								F	REVISION	ONS										
LTR	DESCRIPTION					DA	TE (YR	-MO-D	A)		APPR	OVED								
LTR					DI	ESCRI	PTION						DA	TE (YR	-MO-D	A)		APPR	OVED	
REV				<u> </u>	<del></del> T				1											1
SHEET							-		<del> </del>										-	
REV				-																
SHEET					_															-
REV STATUS	J		l	REV																
OF SHEETS				SHEE	т		1	2	3	4	5	6	7	8	9	10	11	12		
PMIC N/A				PREF	AREC		/onnell		<b>.</b>		<b>L</b>	<b>I</b>	SE S		<u> </u>	<u> </u>		1	US	I
STA MICRO DRA		CUIT		CHEC	KED E	3Y aymon	d Monr	in		COLUMBUS, OHIO 43216										
THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS		,	APPROVED BY Raymond Monnin				MICROCIRCUIT, LINEAR, 4-CHANNEL DIFFERENTIAL, ANALOG MULTIPLEXER, MONOLITHIC SILICON													
AND AGEI DEPARTMEI	VT OF	DEFEN		DRAWING APPROVAL DATE 98-01-06																
AM	ISC N/A	4		REVIS	ION L	EVEL					ZE A		GE CC <b>6726</b> 8				5962	-9762	20	
:										SHE	ET		1	OF	12					

DSCC FORM 2233

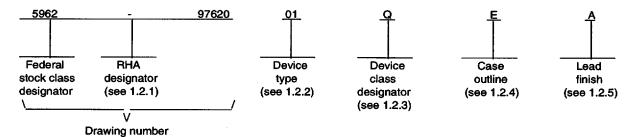
5962-E269-97

APR 97

<u>DISTRIBUTION STATEMENT A</u>. Approved for public release; distribution is unlimited.

### 1. SCOPE

- 1.1 <u>Scope</u>. This drawing documents two product assurance class levels consisting of high reliability (device classes Q and M) and space application (device class V). A choice of case outlines and lead finishes are available and are reflected in the Part or Identifying Number (PIN). When available, a choice of Radiation Hardness Assurance (RHA) levels are reflected in the PIN.
  - 1.2 PIN. The PIN is as shown in the following example:



- 1.2.1 RHA designator. Device classes Q and V RHA marked devices meet the MIL-PRF-38535 specified RHA levels and are marked with the appropriate RHA designator. Device class M RHA marked devices meet the MIL-PRF-38535, appendix A specified RHA levels and are marked with the appropriate RHA designator. A dash (-) indicates a non-RHA device.
  - 1.2.2 Device type(s). The device type(s) identify the circuit function as follows:

Device type Generic number Circuit function

HI-1828A 4-channel differential analog multiplexer

1.2.3 <u>Device class designator</u>. The device class designator is a single letter identifying the product assurance level as follows:

**Device class** 

Device requirements documentation

М

Vendor self-certification to the requirements for MIL-STD-883 compliant, non-JAN class level B microcircuits in accordance with MIL-PRF-38535,

appendix A

Q or V

Certification and qualification to MIL-PRF-38535

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

Outline letter	Descriptive designator	<u>Terminals</u>	Package style
E	GDIP1-T16 or CDIP2-T16	16	dual-in-line
2	CQCC1-N20	20	leadless chip carrier

1.2.5 <u>Lead finish</u>. The lead finish is as specified in MIL-PRF-38535 for device classes Q and V or MIL-PRF-38535, appendix A for device class M.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE <b>A</b>		5962-97620
		REVISION LEVEL	SHEET 2

