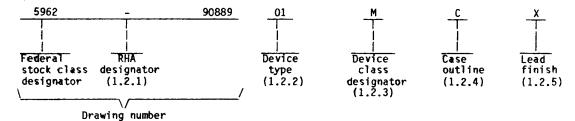
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* U.S. GOVERNMENT PRINTING OFFICE: 1987 — 748-129/60911 5962--E1832



- 1.1 Scope. This drawing forms a part of a one part one part number documentation system (see 6.6 herein). Two product assurance classes, consisting of military high reliability (device classes B, Q, and M) and space application (device classes S and V), and a choice of case outlines and lead finishes are available and are reflected in the Part or Identifying Number (PIN). Device class M microcircuits represent non-JAN class B microcircuits in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices". When available, a choice of radiation hardness assurance (RHA) 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. Device classes M, B, and S RHA marked devices shall meet the MIL-M-38510 specified RHA levels and shall be marked with the appropriate RHA designator. Device classes Q and V devices shall meet or exceed the electrical performance characteristics specified in table I herein after exposure to the specified irradiation levels specified in the absolute maximum ratings herein and the RHA marked device shall be marked in accordance with MIL-I-38535. A dash (-) indicates a non-RHA device.
 - 1.2.2 Device type. The device type shall identify the circuit function as follows:

Device type Generic number Circuit function

O1 54BCT126 Quadruple bus buffer gate with three-state outputs

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

Device class	Device requirements documentation
M	Vendor self-certification to the requirements for non-JAN
	classes B microcircuits in accordance with 1.2.1 of MIL-STD-883
B or S	Certification and qualification to MIL-M-38510
Q or V	Certification and qualification to $MIL-I-38535$

1.2.4 Case outlines. For device classes M, B, and S, case outlines shall meet the requirements in appendix C of MIL-M-38510 and as listed below. For device classes Q and V, case outlines shall meet the requirements of MIL-I-38535, appendix C of MIL-M-38510, and as listed below.

Outline letter	Case outline
С	D-1 (14-lead, .785" x .310" x .200"), dual-in-line package
D	F-2 (14-lead, .390" x .260" x .085"), flat package
2	C-2 (20-terminal, .358" x .358" x .100"), square chip carrier package

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1.2.5 <u>Lead finish</u> . The lead finish sh or MIL-I-38535 for classes U and V. Fini its packaying. The "X" designation is fo considered acceptable and interchangeable	sh letter r use in s	"X" si pecif	nall not be ications who	-M-38510 for o marked on the en lead finish	classes M, B, and S, e microcircuit or nes A, B, and C are
1.3 Absolute maximum ratings. 1/	7, 0,100 F				
Supply voltage range (V_{CC}) Input voltage range Voltage applied to any output in to the Voltage applied to any output in the low Storage temperature range Lead temperature (soldering, 10 se Thermal resistance junction-to-cas Junction temperature (T_J) Power dissipation (P_D) Input clamp current (I_{IC})	he disable he high st state conds) e (θ _J C) -	d sta	te0. 	5 V dc to +5.5 5 V dc to V _{CC} mA °C to +150°C O°C MIL-M-38510, 5°C mW 2/	5 V dc
1.4 Recommended operating conditions.					
Supply voltage range (V _{CC}) Minimum high-level input voltage (Maximum low-level input voltage (V) Maximum high-level output current Maximum low-level output current (Case operating temperature range ($\{1_{011}\}_{-} = -$		12	mA	5 V dc
1.5 Logic testing for device classes Q	and V .				
Fault coverage measurement of manu logic tests (MIL-STD-885, test m	ethod 5012				- toutes Evelended
1/ Stresses above the absolute maximum operation at the maximum levels may	rating ma degrade p	y cau: erfor	se permanen nance and a	t damage to t ffect reliabil	ne device. Extended lity.
Aust be able to withstand the additional number is based upon dc values.	ional P _D d	ue to	that circu	it test, e.g.,	I _{OS} . The P _D
3/ Values will be added when they become	me availab	1e.			
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2. APPLICABLE DOCUMENTS

2.1 Government specifications, standards, bulletin, and handbook. Unless otherwise specified, the following specifications, standards, bulletin, and handbook of the issue listed in that issue of the Department of Defense Index of Specifications and Standards specified in the solicitation, form a part of this drawing to the extent specified herein.

