

REVISIONS			
LTR	DESCRIPTION	DATE (YR-MO-DA)	APPROVED
A	Added Arrhenius equation for unbiased bake under margin test method A, back end margin test step C. Corrected military part numbers for device types 01 and 02. Technical changes made to 1.2.2, table I, figure 1, figure 2, figure 4, figure 5, 4.3.1, and table II. Added vendor CAGE 34649 for device type 05. Editorial changes throughout.	1989 JAN 19	M. A. Frye
B	Add device type 08 for vendor CAGE number 66579. Add vendor CAGE number 34335 to the drawing as a source of supply for the 08 device with changes to table I. Deleted programming cycle timing waveform and table III from drawing. Also deleted ESDS from drawing. Editorial changes throughout.	1989 OCT 30	M. A. Frye
C	Deleted vendor CAGE number 34335 as a source of supply for device type 08. Added vendor CAGE number 34335 as a source of supply for device types 01 through 07. Deleted figure 5. Editorial changes throughout.	1990 FEB 26	M. A. Frye
D	Changes in accordance with NOR 5962-R079-95.	95-02-15	M. A. Frye
E	Added provisions for QD certification. Added CAGE 0C7V7 to drawing as a source of supply for device type 07. Updated boilerplate. - dlg	99-12-03	Raymond Monnin

1. SCOPE

1.1 Scope. This drawing describes device requirements for MIL-STD-883 compliant, non-JAN class level B microcircuits in accordance with MIL-PRF-38535, appendix A.

1.2 Part or Identifying Number (PIN). The complete part number shall be as shown in the following example:



1.2.1 Device types. The device types shall identify the circuit function as follows:

Device type	Generic number	Circuit function	Access time
01	27C128	16K x 8-bit UVEPROM	90 ns
02	27C128	16K x 8-bit UVEPROM	120 ns
03	27C128	16K x 8-bit UVEPROM	150 ns
04	27C128	16K x 8-bit UVEPROM	170 ns
05	27C128	16K x 8-bit UVEPROM	200 ns
06	27C128	16K x 8-bit UVEPROM	250 ns
07	27C128	16K x 8-bit UVEPROM	300 ns
08	27C128	16K x 8-bit UVEPROM	70 ns

1.2.2 Case outlines. The case outlines shall be as designated in MIL-STD-1835 and as follows:

Outline letter	Descriptive designator	Terminals	Package style
X	GDIP1-T28 or CDIP2-T28	28	dual-in-line package 1/
Y	CQCC1-N32	32	rectangular leadless chip carrier

1.2.3 Lead finish. The lead finish is as specified in MIL-PRF-38535, appendix A.

1.3 Absolute maximum ratings.

Supply voltage range (V_{CC}) 2/	-0.6 V dc to 6.25 V dc
Supply voltage range (V_{PP}) 2/	-0.6 V dc to 14.0 V dc
All input voltage range except A_9 2/	-0.6 V dc to 6.25 V dc
Input voltage range (A_9) 2/	-0.6 V dc to 13.5 V dc
Output voltage range 2/	-0.6 V dc to $V_{CC} + 1.0$ V dc
Storage temperature range	-65° C to +150° C
Power dissipation	300 mW
Lead temperature (soldering, 10 seconds)	+300° C
Thermal resistance, junction-to-case (θ_{JC})	See MIL-STD-1835
Junction temperature (T_J)	+150° C 3/
Data retention	10 years minimum

1.4 Recommended operating conditions.

Supply voltage range (V_{CC}) 4/	4.5 V dc to 5.5 V dc
Supply voltage range (V_{PP}) 5/	4.5 V dc to 5.5 V dc
High level input voltage range (V_{IH})	2.0 V dc to 6.5 V dc (TTL)
High level input voltage range (V_{IH})	$V_{CC} - 0.2$ V dc to $V_{CC} + 0.2$ V dc (CMOS)
Low level input voltage range (V_{IL})	-0.1 V dc to 0.8 V dc (TTL)
Low level input voltage range (V_{IL})	GND -0.2 to GND +0.2 V dc (CMOS)
Case operating temperature range (T_C)	-55° C to +125° C

1/ Lid shall be transparent to permit ultraviolet light erasure.