1.3 Absolute maximum ratings. 1/			
Voltage between supply pins	•••••	40 V	
+V <sub>SUPPLY</sub> to ground			
-V <sub>SUPPLY</sub> to ground	***************************************	20 V	
V <sub>L</sub> to ground			
Analog input voltage:			
+Vs		+Vsuppry+2 V	
-Vs			
Digital input voltage:		1001727 4 7	
+V <u>=N</u> +V <sub>A</sub>		+Veneery	
-V <sub>EN</sub> -V <sub>A</sub>			
Continuous current, S or D	***************************************	20 mA	
Peak current, S or D (pulsed at 1 ms, 10% duty cycle ma	ν)	40 mA	
Junction temperature(T <sub>J</sub> )	,		
Thermal resistance, junction-to-case (θ <sub>JC</sub> ):	***************************************	+1/5-0	
case E		0500044	
Thermal resistance, junction to ambient (9)	••••••	25*0/٧٧	
Thermal resistance, junction-to-ambient (θ <sub>JA</sub> ):		0000011	
case E			
case 2	•••••••••	83°C/W	
Power dissipation (@ +75°C):		4.44.114	
case E			
case 2		1.20 W	
Power dissipation derating factor (above +75°C):			
case E			
case 2			
Storage temperature range			
Lead temperature (soldering 10 seconds)	••••••••••••••	72/30	
1.4 Recommended operating conditions.			
Operating ambient temperature range		-55°C to +125°C	
Operating supply voltage (± Vsupply)			
Analog input voltage (Vs)			
Logic low level (VAL)			
Logic high level (V <sub>AH</sub> )			
+5.0 V supply (V <sub>L</sub> )		+5 0 V	
RMS current. S or D max		11 mA	
	•••••		
2. APPLICABLE DOCUMENTS			
2.1 Government specification, standards, and handbooks. of this drawing to the extent specified herein. Unless otherwise issue of the Department of Defense Index of Specifications and solicitation.	specified, the issue	s of these documents are	those listed in the
SPECIFICATION			
DEPARTMENT OF DEFENSE			
MIL-PRF-38535 - Integrated Circuits, Manufacturing, (	Panaral Cassification	for	
mich in 200000 - integrated officials, Manufacturing, C	general Specification	ior.	
1/ Stresses above the absolute maximum rating may cause p maximum levels may degrade performance and affect relia	permanent damage to bility.	o the device. Extended op	peration at the
STANDARD	SIZE	<u> </u>	
	A		5962-97620
MICROCIRCUIT DRAWING	1 ~ 1		

DEFENSE SUPPLY CENTER COLUMBUS

COLUMBUS, OHIO 43216-5000

REVISION LEVEL

SHEET

3

#### **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 <u>Order of precedence</u>. 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 requirements for device classes Q and V shall be in accordance with MIL-PRF-38535 and as specified herein 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. The individual item requirements for device class M shall be in accordance with MIL-PRF-38535, appendix A for non-JAN class level B devices and as specified herein.
- 3.2 <u>Design, construction, and physical dimensions</u>. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38535 and herein for device classes Q and V or MIL-PRF-38535, appendix A and herein for device class M.
  - 3.2.1 Case outlines. The case outlines shall be in accordance with 1.2.4 herein.
  - 3.2.2 <u>Terminal connections</u>. The terminal connections shall be as specified on figure 1.
  - 3.2.3 Truth table. The truth table shall be as specified on figure 2.
- 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 ambient operating temperature range.
- 3.4 <u>Electrical test requirements</u>. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are defined in table I.

STANDARD MICROCIRCUIT DRAWING	SIZE <b>A</b>		5962-97620
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000		REVISION LEVEL	SHEET