SPECIFICATIONS

MILITARY

MIL-M-38510 - Microcircuits, General Specification for.

MIL-1-38535 - Integrated Circuits, Manufacturing, General Specification for.

STANDARDS

MILITARY

MIL-STD-480 - Configuration Control-Engineering Changes, Deviations and Waivers.
MIL-STD-883 - Test Methods and Procedures for Microelectronics.

BULLETIN

MILITARY

MIL-BUL-103 - List of Standardized Military Drawings (SMD's).

HANDBOOK

MILITARY

MIL-HDBK-780 - Military Drawings.

(Copies of the specifications, standards, bulletin, and handbook required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

- 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.
 - 3. REQUIREMENTS
- 3.1 Item requirements. The individual item requirements for device class M shall be in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices" and as specified herein. The individual item requirements for device classes B and S shall be in accordance with MIL-M-38510 and as specified herein. For device classes B and S, a full electrical characterization table for each device type shall be included in this SMD. The individual item requirements for device classes Q and V shall be in accordance with MIL-I-38535 and as specified herein.
- 3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-M-38510 for device classes M, B, and S and MIL-I-38535 for device classes Q and V and herein.
 - 3.2.1 Case outline(s). The case outlines shall be in accordance with 1.2.4 herein.
 - 3.2.2 Terminal connections. The terminal connections shall be as specified on figure 1.

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- 3.2.3 Truth table. The truth table shall be as specified on figure 2.
- 3.2.4 Logic diagram. The logic diagram shall be as specified on figure 3.
- 3.3 <u>Electrical performance characteristics and postirradiation parameter limits</u>. Unless otherwise specified herein, the electrical performance characteristics and postirradiation parameter limits are as specified in table I and shall apply over the full case operating temperature range.
- 3.4 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table IIA. The electrical tests for each subgroup are defined in table I.
- $3.5\,$ Marking. The part shall be marked with the PIN listed in 1.2 herein. Marking for device class M shall be in accordance with MIL-STD-883 (see $3.1\,$ herein). In addition, the manufacturer's PIN may also be marked as listed in MIL-BUL-103. Marking for device classes B and S shall be in accordance with MIL-M-38510. Marking for device classes Q and V shall be in accordance with MIL-I-38535.
- 3.5.1 Certification/compliance mark. The compliance mark for device class M shall be a "C" as required in MIL-STD-883 (see 3.1 herein). The certification mark for device classes B and S shall be a "J" or "JAN" as required in MIL-M-38510. The certification mark for device classes Q and V shall be a "QML" as required in MIL-I-38535.
- 3.6 Certificate of compliance. 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-BUL-103 (see 6.7.3 herein). 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 6.7.2 herein). The certificate of compliance submitted to DESC-ECS prior to listing as an approved source of supply for this drawing shall affirm that the manufacturer's product meets, for device class M the requirements of MIL-STD-883 (see 3.1 herein) or, for device classes Q and V, the requirements of MIL-I-38535 and the requirements herein.
- 3.7 Certificate of conformance. A certificate of conformance as required for device class M in MIL-STD-883 (see 3.1 herein) or device classes B and S in MIL-M-38510 or for device classes Q and V in MIL-I-38535 shall be provided with each lot of microcircuits delivered to this drawing.
- 3.8 Notification of change for device class M. For device class M, notification to DESC-ECS of change of product (see 6.2 herein) involving devices acquired to this drawing is required for any change as defined in MIL-STD-480.
- 3.9 Verification and review for device class M. For device class M, DESC, DESC'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
- 3.10 Microcircuit group assignment for device classes M, B, and S. Device classes M, B, and S devices covered by this drawing shall be in microcircuit group number 126 (see MIL-M-38510, appendix E).
- 3.11 Serialization for device class S. All device classes S devices shall be serialized in accordance with MIL-M-38510.
 - 4. QUALITY ASSURANCE PROVISIONS
- 4.1 Sampling and inspection. For device class M sampling and inspection procedures shall be in accordance with section 4 of MIL-M-38510 to the extent specified in MIL-STD-883 (see 3.1 herein). For device classes B and S sampling and inspection procedures shall be in accordance with MIL-M-38510 and method 5005 of MIL-STD-883, except as modified herein. For device classes Q and V, sampling and inspection procedures shall be in accordance with MIL-I-38535.