2/ Under absolute maximum ratings, voltages are with respect to GND.

3/ Maximum junction temperature may be increased to +175° C during burn-in and steady-state life.

4/ V_{CC} must be applied before or at the same time as V_{PP} and removed after or at the same time as V_{PP} . The device must not be inserted into or removed from the board when V_{PP} or V_{CC} is applied.

5/ V_{PP} can be connected to V_{CC} directly (except in the program mode). V_{CC} supply current in this case would be $I_{CC} + I_{PP}$. During programming, V_{PP} must be maintained at 12.5 V (± 0.5 V).

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 2

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 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-38535 - Integrated Circuits, Manufacturing, 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.

HANDBOOKS

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 shall take 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 requirements shall be in accordance with MIL-PRF-38535, appendix A for non-JAN class level B devices and as specified herein. Product built to this drawing that is produced by a Qualified Manufacturer Listing (QML) certified and qualified manufacturer or a manufacturer who has been granted transitional certification to MIL-PRF-38535 may be processed as QML product in accordance with the manufacturer's approved program plan and qualifying activity approval in accordance with MIL-PRF-38535. This QML flow as documented in the Quality Management (QM) plan may make modifications to the requirements herein. These modifications shall not affect the PIN as described herein. A "Q" or "QML" certification mark in accordance with MIL-PRF-38535 is required to identify when the QML flow option is used. This drawing has been modified to allow the manufacturer to use the alternate die/fabrication requirements of paragraph A.3.2.2 of MIL-PRF-38535 or other alternative approved by the Qualifying Activity.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38535, appendix A and herein.

3.2.1 Terminal connections. The terminal connections shall be as specified on figure 1.

3.2.2 Truth table. The truth table shall be as specified on figure 2.

3.2.2.1 Unprogrammed devices. The truth table for unprogrammed devices shall be as specified on figure 2.

3.2.2.2 Programmed devices. The requirements for supplying programmed devices are not part of this drawing.

3.2.3 Case outlines. The case outlines shall be in accordance with 1.2.2 herein.

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

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 3

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. Marking shall be in accordance with MIL-PRF-38535, appendix A. The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked as listed in MIL-HDBK-103 (see 6.6 herein). For packages where the entire SMD PIN number is not feasible due to space limitations, the manufacturer has the option of not marking the "5962-" on the device.

3.5.1 Certification/compliance mark. The certification mark for device classes Q and V shall be a "QML" or "Q" as required in MIL-PRF-38535. The compliance mark for device class M shall be a "C" as required in MIL-PRF-38535, appendix A. For Class Q product built in accordance with A.3.2.2 of MIL-PRF-38535 or other alternative approved by the Qualifying Activity, the "QD" certification mark shall be used in place of the "QML" or "Q" certification mark.

3.6 Processing EPROMS. All testing requirements and quality assurance provisions herein shall be specified by the manufacturer prior to delivery.

3.6.1 Erase of EPROMS. When specified, devices shall be erased in accordance with the procedures and characteristics specified in 4.4.

3.6.2 Programmability of EPROMS. When specified, devices shall be programmed to the specified pattern using the procedures and characteristics specified in 4.5.

3.6.3 Verification of erasure or programmability of EPROMS. When specified, devices shall be verified as either programmed to the specified program or erased. As a minimum, verification shall consist of performing a functional test (subgroup 7) to verify that all bits are in the proper state. Any bit that does not verify to be in the proper state shall constitute a failure, and shall be removed from the lot.