DSCC FORM 2234

APR 97

- 3.5 Marking. 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. For packages where marking of 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. For RHA product using this option, the RHA designator shall still be marked. Marking for device classes Q and V shall be in accordance with MIL-PRF-38535. Marking for device class M shall be in accordance with MIL-PRF-38535, appendix A.
- 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.
- 3.6 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.
- 3.7 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.
- 3.8 Notification of change for device class M. For device class M, notification to DSCC-VA of change of product (see 6.2 herein) involving devices acquired to this drawing is required for any change as defined in MIL-STD-973.
- 3.9 Verification and review for device class M. For device class M, 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.
- 3.10 Microcircuit group assignment for device class M. Device class M devices covered by this drawing shall be in microcircuit group number 82 (see MIL-PRF-38535, appendix A).
  - 4. QUALITY ASSURANCE PROVISIONS
  - 4.1 Sampling and inspection. For device classes Q and V, sampling and inspection procedures shall be in accordance with MIL-PRF-38535 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. For device class M, sampling and inspection procedures shall be in accordance with MIL-PRF-38535, appendix A.
- 4.2 Screening. For device classes Q and V, screening shall be in accordance with MIL-PRF-38535, and shall be conducted on all devices prior to qualification and technology conformance inspection. 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.

# STANDARD MICROCIRCUIT DRAWING **DEFENSE SUPPLY CENTER COLUMBUS**

COLUMBUS, OHIO 43216-5000

SIZE 5962-97620 Α **REVISION LEVEL** SHEET 5

DSCC FORM 2234

**APR 97** 

	T	TABLE I. Electrical p	erromance o	narac	Tenstics				<b></b>
Test	Symbol	Conditions -55°C ≤ T <sub>A</sub> ≤+12 +V <sub>SUPPLY</sub> = +15 -V <sub>SUPPLY</sub> = -15 V, V <sub>L</sub> V <sub>EN</sub> = 0.4 V	5 V .= +5 V,		oup A groups	Device type	L	imits	Un
		unless otherwise s	pecified				Min	Max	
Input leakage current	lн	Measure inputs sequer connect all unused input	•	1,	2, 3	All	-1.0	1.0	JL/
	hL	Measure inputs sequer connect all unused inpu					-1.0	1.0	
Leakage current into	+ls	$V_S = +10V, V_D = -10V, V_S $	V <sub>EN</sub> = 4 V		1	Ali	-10	+10	n/
the source terminal of	(OFF)	All unused inputs = -10		2	2, 3		-50	+50	
an "OFF" switch	-ls	1	$V_S = -10V, V_D = +10V, V_{EN} = 4 V$		1	All	-10	+10	n/
	(OFF)	All unused inputs = +10	) V		, 3		-50	+50	
Leakage current into	+1 <sub>D</sub>	$V_D = +10 \text{ V}, V_{EN} = 4 \text{ V}$			1	Ali	-10	+10	l n/
the drain terminal of	(OFF)	All unused inputs = -10	V		., 3		-125	+125	
an "OFF" switch	-l <sub>D</sub>	$V_D = -10 \text{ V}, V_{EN} = 4 \text{ V}$			1	All	-10	+10	n/
l colone average frame	(OFF)	All unused inputs = +10			2, 3	A N	-125	+125	<b>!</b> .
Leakage current from an "ON" driver into	+l <sub>D</sub>	Vs = V <sub>D</sub> = +10 V, V <sub>EN</sub> =			1	All	-10	+10	n/
	(ON)	All unused inputs = -10 Vs = VD = -10 V, VEN = 9			2, 3	A II	-125	+125	
the switch (drain)	(ON)	All unused inputs = +10			1 . 3	All	-10 -125	+10	n/
Positive supply current	I(+)	V <sub>AL</sub> = 0.4 V, V <sub>AH</sub> = 4.0 V			2, 3	All	-125	+125	-
osiave supply culterit	(+)	V <sub>EN</sub> = 0.4 V		1,	2,3	All		0.5	m
Negative supply current	I(-)	V <sub>AL</sub> = 0.4 V, V <sub>AH</sub> = 4.0 V V <sub>EN</sub> = 0.4 V		1,	2, 3	All	-1.0		m.
Logic supply current	lı.	Val = 0.4 V, VaH = 4.0 V VEN = 0.4 V	<b>,</b>	1,	2, 3	All		1.0	m
Switch "ON" resistance	+Rps1	V <sub>S</sub> = 10 V, I <sub>D</sub> = 1 mA			1	All		400	Ω
		, -		2	, 3			500	
	-Rosi	V <sub>S</sub> = -10 V, I <sub>D</sub> = -1 mA			1	All		400	Ω
				2	, 3	l		500	1
Logic level voltage	VAL	Low digital input for all	DC tests	1,	2, 3	All		0.4	V
	VAH	High digital input for all	DC tests			Ì	4.0		
Break-Before-Make time delay	topen	$R_L = 200\Omega$ , $C_L = 12.5 p$ figure 3	F, see		9	Ali	5		ns
Propagation delay times	ta	$R_L = 10M\Omega$ , $C_L = 12.5$ g	oF		9	All		500	ns
		Address inputs to I/O ch times, see figure 3	nannel	10	, 11			1000	
Enable to I/O	ton(EN)	$R_L = 200\Omega$ , $G_L = 12.5$ p figure 3	F, see	!	9	All		500	ns
•	toff(EN)	$R_L = 200\Omega$ , $C_L = 12.5 p$ figure 3	F, see	10,	, 11			1000	
,					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
STANDARD MICROCIRCUIT DRAWING			SIZE A					5962-9	762
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000					REVISK	ON LEVEL		SHEET	6

