

REVISIONS																			
LTR	DESCRIPTION										DATE (YR-MO-DA)				APPROVED				
A	Made technical changes in Table I. Editorial changes throughout. mlp										92-01-27				Monica L. Poelking				
B	Changes in accordance with NOR 5962-R268-92. tvn										92-08-04				Monica L. Poelking				
C	Add package CDFP4-F16. Use new boilerplate. ljs										98-02-04				Raymond Monnin				
D	Figure 4 modified to be consistent with Table I. ljs										98-08-12				Raymond Monnin				
E	Add V _{CC} positive supply voltage specifications to para. 1.3 and 1.4. ljs										98-10-20				Raymond Monnin				
<p>The original first page of this drawing has been replaced.</p>																			
REV																			
SHEET																			
REV	E																		
SHEET	15																		
REV STATUS				REV		E	E	E	E	E	E	E	E	E	E	E	E	E	E
OF SHEETS				SHEET		1	2	3	4	5	6	7	8	9	10	11	12	13	14
PMIC N/A				PREPARED BY David Queenan						DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216									
STANDARD MICROCIRCUIT DRAWING THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE AMSC N/A				CHECKED BY D. A. Diconzo															
				APPROVED BY Robert P. Evans															
				DRAWING APPROVAL DATE 87-11-24															
				REVISION LEVEL E						SIZE A	CAGE CODE 67268	5962-87560							
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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 PIN is as shown in the following example:

<u>5962-87560</u>	<u>01</u>	<u>E</u>	<u>X</u>
*	*	*	*
*	*	*	*
*	*	*	*
*	*	*	*
Drawing number	Device type (see 1.2.1)	Case outline (see 1.2.2)	Lead finish (see 1.2.3)

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

<u>Device type</u>	<u>Generic number</u>	<u>Circuit function</u>
01	10H524	Quad TTL-to-ECL translator

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

<u>Outline letter</u>	<u>Descriptive designator</u>	<u>Terminals</u>	<u>Package style</u>
E	GDIP1-T16 or CDIP2-T16	16	Dual -in-line
F	GDIP2-F16 or CDFP3-F16	16	Flat package
X	CDFP4-F16	16	Flat-package
2	CQCC1-N20	20	Square chip carrier

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

1.3 Absolute maximum ratings.

Positive supply voltage range (V_{CC})	0.0 V dc to 7.0 V dc
Negative supply voltage range (V_{EE})	-8.0 V dc to 0.0 V dc
Total supply voltage range ($V_{CC} + V_{EE} $)	12 V dc
Input voltage range.....	-5.2 V dc to 0.0 V dc
Storage temperature range.....	-65EC to +165EC
Lead temperature (soldering, 10 seconds).....	+300EC
Junction temperature (T_J)	+165EC
Maximum power dissipation (P_D)	530 mW
Thermal resistance, junction-to-case (θ_{JC}).....	See MIL-STD-1835

1.4 Recommended operating conditions.

Positive supply voltage range (V_{CC})	4.5 V dc minimum to 5.5 V dc maximum
Negative supply voltage range (V_{EE}).....	-5.46 V dc minimum to -4.94 V dc maximum
Case operating temperature range (T_C).....	-55EC to +125EC
Minimum high level input voltage (V_{IH}):	
$T_A = +25EC$	-0.780 V dc
$T_A = +125EC$	-0.650 V dc
$T_A = -55EC$	-0.840 V dc
Maximum low level input voltage (V_{IL})	-1.950 V dc

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2. APPLICABLE DOCUMENTS

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

SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-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 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 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 manufacturers 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 form, fit, or function of the device. 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.

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

3.2.2 Terminal connections. 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.

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3.2.4 Logic diagram. The logic diagram shall be as specified on figure 3.

3.2.5 Test circuit and switching waveforms. The test circuit and switching waveforms shall be as specified on figure 4.

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 case operating temperature range.