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Test	Symbol	Cond.	itions	Group A Isubgroups		Unit	
	<u> </u>	unless other	wise specified	Subgroups:		Max	<u> </u>
High level output voltage	V _{OH}	V _{CC} = 4.5 V, V _{IH} = 2.0 V, V _{IL} = 0.8 V	I _{OH} = -3 mA	1,2,3	2.4		V
		1 1 - 5.5	I _{OH} = -12 mA	!	2.0		1
Low level output voltage	I V _{OL}	Y _{CC} = 4.5 V, I _{OL} Y _{IH} = 2.0 V, Y _{IL} = 0.8 V	= 48 mA,	1,2,3	 - -	0.55	V
Input clamp voltage	VIC	$V_{CC} = 4.5 \text{ V}, I_{IN}$	= -18 mA	1,2,3		-1.2	
high level input current	I 1H1	V _{CC} = 0.0 V	V _{IN} = 7.0 V	1,2,3		100	μА
	1 _{1H2}	V _{CC} = 5.5V	V _{IN} = 2.7 V	_		35	i
Low level input current	IIL	V _{CC} = 5.5 V, V _{IN}	= 0.5 V	1,2,3	 	-20	μ A
Output current	1 ₀	V _{CC} = 5.5 V, V _{OUT} = 0.0 V	1/	1,2,3	 -100 	 -225 	mA
Supply current	ICCH	IV _{CC} = 5.5 V, IOutputs open		1,2,3		33	mA
	TCCL	1		j	i i	51	ı
	1 _{CCZ}				 	8	ŀ
Off-state output leakage current	IOZH	V _{CC} = 5.5 V	V _{OUT} = 2.7 V	1,2,3		50	μА
	IOZL		V _{OUT} = 0.5 V			 -50	1 1
Functional tests	i	 See 4.4.1b 2/		7,8	 j		

See footnotes at end of table.

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Test	Symbol	Conditions -55°C <u><</u> T _C <u><</u> +125°C	Group A	Lim	Unit	
	!	unless otherwise specified	subgroups	Min	Max	
Propagation delay time A to Y	t _{PLH}		9	1.5	4.9	l ns
	t _{PHL}	$R_1 = R_2 = 500\alpha$, See figure 4		2.7	 6.9 	
	! tpLH 	 V _{CC} = 4.5 V and 5.5 V dc, C _L = 50 pF,	10,11	1.5	5.6	
	 tpHL 	R1 = R2 = 500ବ, See figure 4 		2.7	7.7	[
Output enable time, G to Y	t _{PZH}	 V _{CC} = 5.0 V, C _L = 50 pF, R ₁ = R ₂ = 5000,	9	2.6	6.4	ns
	t _{PZL}	R ₁ = R ₂ = 500α, See figure 4		3.7	8.3	
	t _{PZH}	 V _{CC} = 4.5 V and 5.5 V dc, C _L = 50 pF,	10,11	2.6	7.2	1
	t _{PZL}	R1 = R2 = 5000, See figure 4		3.7	10.5	
Output disable time, G to Y	t _{PHZ}		9	3.2	8.2	ns
	t _{PLZ}	R ₁ = R ₂ = 5000, See figure 4	 	3.4	8.0	
	 t _{PHZ}	 V _{CC} = 4.5 V and 5.5 V dc, C ₁ = 50 pF,	10,11	3.2	9.6	
 tp _{LZ}		CL = 50 pF, R ₁ = R ₂ = 5000, See figure 4]	3.4	12.3	ļ

 $[\]frac{1}{}$ Not more than one output should be tested at one time and the duration of the test condition shall not exceed one second.