Test	Symbol	Conditions $-55^{\circ}C \le T_{A} \le +125^{\circ}C$ $+V_{SUPPLY} = +15 V$ $-V_{SUPPLY} = -15 V, V_{L} = +5 V,$ $V_{EN} = 0.4 V$	Group A subgroups	Device Type	Lir	nits	Unit
	L	Unless otherwise specified			Min	Max	
Address capacitance	CA	V+ = V- = 0 V, f = 1 MHz <u>1</u> /	4	All		10	pF
Output switch capacitance	Cos	V+ = V- = 0 V, f = 1 MHz <u>1</u> /	4	All		25	pF
Input switch capacitance	Cıs	V+ = V- = 0 V, f = 1 MHz <u>1</u> /	4	Ali		10	pF
Charge transfer error	VCTE	$V_S = GND$ , $V_{GEN} = 0 V$ to $5 V 1/$	4	All		10	mV
Off isolation	Viso	$V_{EN} = 4.0 \text{ V}, R_L = 1 \text{k}\Omega, 1/$ $C_L = 15 \text{ pF}, V_S = 7 \text{ V RMS},$ $f = 100 \text{ kHz}$	4	All	-50		dB

<sup>1/</sup> These parameters are controlled by design or process parameters and are not directly tested. These parameters are characterized upon initial design release and upon design changes which would affect these characteristics.

STANDARD
MICROCIRCUIT DRAWING
CENOE OUDDLY OFFICE COLUMNS

DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000

SIZE <b>A</b>		5962-97620		
	REVISION LEVEL	SHEET		
		7		

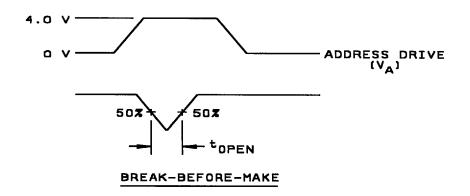
Device type	0	1			
Case outline	E	2			
Terminal number	Terminal symbol				
1 2	ADDRESS A <sub>1</sub> +5 V SUPPLY	NC ADDRESS A <sub>1</sub>			
3	ENABLE	+5 V SUPPLY			
4	OUT 5 THRU 8	ENABLE			
5	IN 8	OUT 5 THRU 8			
6	IN 7	NC			
7	IN 6	IN 8			
8	IN 5	IN 7			
9	IN 4	IN 6			
10	IN 3	IN 5			
11	IN 2	NC			
12	OUT 1 THRU 4	IN 4			
13	IN 1	IN 3			
14	+V <sub>SUPPLY</sub>	IN 2			
15	-Vsupply	OUT 1 THRU 4			
16	ADDRESS A₀	NC			
17		IN 1			
18		+Vsupply			
19		-Vsupply			
20		ADDRESS A₀			

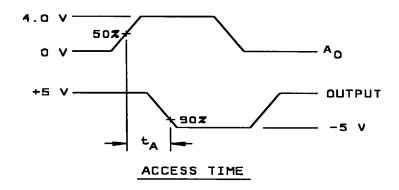
FIGURE 1. <u>Terminal connections</u>.