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

3.5 Marking. 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 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.

3.6 Certificate of compliance. 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 herein). The certificate of compliance submitted to DSCC-VA prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-PRF-38535, appendix A and the requirements herein.

3.7 Certificate of conformance. A certificate of conformance as required in MIL-PRF-38535, appendix A shall be provided with each lot of microcircuits delivered to this drawing.

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

3.9 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.

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 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 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.

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TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions -55°C # T _C #+125°C unless otherwise specified	Group A subgroups	Limits		Unit		
				Min	Max			
Cases E, F, 2 and X		Quiescent tests 1/						
			V _R	V _F				
High level output voltage	V _{OH}	Outputs terminated through 100Ω to -2 V	2.4	0.4	1	-1.010	-0.780	V
			2.4	0.4	2	-0.860	-0.650	
			2.4	0.4	3	-1.060	-0.840	
Low level output voltage	V _{OL}	V _{CC} = +5.0 V V _{EE} = -5.2 V GND = 0.0 V 2/	2.4	0.4	1	-1.950	-1.580	V
			2.4	0.4	2	-1.950	-1.565	
			2.4	0.4	3	-1.950	-1.610	
High level threshold output voltage	V _{OHA}		V _{IHT}	V _{ILT}				V
			2.0	0.8	1	-1.010	-0.780	
			2.0	0.8	2	-0.860	-0.650	
Low level threshold output voltage	V _{OLA}		2.0	0.8	3	-1.060	-0.840	V
			2.0	0.8	1	-1.950	-1.580	
			2.0	0.8	2	-1.950	-1.565	
Input clamping voltage	V _D	GND = 0.0 V I _D = -10 mA V _{CC} = +5.0 V V _{EE} = -5.46 V	A _{IN} , B _{IN} , C _{IN} D _{IN}		1, 2, 3		-1.5	V
		GND = 0.0 V I _D = -20 mA V _{CC} = +5.0 V V _{EE} = -5.46 V	Strobe		1, 2, 3		-1.5	V
Input breakdown current	I _{IN}	B _{VIN} = 5.5 V V _{EE} = -5.46 V V _{CC} = +5.0 V GND = 0.0 V			1, 2, 3		1.0	mA
Forward bias input current	I _{INF}	V _{CC} = +5.0 V V _F = 0.4 V V _{EE} = -4.94 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}		1, 2, 3		-3.2	mA

See footnotes at end of table.

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TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions -55°C # T _C #+125°C unless otherwise specified		Group A subgroups	Limits		Unit
					Min	Max	
Cases E, F, 2 and X Quiescent tests - continued1/							
Forward bias input current	I _{INF}	V _{CC} = +5.0 V V _R = 2.4 V V _{EE} = -4.94 V GND = 0.0 V	Strobe	1, 2, 3		-12.8	mA
Reverse bias input current	I _R	V _{CC} = +5.0 V V _R = 2.4 V V _{EE} = -5.46 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} , D _{IN}	1, 2, 3		50	μA
		V _{CC} = +5.0 V V _F = 0.4 V V _{EE} = -5.46 V GND = 0.0 V	Strobe	1, 2, 3		200	μA
Supply current negative	I _{EE} 4/	V _{EE} = -5.46 V V _{CC} = +5.0 V GND = 0.0 V		2,3	-72		mA
				1	-66		mA
Supply current high	I _{CCH}	All inputs = 2.4 V V _{CC} = +5.0 V V _{EE} = -5.46 V GND = 0.0 V		1, 3		16	mA
				2		18	mA
Supply current low	I _{CCL}	Strobe = 0.4 V V _{CC} = +5.0 V V _{EE} = -5.46 V GND = 0.0 V		1, 3		25	mA
				2		25	mA
Functional tests		See 4.3.1c		7			