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 $[\]frac{2}{}$ Functional tests shall be conducted at input test conditions of 0.4 V \leq V_{IL} \leq 0.8 V and 2.0 V \leq V_{IH} \leq 2.4 V, for V_{CC} = 4.5 V and repeated at V_{CC} = 5.5 V.

Device type	01						
 Case outlines 	 C and D 	2					
Terminal number 	Terminal symbol						
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	1G 1A 1Y 2G 2A 2Y GND 3Y 3A 3G 4Y 4A 4G VCC	NC 1G 1A 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					

NC = No internal connection

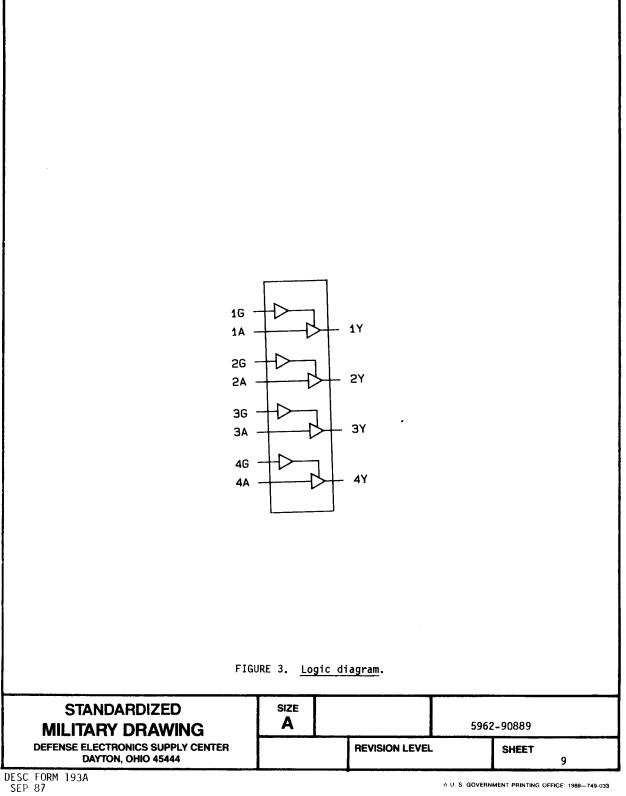
FIGURE 1. <u>Terminal connections</u>.

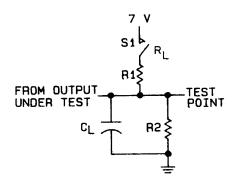
i Inpi	ıts	
 G 	A	Y
 H H L	H L X	H L L Z

H = High voltage level
L = Low voltage level
X = Irrelevant
Z = High impedance

FIGURE 2. Truth table.

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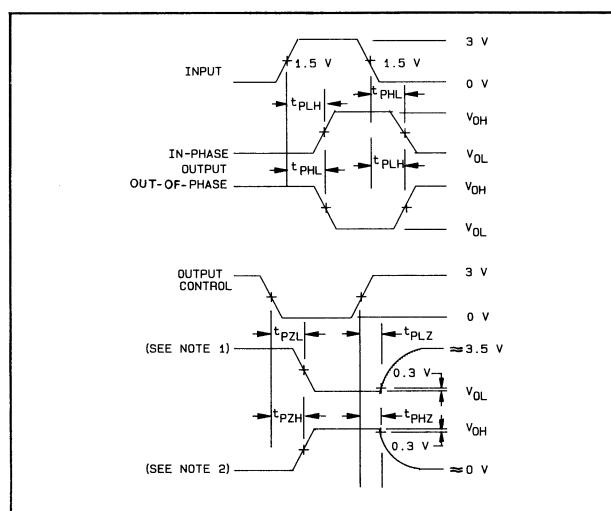


NOTE: C_L = 50 pF, includes probe and jig capacitance. R_L = R1 = R2 = $500\, \Omega_{\rm s}$

Test	S1
tpLH tpHL tpZH tpZL tpHZ tpHZ	Open Open Open Closed Open Closed

FIGURE 4. Test circuit and switching waveforms.