3.7 Certificate of compliance. For device classes Q and V, a certificate of compliance shall be required from a QML-38535 listed manufacturer in order to supply to the requirements of this drawing (see 6.6.1 herein). For device class M, a certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in MIL-HDBK-103 (see 6.6.2 herein). The certificate of compliance submitted to DSCC-VA prior to listing as an approved source of supply for this drawing shall affirm that the manufacturer's product meets, for device classes Q and V, the requirements of MIL-PRF-38535 and herein or for device class M, the requirements of MIL-PRF-38535, appendix A and herein.

3.8 Certificate of conformance. A certificate of conformance as required for device classes Q and V in MIL-PRF-38535 or for device class M in MIL-PRF-38535, appendix A shall be provided with each lot of microcircuits delivered to this drawing.

3.9 Notification of change. Notification of change to DSCC-VA shall be required in accordance with MIL-PRF-38535, appendix A.

3.10 Verification and review. DSCC, DSCC's agent and the acquiring activity retain the option to review the manufacturer's facility and applicable required documentation. Offshore documentation shall be made available onshore at the option of the reviewer.

3.11 Data retention. A data retention stress test shall be completed as part of the vendor's reliability monitors. This test shall be done for initial characterization and after any design or process change which may affect data retention. The methods and procedures may be vendor specific, but shall guarantee the number of years listed in section 1.3 herein over the full military temperature range. The vendor's procedure shall be kept under document control and shall be made available upon request of the acquiring or preparing activity, along with test data.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 4

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C 4.5 V ≤ V _{CC} ≤ 5.5 V unless otherwise specified	Device types	Group A subgroups	Limits		Unit
					Min	Max	
High level output voltage	V _{OH}	I _{OH} = -400 μA	All	1,2,3	2.4		V
Low level output voltage	V _{OL}	I _{OL} = 2.1 mA	All	1,2,3		0.45	V
Input current (leakage)	I _I	V _I = 0 V to 5.5 V	All	1,2,3		±10	μA
Output current (leakage)	I _O	V _O = 0 V to V _{CC}	All	1,2,3		±10	μA
V _{PP} supply current	I _{PP1}	V _{PP} = V _{CC} = 5.5 V	All	1,2,3		100	μA
V _{PP} supply current (during program pulse) 1/	I _{PP2}	V _{PP} = 13 V	01-07	1		50	mA
			08			60	
Operating supply current (active)	I _{CC1}	V _{CC} = 5.5 V, $\overline{CE} = V_{IL}$, f = 1/t _{AVQV} , 0 ₁₋₀₈ = 0 mA	03.04, 05.06, 07	1,2,3		25	mA
			08			85	
			01			70	
			02			60	
Standby power supply current (TTL)	I _{CC2}	V _{CC} = 5.5 V, $\overline{CE} = 2.0$ V, f = 0	01-07	1,2,3		3.0	mA
			08			200	
Standby power supply current (CMOS)	I _{CC3}	V _{CC} = 5.5 V, $\overline{CE} = V_{CC}$, f = 0	01-07	1,2,3		300	μA
			08			500	
Input capacitance	C _{IN}	V _I = 0 V, f = 1 MHz, see 4.3.1c	All	4		10	pF
Output capacitance	C _{OUT}	V _O = 0 V, f = 1 MHz, see 4.3.1c	All	4		14	pF
Functional tests		see 4.3.1e	All	7,8A,8B			

See footnotes at end of table.