Cases E, F and X

DC rapid tests ^{3/}

Test	Symbol	Conditions	V _R	V _F				Unit
High level output voltage	V _{OH}	Outputs terminated through 100Ω to -2 V	2.4	0.4	1	-1.028	-0.800	V
			2.4	0.4	2	-0.879	-0.671	
			2.4	0.4	3	-1.079	-0.861	
Low level output voltage	V _{OL}	V _{CC} = +5.0 V V _{EE} = -5.2 V GND = 0.0 V ^{2/}	2.4	0.4	1	-1.950	-1.586	V
			2.4	0.4	2	-1.950	-1.571	
			2.4	0.4	3	-1.950	-1.616	

See footnotes at end of table.

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TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions -55°C # T _C #+125°C unless otherwise specified	Group A subgroups	Limits		Unit		
				Min	Max			
Cases E, F and X DC rapid tests - continued 3/								
High level threshold output voltage	V _{OHA}	Outputs terminated through 100Ω to -2 V	V _{IHT}	V _{ILT}	1 2 3	-1.028 -0.879 -1.079	-0.800 -0.671 -0.861	V
			2.0	0.8				
			2.0	0.8				
Low level threshold output voltage	V _{OLA}	V _{CC} = +5.0 V	2.0	0.8	1	-1.950	-1.586	V
		V _{EE} = -5.2 V	2.0	0.8	2	-1.950	-1.571	
		GND = 0.0 V 2/	2.0	0.8	3	-1.950	-1.616	
Input clamping voltage	V _D	V _{CC} = +5.0 V I _D = -10 mA V _{EE} = -5.46 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}		1, 2, 3		-1.5	V
		V _{CC} = +5.0 V I _D = -20 mA V _{EE} = -5.46 V GND = 0.0 V	Strobe		1, 2, 3		-1.5	V
Input breakdown current	I _{IN}	B _{VIN} = 5.5 V V _{CC} = +5.0 V V _{EE} = -5.46 V GND = 0.0 V	1, 2, 3				1.0	mA
Forward bias input current	I _{INF}	V _{CC} = +5.0 V V _F = 0.4 V V _{EE} = -4.94 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}		1, 2, 3		-3.2	mA
		V _{CC} = +5.0 V V _R = 2.4 V V _{EE} = -4.94 V GND = 0.0 V	Strobe		1, 2, 3		-12.8	mA
Reverse bias input current	I _R	V _{CC} = +5.0 V V _R = 2.4 V V _{EE} = -5.46 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}		1, 2, 3		50	μA
		V _{CC} = +5.0 V V _F = 0.4 V V _{EE} = -5.46 V GND = 0.0 V	Strobe		1, 2, 3		200	μA

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C # T _C # +125°C unless otherwise specified	Group A subgroups	Limits		Unit
				Min	Max	
Cases E, F and X DC rapid tests - Continued 3/						
Supply current negative	I _{EE} 4/	V _{EE} = -5.46 V V _{CC} = +5.0 V GND = 0.0 V	2, 3	-71		mA
			1	-65		mA
Supply current high	I _{CCH}	V _{CC} = +5.0 V All inputs = 2.4 V V _{EE} = -5.46 V GND = 0.0 V	1, 3		16	mA
			2		18	mA
Supply current low	I _{CCH}	V _{CC} = +5.0 V Strobe = 0.4 V V _{EE} = -5.46 V GND = 0.0 V	1, 3		25	mA
			2		25	mA
Functional tests		See 4.3.1c	7			