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NOTES:

- 1. Output with internal conditions such that the output is low except when disabled by the output control.
- Output with internal conditions such that the output is high except when disabled by the output control.
- All input pulses are supplied by the generators having the following characteristics: PRR \leq 10 MHz, Z_0 = 50α , $t_r < 2.5$ ns, $t_f < 2.5$ ns. The outputs are measured one at a time with one transition per measurement.

FIGURE 4. Test circuit and switching waveforms - Continued.

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- 4.2 Screening. For device class M, screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection. For device classes B and S screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to qualification and quality conformance inspection. For device classes Q and V screening shall be in accordance with MIL-I-38535, and shall be conducted on all devices prior to qualification and technology 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. For device class M the test circuit shall be submitted to DESC-ECS for review with the certificate of compliance. For device classes B and S the test circuit shall be submitted to the qualifying activity. For device classes Q and V the test circuit shall be submitted to DESC-ECS with the certificate of compliance and under the control of the device manufacturer's technical review board (TRB) in accordance with MIL-I-38535.
 - (2) $T_A = +125^{\circ}C$, minimum.
 - b. Interim and final electrical test parameters shall be as specified in table IIA herein. For device class M, interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.
- 4.2.1 Additional screening for device class V. Additional screening for device class V beyond the requirements of device class Q shall be as specified in appendix B of MIL-I-38535 and as detailed in table IIB herein. These additional screens may be used to satisfy space system requirements and shall be reflected in the PIN.
 - 4.3 Qualification inspection.
- 4.3.1 Qualification inspection for device classes B and S. Qualification inspection for device classes B and S shall be in accordance with MIL-M-38510. Inspections to be performed shall be those specified in method 5005 of MIL-STD-883 and herein for groups A, B, C, D, and E inspections (see 4.4.1 through 4.4.5).
- 4.3.2 Qualification inspection for device classes Q and V. Qualification inspection for device classes Q and V shall be in accordance with MIL-I-38535. Inspections to be performed shall be those specified in MIL-I-38535 and herein for groups A, B, C, D, and E inspections (see 4.4.1 through 4.4.5).
- 4.4 Conformance inspection. Quality conformance inspection for device class M shall be in accordance with MIL-STD-883 (see 3.1 herein) and as specified herein. Quality conformance inspection for device classes B and S shall be in accordance with MIL-M-38510 and as specified herein. Inspections to be performed for device classes M, B, and S shall be those specified in method 5005 of MIL-STD-883 and herein for groups A, B, C, D, and E inspections (see 4.4.1 through 4.4.5). Technology conformance inspection for classes Q and V shall be in accordance with MIL-I-38535 including groups A, B, C, D, and E inspections and as specified herein.
 - 4.4.1 Group A inspection.
 - a. Tests shall be as specified in table IIA herein.
 - b. For device class M, subgroups 7 and 8 tests shall be sufficient to verify the truth table. For device classes B and S, subgroups 7 and 8 tests shall be sufficient to verify the truth table as approved by the qualifying activity. For device classes Q and V, subgroups 7 and 8 shall include verifying the functionality of the device; these tests shall have been fault graded in accordance with MIL-STD-883, test method 5012 (see 1.5 herein).
 - c. Subgroups 4, 5, and 6 in table I, method 5005 of MIL-STD-883 shall be omitted.

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TABLE IIA. Electrical test requirements. 1/2/