STANDARD
MICROCIRCUIT DRAWING
DEFENSE SUPPLY CENTER COLUMBUS
COLUMBUS, OHIO 43216-5000

SIZE
A

REVISION LEVEL
E

5962-87661

SHEET
5

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C 4.5 V ≤ V _{CC} ≤ 5.5 V unless otherwise specified	Device types	Group A subgroups	Limits		Unit
					Min	Max	
Address access time <u>2/</u>	t _{AVQV}	See figures 3 and 4	01 02 03 04 05 06 07 08	9,10,11		90 120 150 170 200 250 300 70	ns
Chip enable access time <u>2/</u>	t _{ELQV}	See figures 3 and 4	01 02 03 04 05 06 07 08	9,10,11		90 120 150 170 200 250 300 70	ns
Output enable access time <u>2/</u>	t _{OLQV}	See figures 3 and 4	01,02 03,04 05 06 07 08	9,10,11		50 70 75 100 120 25	ns
$\overline{\text{CE}}$ or $\overline{\text{OE}}$ disable to output in high Z <u>1/</u>	t _{EHQZ} , t _{OHQZ}	See figures 3 and 4	01,02 03,04	9,10,11		50	ns
			05,06			60	
			07			105	
			08			25	
$\overline{\text{CE}}$ or $\overline{\text{OE}}$ enable to output valid <u>1/</u>	t _{EHQV} , t _{OHQV}	See figures 3 and 4	All	9,10,11	0		ns

1/ May not be tested, but shall be guaranteed to the limits specified in table I.2/ For all switching characteristics and timing measurements, inputs pulse levels are 0.40 V and 2.4 V and V_{PP} = 12.5 V ± 0.5 V during programming.

STANDARD
MICROCIRCUIT DRAWING
DEFENSE SUPPLY CENTER COLUMBUS
COLUMBUS, OHIO 43216-5000

SIZE
A

REVISION LEVEL
E

5962-87661

SHEET
6

CASE X

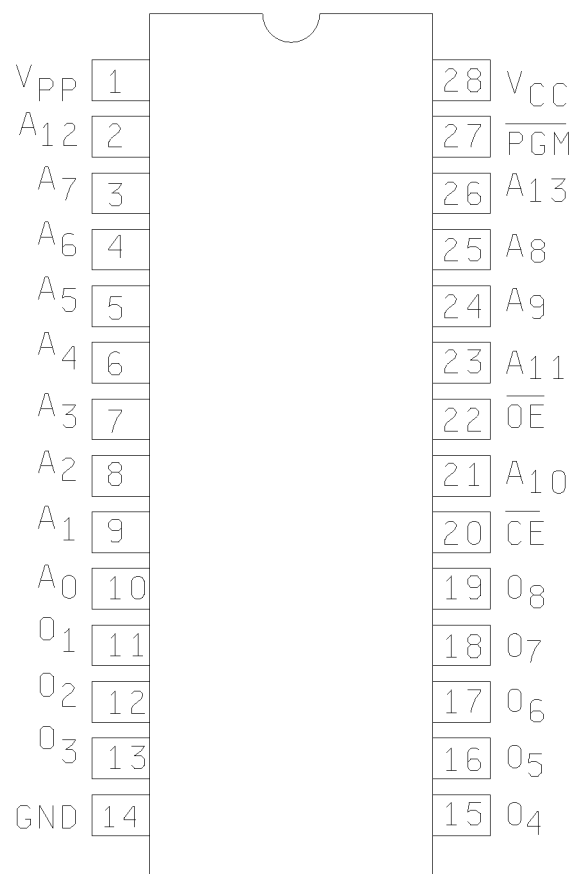


FIGURE 1. Terminal connections.