	ADDRESS	"ON"	
A <sub>1</sub>	Ao	EN_	CHANNELS
L	L	L	1 and 5
·L	Н	L	2 and 6
н	L	L	3 and 7
Н	Н	L	4 and 8
х	х	Н	NONE

FIGURE 2. Truth table.

STANDARD MICROCIRCUIT DRAWING	SIZE A		5962-97620
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000		REVISION LEVEL	SHEET 8





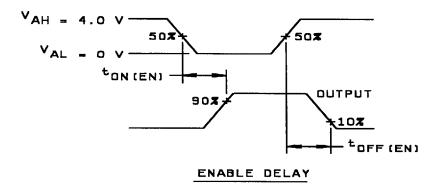


FIGURE 3. Timing waveforms.

STANDARD MICROCIRCUIT DRAWING	SIZE <b>A</b>		5962-97620
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000		REVISION LEVEL	SHEET 9

### 4.2.1 Additional criteria for device class M.

- 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 acquiring 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.
  - (2)  $T_A = +125^{\circ}C$ , minimum.
- b. Interim and final electrical test parameters shall be as specified in table II herein.

# 4.2.2 Additional criteria for device classes Q and V.

- a. The bum-in test duration, test condition and test temperature, or approved alternatives shall be as specified in the device manufacturer's QM plan in accordance with MIL-PRF-38535. The bum-in test circuit shall be maintained under document revision level control of the device manufacturer's Technology Review Board (TRB) in accordance with MIL-PRF-38535 and shall be made available to the acquiring or preparing 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.
- b. Interim and final electrical test parameters shall be as specified in table II herein.
- Additional screening for device class V beyond the requirements of device class Q shall be as specified in MIL-PRF-38535, appendix B or as modified in the device manufacturer's quality management plan.
- 4.3 Qualification inspection for device classes Q and V. Qualification inspection for device classes Q and V shall be in accordance with MIL-PRF-38535. Inspections to be performed shall be those specified in MIL-PRF-38535 and herein for groups A, B, C, D, and E inspections (see 4.4.1 through 4.4.4).
- 4.4 Conformance inspection. Technology conformance inspection for classes Q and V shall be in accordance with MIL-PRF-38535 and as specified in QM PLAN including groups A, B, C, D, and E inspections and as specified herein except where option 2 of MIL-PRF-38535 permits alternate in-line control testing. Quality conformance inspection for device class M shall be in accordance with MIL-PRF-38535, appendix A and as specified herein. Inspections to be performed for device class M 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 4.4.4).

## 4.4.1 Group A inspection.

- a. Tests shall be as specified in table II herein.
- b. Subgroups 5, 6, 7 and 8 in table I, method 5005 of MIL-STD-883 shall be omitted.
- c. Subgroup 4 parameters are controlled by design or process parameters and are not directly tested. These parameters are characterized upon initial design release and upon design changes which would affect these characteristics.
- 4.4.2 Group C inspection. The group C inspection end-point electrical parameters shall be as specified in table II herein.
- 4.4.2.1 Additional criteria for device class M. Steady-state life test conditions, method 1005 of MIL-STD-883:
  - a. 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 acquiring 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 1005 of MIL-STD-883.
  - b.  $T_A = +125$ °C, minimum.
  - c. Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

STANDARD MICROCIRCUIT DRAWING	SIZE A		5962-97620
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000		REVISION LEVEL	SHEET 10