 Test requirements		Subgroups hod 5005,ta	Subgroups (per MIL-I-38535, table III)		
 	Device class M	 Device class B	 Device class S	 Device class Q	Device class V
Interim electrical parameters (see 4.2)		 1 	 1 	1	1 1
Final electrical parameters (see 4.2)	1*,2,3,7, 8,9,10,11	 1*,2,3,7, 7,9,10,11	 1*,2,3,7, 7,9,10,11	 1*,2,3,7, 7,9,10,11	1*,2,3,7, 7,9,10,11
Group A test requirements (see 4.4)	 1,2,3,7, 8,9,10,11	1,2,3,7, 8,9,10,11	 1,2,3,7, 8,9,10,11	1,2,3,7, 8,9,10,11	1,2,3,7, 8,9,10,11
Group B end-point electrical parameters (see 4.4)			1,2,3, 9,10,11		1,2,3, 9,10,11
 Group C end-point electrical parameters (see 4.4)	1,2,3	1,2,3		1,2,3	
 Group D end-point electrical parameters (see 4.4)	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3
 Group E end-point electrical parameters (see 4.4)	1,7,9	1,7,9	1,7,9	1,7,9	1,7,9

- 1/ Blank spaces indicate tests are not applicable.
- 2/ * indicates PDA applies to subgroup 1.
- 4.4.2 Group B inspection. The group B inspection end-point electrical parameters shall be as specified in table IIA herein.
 - 4.4.3 Group C inspection.
 - a. End-point electrical parameters shall be as specified in table IIA herein.
 - b. Steady-state life test conditions, method 1005 of MIL-STD-883:
 - (1) Test condition A, B, C or D. For device class M, the test circuit shall be submitted to DESC-ECS for review with the certificate of compliance. For device classes B and S, the test circuit shall be submitted to the qualifying activity. For device classes Q and V, the test circuit shall be submitted to DESC-ECS with the certificate of compliance and under the control of the device manufacturer's TRB in accordance with MIL-I-38535.
 - (2) $T_A = +125^{\circ}C$, minimum.
 - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

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TABLE IIB. Additional screening for device class V.

Test	MIL-STD-883, test method	Lot requirement
 Particle impact noise detection	2020	100%
Internal visual	2010, condition A or approved alternate	100%
Nondestructive bond pull	2023 or approved alternate	100%
 Reverse bias burn-in 	1015	100%
 Burn-in 	1015, total of 240 hours at +125°C	100%
 Radiographic 	2012	100%

- 4.4.4 Group D inspection. For group D inspection, end-point electrical parameters shall be as specified in table IIA herein.
- 4.4.5 Group E inspection. Group E inspection is required only for parts intended to be marked as radiation hardness assured (see 3.5 herein). RHA levels for device classes B and S shall be M, D, R, and H and for device classes M shall be M and D. RHA quality conformance inspection sample tests shall be performed at the level specified in the acquisition document. RHA tests for device classes Q and V shall be performed in accordance with MIL-I-38535 and 1.2.1 herein.
 - a. RHA tests for device classes B and S for levels M, D, R, and H, or for device class M for levels M and D shall be performed through each level to determine at what levels the devices meet the RHA requirements. These RHA tests shall be performed for initial qualification and after design or process changes which may affect the RHA performance of the device.
 - b. End-point electrical parameters shall be as specified in table IIA herein.
 - c. Prior to total dose irradiation, each selected sample shall be assembled in its qualified package. It shall pass the specified group A electrical parameters in table I for subgroups specified in table IIA herein.
 - d. For device classes M, B, and S, the devices shall be subjected to radiation hardness assured tests as specified in MIL-M-38510 for RHA level being tested, and meet the postirradiation end-point electrical parameter limits as defined in table I at $T_A = 25^{\circ}C$ ±5 percent, after exposure.

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- e. Prior to and during total dose irradiation testing, the devices shall be biased to establish a worst case condition as specified in the radiation exposure circuit.
 - (1) Inputs tested high, V_{CC} = volts dc, R_{CC} = Ω +5%, V_{IN} = volts dc, R_{IN} = Ω +20%, and all outputs are open. (Values will be added when they become available.)
 - (2) Inputs tested low V_{CC} = volts dc, R_{CC} = Ω +5%, V_{IN} = 0.0 volts dc, and all outputs are open. (Values will be added when they become available.)
- f. For device classes M, B, and S subgroups 1 and 2 in table V, method 5005 of MIL-STD-883 shall be tested as appropriate for device construction.
- y. When specified in the purchase order or contract, a copy of the RHA delta limits shall be supplied.
- 5. PACKAGING
- 5.1 Packaging requirements. The requirements for packaging shall be in accordance with M1L-M-38510 for device classes M, B, and S and M1L-I-38535 for device classes Q and V.
 - 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.
- b.1.1 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.
 - 6.1.2 Substitutability. Device classes B and Q devices will replace device classes M devices.
- 6.2 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-481 using DD Form 1693, Engineering Change Proposal (Short Form).
- 6.3 Record of users. Military and industrial users shall inform Defense Electronics Supply Center when a system application requires configuration control and which SMD's are applicable to that system. DESC 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 DESC-ECS, telephone (513) 296-6022.
- 6.4 Comments. Comments on this drawing should be directed to DESC-ECS, Dayton, Ohio 45444, or telephone (513) 296-5375.
 - 6.5 Symbols, definitions, and functional descriptions.