Case 2

DC rapid tests 3/

Test	Symbol	Conditions	V _R	V _F				Unit
High level output voltage	V _{OH}	Outputs terminated through 100Ω to -2 V.	2.4	0.4	1	-1.034	-0.806	V
			2.4	0.4	2	-0.886	-0.678	
			2.4	0.4	3	-1.086	-0.868	
Low level output voltage	V _{OL}	V _{CC} = +5.0 V V _{EE} = -5.2 V GND = 0.0 V 2/	2.4	0.4	1	-1.950	-1.588	V
			2.4	0.4	2	-1.950	-1.574	
			2.4	0.4	3	-1.950	-1.619	
High level threshold output voltage	V _{OHA}		V _{IHT}	V _{ILT}				V
Low level threshold output voltage	V _{OLA}		2.0	0.8	1	-1.034	-0.806	V
			2.0	0.8	2	-0.886	-0.678	
			2.0	0.8	3	-1.086	-0.868	
			2.0	0.8	1	-1.950	-1.588	V
			2.0	0.8	2	-1.950	-1.574	
			2.0	0.8	3	-1.950	-1.619	

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C # T _C #+125°C unless otherwise specified		Group A subgroups	Limits		Unit
					Min	Max	
Case 2 DC rapid tests - Continued 3/							
Input clamping voltage	V _D	V _{CC} = +5.0 V I _D = -10 mA V _{EE} = -5.46 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}	1, 2, 3		-1.5	V
		V _{CC} = +5.0 V I _D = -20 mA V _{EE} = -5.46 V GND = 0.0 V	Strobe	1, 2, 3		-1.5	V
Input breakdown current	I _{IN}	B _{VIN} = 5.5 V V _{EE} = -5.46 V V _{CC} = +5.0 V GND = 0.0 V		1, 2, 3		1.0	mA
Forward bias input current	I _{INF}	V _{CC} = +5.0 V V _F = 0.4 V V _{EE} = -4.94 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}	1, 2, 3		-3.2	mA
		V _{CC} = +5.0 V V _R = 2.4 V V _{EE} = -4.94 V GND = 0.0 V	Strobe	1, 2, 3		-12.8	mA
Reverse bias input current	I _R	V _{CC} = +5.0 V V _R = 2.4 V V _{EE} = -5.46 V GND = 0.0 V	A _{IN} , B _{IN} , C _{IN} D _{IN}	1, 2, 3		50	μA
		V _{CC} = +5.0 V V _R = 0.4 V V _{EE} = -5.46 V GND = 0.0 V	Strobe	1, 2, 3		200	μA
Supply current negative	I _{EE} 4/	V _{EE} = -5.46 V V _{CC} = +5.0 V GND = 0.0 V		2, 3	-71		mA
				1	-65		mA

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C # T _C #+125°C unless otherwise specified	Group A subgroups	Limits		Unit
				Min	Max	
Case 2 DC Rapid tests - continued 3/						
Supply current high	I _{CC} H	V _{CC} = +5.0 V All inputs = 2.4 V V _{EE} = -5.46 V GND = 0.0 V	1, 3		16	mA
			2		18	mA
Supply current low	I _{CC} L	V _{CC} = +5.0 V Strobe = 0.4 V V _{EE} = -5.46 V GND = 0.0 V	1, 3		25	mA
			2		25	mA
Functional tests		See 4.3.1c	7			

Cases E, F, X and 2

AC tests

Transition time	t _{TLH}	V _{EE} = -2.94 V V _{CC} = +7.0 V C _L ≤ 5 pF	9	0.45	2.0	ns
	t _{THL}		10	0.5	2.5	ns
			11	0.4	1.8	ns
Propagation delay time, A, B, C, or D input to A, B, C, or D output	t _{PHH1}	Load all outputs through 100Ω to ground. GND = +2.0 V See figure 4	9	0.55	2.4	ns
	t _{PLL1}		10	0.50	3.5	ns
	t _{PHL1}		11	0.50	2.1	ns
Propagation delay time, strobe to output	t _{PLH1}					
	t _{PHH2}		9	0.55	2.5	ns
	t _{PLL2}		10	0.85	3.6	ns
	t _{PHL2}		11	0.55	2.0	ns
	t _{PLH2}					
Functional tests		See 4.3.1c	7			

1/ The quiescent limits are determined after a device has reached thermal equilibrium. This is defined as the reading taken with the device in a socket with ≥ 500 LFPM of +25° C, +125° C or -55° C (as applicable) air blowing on the unit in a transverse direction with power applied for at least 4 minutes before the reading is taken. This method was used for theoretical limit establishment only. All devices shall be tested to the delta V (rapid test) conditions specified herein. The rapid test method is an equivalent method of testing quiescent conditions.