STANDARD
MICROCIRCUIT DRAWING
DEFENSE SUPPLY CENTER COLUMBUS
COLUMBUS, OHIO 43216-5000

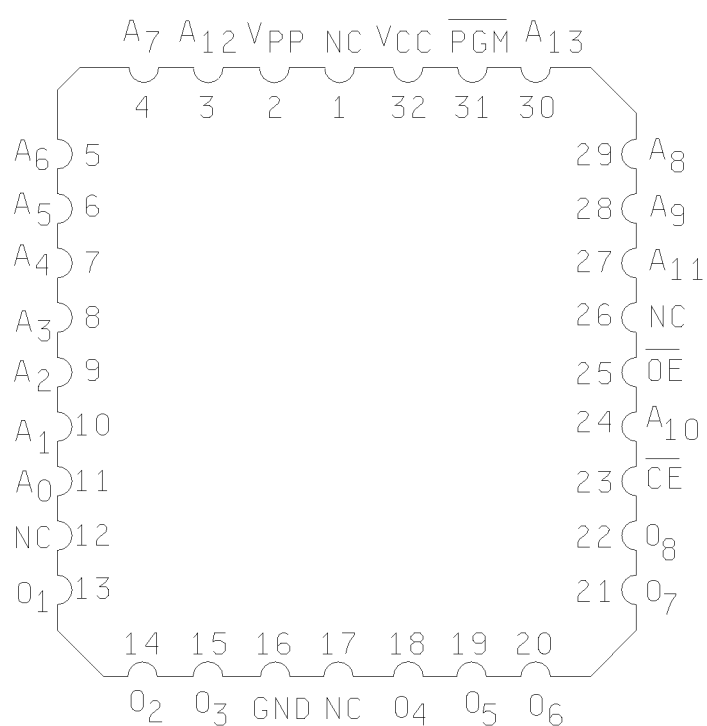
SIZE
A

5962-87661

REVISION LEVEL
E

SHEET
7

CASE Y



Top view

FIGURE 1. Terminal connections - Continued.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 8

Mode	Function pins (see note 1)							
	\overline{CE}	\overline{OE}	\overline{PGM}	V_{PP}	V_{CC}	A_9	A_0	$O_1 - O_8$
Read	V_{IL}	V_{IL}	V_{IH}	V_{CC}	V_{CC}	X	X	D_{OUT}
Output disable	V_{IL}	V_{IH}	V_{IH}	V_{CC}	V_{CC}	X	X	HIGH-Z
Standby	V_{IH}	X	X	V_{CC}	V_{CC}	X	X	HIGH-Z
Programming	V_{IL}	V_{IH}	V_{IL}	V_{PP}	V_{CC}	X	X	D_{IN}
Verify	V_{IL}	V_{IL}	V_{IH}	V_{PP}	V_{CC}	X	X	D_{OUT}
Program inhibit	V_{IH}	X	X	V_{PP}	V_{CC}	X	X	HIGH-Z
Signature mode (see notes 2, 3, and 4)	V_{IL}	V_{IL}	V_{IH}	V_{CC}	V_{CC}	VH	V_{IL}	MFG code
						VH	V_{IH}	Device code

NOTES:

1. X can be V_{IL} or V_{IH} .
2. VH = 12 V \pm 0.5 V.
3. All other address must be held at V_{IL} .
4. See 6.6.

FIGURE 2. Truth table.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 9

Read cycle timing

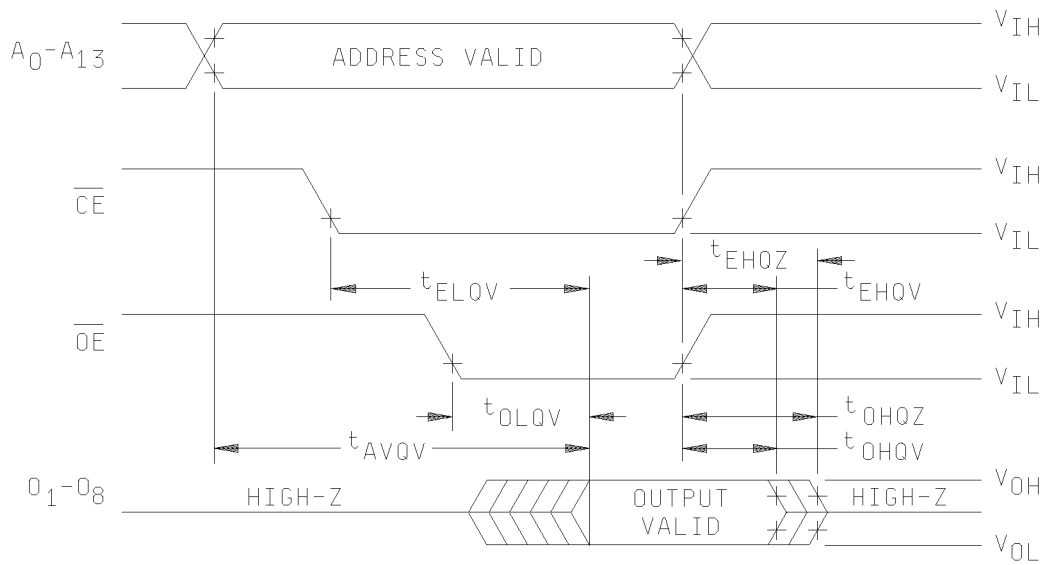


FIGURE 3. Read cycle timing waveform.

PARAMETER MEASUREMENT INFORMATION

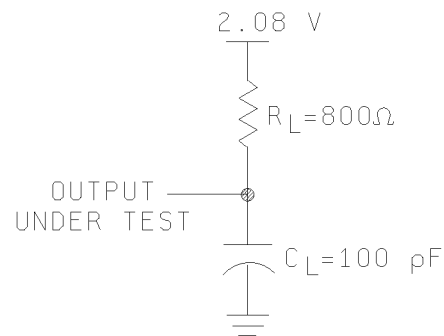


FIGURE 4. Output load circuit.

STANDARD
MICROCIRCUIT DRAWING
DEFENSE SUPPLY CENTER COLUMBUS
COLUMBUS, OHIO 43216-5000

SIZE
A

5962-87661

REVISION LEVEL
E

SHEET
10

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38535, appendix A.

4.2 Screening. Screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection. The following additional criteria shall apply:

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

(1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or procuring activity upon request. 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) $T_A = +125^\circ\text{C}$, minimum.

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.

4.3 Quality conformance inspection. Quality conformance inspection shall be in accordance with method 5005 of MIL-STD-883 including groups A, B, C, and D inspections. The following additional criteria shall apply.

4.3.1 Group A inspection.

a. Tests shall be as specified in table II herein.

b. Subgroups 5 and 6 in table I, method 5005 of MIL-STD-883 shall be omitted.

c. Subgroup 4 (C_{IN} and C_{OUT} measurements) shall be measured only for the initial qualification and after process or design changes which may affect capacitance. Sample size shall be 15 devices with zero accept, and all input and output terminals tested.

d. All devices selected for testing shall have a checkerboard pattern or equivalent. After completion of all testing, the devices shall be verified and erased (except devices submitted for groups C and D testing).

e. Subgroups 7 and 8 shall include verification of the truth table.

4.3.2 Groups C and D inspections.

a. End-point electrical parameters shall be as specified in table II herein.

b. Steady-state life test conditions, method 1005 of MIL-STD-883.

(1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or procuring activity upon request. 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) $T_A = +125^\circ\text{C}$, minimum.

(3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

c. All devices selected for testing shall be programmed with a checkerboard pattern, then verified and erased.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 11

TABLE II. Electrical test requirements. 1/ 2/ 3/

MIL-STD-883 test requirements	Subgroups (per method 5005, table I)
Interim electrical parameters (method 5004)	---
Final electrical test parameters (method 5004)	1*, 2, 3, 7, 8, 9, 10, 11
Group A test requirements (method 5005)	1, 2, 3, 4**, 7, 8, 9, 10, 11
Groups C and D end-point electrical parameters (method 5005)	2, 8A, 10 or 1, 2, 3

1/ * PDA applies to subgroup 1 (see 4.2c).

2/ ** See 4.3.1c.

3/ Any subgroups at the same temperature may be combined when using a multifunction tester.

4.4 Erasing procedure. The recommended erasure procedure shall be as specified by the device manufacturer.

4.5 Programming procedures. The programming procedure shall be as specified by the device manufacturer.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38535, appendix A.