GND	 Ground zero voltage potential.
ICC IIH ICC	 Quiescent supply current.
11L	 Input current low.
ŢĬĦ	 Input current high.
10	 Case temperature.
TA	 Ambient temperature.
ACC.	 Positive supply voltage.
V _{CC} V _{IC}	 Input clamp voltage.

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6.6 One part - one part number system. The one part - one part number system described below has been developed to allow for transitions between identical generic devices covered by the four major microcircuit requirements documents (MIL-M-38510, MIL-H-38534, MIL-I-38535, and 1.2.1 of MIL-STD-883) without the necessity for the generation of unique PIN's. The four military requirements documents represent different class levels, and previously when a device manufacturer upgraded military product from one class level to another, the benefits of the upgraded product were unavailable to the Original Equipment Manufacturer (OEM), that was contractually locked into the original unique PIN. By establishing a one part number system covering all four documents, the OEM can acquire to the highest class level available for a given generic device to meet system needs without modifying the original contract parts selection criteria.

Military documentation format	Example PIN under new system	Manufacturing source listing	Document listing
New MIL-M-38510 Military Detail Specifications (in the SMD format)	5962-XXXXXZZ(B or S)YY	QPL-38510 (Part 1 or 2)	MIL-BUL-103
New MIL-H-38534 Standardized Military Drawings	5962-XXXXXZZ(H or K)YY	QML -38534	MIL-BUL-103
New MIL-1-38535 Standardized Military Drawings	5962-XXXXXZZ(Q or V)YY	QML-38535	MIL-BUL-103
New 1.2.1 of MIL-STD-883 Standardized Military Drawings	5962-XXXXXZZ(M)YY	MIL-BUL-103	MIL-BUL-103

- b.7 Sources of supply.
- 6.7.1 Sources of supply for device classes B and S. Sources of supply for device classes B and S are listed in QPL-38510.
- 6.7.2 Sources of supply for device classes Q and V. Sources of supply for device classes Q and V are listed in QML-38535. The vendors listed in QML-38535 have submitted a certificate of compliance (see 3.6 herein) to DESC-ECS and have agreed to this drawing.
- 6.7.3 Approved sources of supply for device class M. Approved sources of supply for class M are listed in MIL-BUL-103. The vendors listed in MIL-BUL-103 have agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DESC-ECS.

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STANDARDIZED MILITARY DRAWING SOURCE APPROVAL BULLETIN

DATE: 31 OCT 1990

Approved sources of supply for SMD $\frac{5962-90889}{1}$ are listed below for immediate acquisition only and shall be added to MIL-BUL-103 during the next revision. MIL-BUL-103 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 DESC-ECS. This bulletin is superseded by the next dated revision of MIL-BUL-103.

 Standardized military drawing PIN	Vendor CAGE number	Vendor similar PIN <u>1</u> /
5962-9088901MCX	01295	SNJ 54BCT126J
 5962-9088901MDX 	01295	SNJ54BCT126W
5962-9088901M2X	01295	SNJ54BCT126FK

1/ 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

01295

Vendor name and address

Texas Instruments, Incorporated 13500 N. Central Expressway P.O. Box 655303

Dallas, TX 75265 Point of contact:

I-20 at FM 1788

Midland, TX 79711-0448

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