2/ The high and low level output current varies with temperature and shall be calculated using the following formulas:
 $I_{OH} = (-2 \text{ V} - V_{OH})/100\Omega$ and $I_{OL} = (-2 \text{ V} - V_{OL})/100\Omega$.

3/ The dc rapid test forcing functions and limits are used for all dc testing. These limits are determined for each device type based on the power dissipation and package type. The rapid test (delta V) limits and forcing functions are skewed allowing rapid testing to be performed at standard temperatures without the addition of delta T's.

4/ I_{EE} limits, although specified in the Min column, shall not be exceeded in magnitude, as a maximum value.

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Case outlines	E	F, X	2
Terminal number	Terminal symbol		
1	B _{OUT}	\bar{D}_{OUT}	NC
2	A _{OUT}	D _{OUT}	B _{OUT}
3	\bar{B}_{OUT}	C _{OUT}	A _{OUT}
4	\bar{A}_{OUT}	GND	\bar{B}_{OUT}
5	A _{IN}	B _{OUT}	\bar{A}_{OUT}
6	STROBE	A _{OUT}	NC
7	B _{IN}	\bar{B}_{OUT}	A _{IN}
8	V _{EE}	\bar{A}_{OUT}	STROBE
9	V _{CC}	A _{IN}	B _{IN}
10	C _{IN}	STROBE	V _{EE}
11	D _{IN}	B _{IN}	NC
12	\bar{C}_{OUT}	V _{EE}	V _{CC}
13	\bar{D}_{OUT}	V _{CC}	C _{IN}
14	D _{OUT}	C _{IN}	D _{IN}
15	C _{OUT}	D _{IN}	\bar{C}_{OUT}
16	GND	\bar{C}_{OUT}	NC
17	---	---	\bar{D}_{OUT}
18	---	---	D _{OUT}
19	---	---	C _{OUT}
20	---	---	GND

NC = No connection

FIGURE 1. Terminal connections.

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Strobe	Input	OUT	$\overline{\text{OUT}}$
L	X	L	H
H	L	L	H
H	H	H	L

H = High level
 L = Low level
 X = Irrelevant

FIGURE 2. Truth table.