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 should inform Defense Supply Center Columbus when a system application requires configuration control and which SMD's are applicable to that system. 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) 692-0525.

6.5 Comments. Comments on this drawing should be directed to DSCC-VA, Columbus, Ohio 43216-5000, or telephone 614-692-0674.

6.6 Approved source of supply. An approved source of supply is listed herein. Additional sources will be added as they become available. The vendor listed herein has agreed to this drawing and a certificate of compliance (see 3.7 herein) has been submitted to DSCC-VA.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-87661
		REVISION LEVEL E	SHEET 12

STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 99-12-03

Approved sources of supply for SMD 5962-87661 are listed below for immediate acquisition information only and shall be added to MIL-HDBK-103 and QML-38535 during the next revision. MIL-HDBK-103 and QML-38535 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 revisions of MIL-HDBK-103 and QML-38535.

Standard microcircuit drawing PIN <u>1</u> /	Vendor CAGE number	Vendor similar PIN <u>3</u> /
5962-8766101XX	<u>2</u> / <u>2</u> /	AM27C128-90/BXA WS27C128F-90DMB
5962-8766101YX	<u>2</u> / <u>2</u> /	AM27C128-90/BUA WS27C128F-90CMB
5962-8766102XX	<u>2</u> / <u>2</u> /	AM27C128-120/BXA WS27C128L-12DMB
5962-8766102YX	<u>2</u> / <u>2</u> /	AM27C128-120/BUA WS27C128L-12CMB
5962-8766103XX	<u>2</u> / <u>2</u> / <u>2</u> /	AM27C128-150/BXA 27C128-15BXA WS27C128L-15DMB
5962-8766103YX	<u>2</u> / <u>2</u> / <u>2</u> /	AM27C128-150/BUA 27C128-15BUC WS27C128L-15CMB
5962-8766104XX	<u>2</u> / <u>2</u> / <u>2</u> /	AM27C128-170/BXA 27C128-17BXA WS27C128L-17DMB
5962-8766104YX	<u>2</u> / <u>2</u> / <u>2</u> /	AM27C128-170/BUA 27C128-17BUC WS27C128L-17CMB
5962-8766105XX	<u>2</u> / <u>2</u> / <u>2</u> / <u>2</u> / <u>2</u> /	SMJ27C128-20JM AM27C128-200/BXA MD27C128-20 27C128-20BXA WS27C128L-20DMB
5962-8766105YX	<u>2</u> / <u>2</u> / <u>2</u> /	AM27C128-200/BUA 27C128-20BUC WS27C128L-20CMB

See footnote at end of list.

Standard microcircuit drawing PIN <u>1/</u>	Vendor CAGE number	Vendor similar PIN <u>3/</u>
5962-8766106XX	<u>2/</u> <u>2/</u> <u>2/</u> <u>2/</u>	SMJ27C128-25JM AM27C128-250/BXA 27C128-25BXA WS27C128L-25DMB
5962-8766106YX	<u>2/</u> <u>2/</u> <u>2/</u>	AM27C128-250/BUA 27C128-25BUC WS27C128L-25CMB
5962-8766107XA	0C7V7 <u>2/</u> <u>2/</u> <u>2/</u> <u>2/</u>	27C128-300/BXA SMJ27C128-30JM AM27C128-300/BXA 27C128-30BXA WS27C128L-DMB
5962-8766107YX	<u>2/</u> <u>2/</u> <u>2/</u>	AM27C128-300/BUA 27C128-30BUC WS27C128L-30CMB
5962-8766108XX	<u>2/</u>	WS57C128F-70DMB
5962-8766108YX	<u>2/</u>	WS57C128F-70CMB

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/ No longer available from an approved source.

3/ 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>	<u>Manufacturing code</u>	<u>Device code</u>
0C7V7	QP Labs 3605 Kifer Road Santa Clara, CA 95051	01H	16H