DSCC FORM 2234

## TABLE II. Electrical test requirements.

Test requirements	Subgroups (in accordance with MIL-STD-883, method 5005, table I)	Subgroups (in accordance with MIL-PRF-38535, table III)	
	Device class M	Device class Q	Device class V
Interim electrical parameters (see 4.2)	1	1	1
Final electrical parameters (see 4.2)	1/ 1, 2, 3, 9, 10, 11	1/ 1, 2, 3, 9, 10, 11	<u>1</u> / 1, 2, 3, 9, 10, 11
Group A test requirements (see 4.4)	1, 2, 3, 4, 9, 10, 11 <u>2</u> /	1, 2, 3, 4, 9, 10, 11 <u>2</u> /	1, 2, 3, 4, 9, 10, 11 <u>2</u> /
Group C end-point electrical parameters (see 4.4)	1	1	1
Group D end-point electrical parameters (see 4.4)	1	1	1
Group E end-point electrical parameters (see 4.4)			

- 1/ PDA applies to subgroup 1.
- 2/ See 4.4.1c.
- 4.4.2.2 Additional criteria for device classes Q and V. The steady-state life test duration, test condition and test temperature, or approved alternatives shall be as specified in the device manufacturer's QM plan in accordance with MIL-PRF-38535. The test circuit shall be maintained under document revision level control by the device manufacturer's TRB in accordance with MIL-PRF-38535 and shall be made available to the acquiring or preparing 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 1005 of MIL-STD-883.
  - 4.4.3 Group D inspection. The group D inspection end-point electrical parameters shall be as specified in table II herein.
- 4.4.4 <u>Group E inspection</u>. Group E inspection is required only for parts intended to be marked as radiation hardness assured (see 3.5 herein).
  - a. End-point electrical parameters shall be as specified in table II herein.
  - b. For device classes Q and V, the devices or test vehicle shall be subjected to radiation hardness assured tests as specified in MIL-PRF-38535 for the RHA level being tested. For device class M, the devices shall be subjected to radiation hardness assured tests as specified in MIL-PRF-38535, appendix A for the RHA level being tested. All device classes must meet the postirradiation end-point electrical parameter limits as defined in table I at T<sub>A</sub> = +25°C ±5°C, after exposure, to the subgroups specified in table II herein.

STANDARD MICROCIRCUIT DRAWING	SIZE <b>A</b>		5962-97620
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000		REVISION LEVEL	SHEET 11

DSCC FORM 2234

**APR 97** 

### 5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38535 for device classes Q and V or MIL-PRF-38535, appendix A for device class M.

#### 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.
- 6.1.1 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 class Q devices will replace device class 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-973 using DD Form 1692, Engineering Change Proposal.
- 6.3 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.
- 6.4 Comments. Comments on this drawing should be directed to DSCC-VA, Columbus, Ohio 43216-5000, or telephone (614) 692-0674.
- 6.5 Abbreviations, symbols, and definitions. The abbreviations, symbols, and definitions used herein are defined in MIL-PRF-38535 and MIL-HDBK-1331.
  - 6.6 Sources of supply.
- 6.6.1 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 DSCC-VA and have agreed to this drawing.
- 6.6.2 Approved sources of supply for device class M. Approved sources of supply for class M are listed in MIL-HDBK-103. The vendors listed in MIL-HDBK-103 have agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DSCC-VA.

STANDARD MICROCIRCUIT DRAWING	SIZE <b>A</b>		5962-97620
DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000		REVISION LEVEL	SHEET 12

DSCC FORM 2234

### STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 98-01-06

Approved sources of supply for SMD 5962-97620 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 revision of MIL-HDBK-103 and QML-38535.

Standard microcircuit drawing PIN <u>1</u> /	Vendor CAGE number	Vendor similar PIN <u>2</u> /
5962-9762001Q2A	34371	HI4-1828A/883
5962-9762001QEA	34371	HI1-1828A/883

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

Vendor CAGE <u>number</u>

Vendor name and address

34371

Harris Semiconductor P.O. Box 883 Melboume, FL 32902-0883

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