54230	WMS512K8U-12C
5962-9561330HYC	54230	WMS512K8U-12C
5962-9561330HZA	54230	WMS512K8U-12DJ
5962-9561330HZA	54230	WMS512K8U-12DJ

- 1/ The lead finish 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 manufacturer to determine its availability.
- 2/ Device types and case outlines may be similar to the device types and case outlines listed on SMD 5962-95600.
- 3/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

Vendor CAGE
number

Vendor name
and address

0EU86

Austin Semiconductor, Incorporated
8701 Cross Park Drive
Austin, TX 78754-4566

54230

White Electronic Designs Corporation
3601 East University Drive
Phoenix, AZ 85034-7217

88379

Aeroflex Laboratories, Incorporated
35 South Service Road
Plainview, NY 11803-4101

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