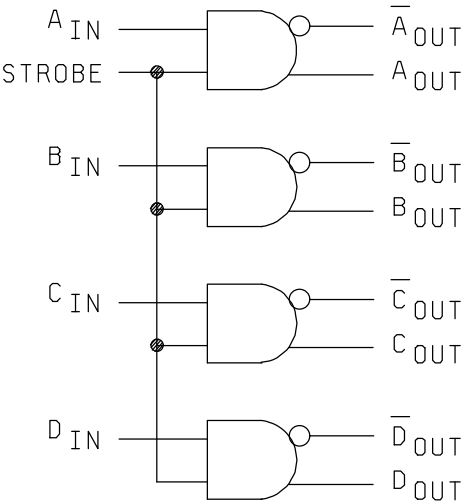
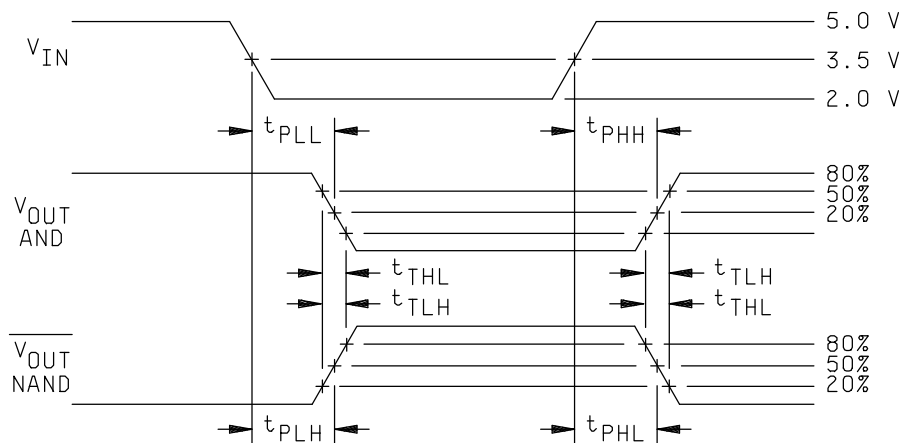
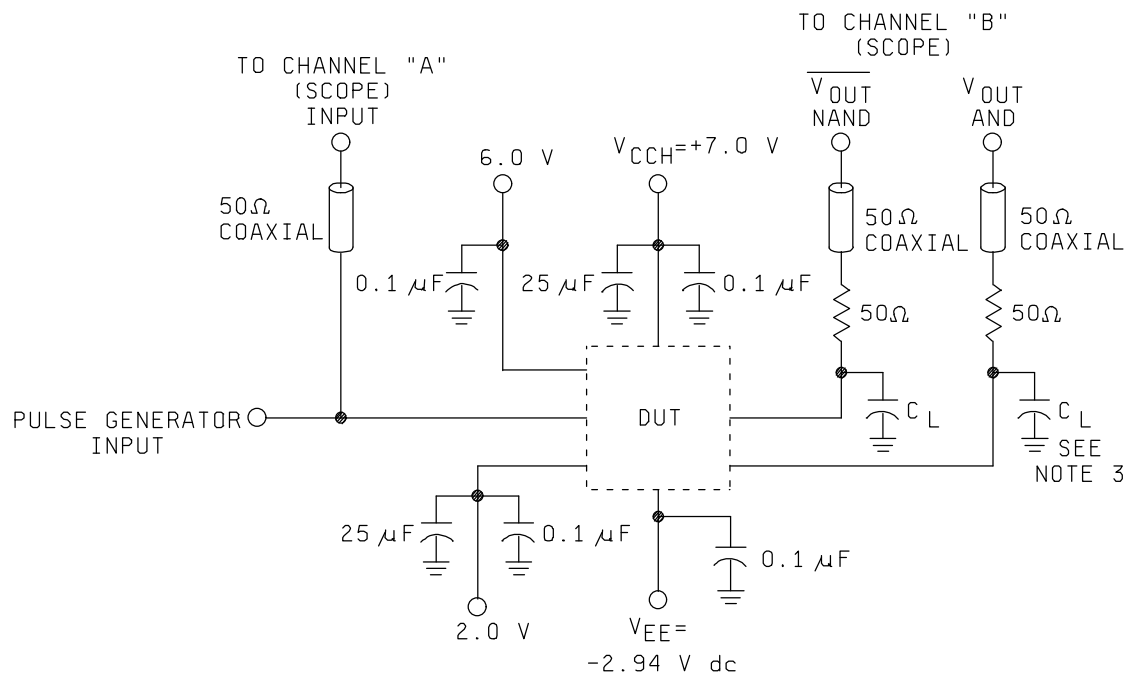


FIGURE 3. Logic diagram.

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- NOTES: 1. 50 Ω to ground located in each scope channel input.
 2. All input and output cables to the scope are equal lengths of 50 Ω coaxial cable.
 3. C_L (test jig) ≤ 5 pF.
 4. Unused outputs connected to 100 Ω resistor to ground.
 5. Pulse generator characteristics:
 PRR = 1 MHz, t_r and $t_f = 2.0$ ns ± 0.2 ns (20% to 80%), duty cycle = 50%.

FIGURE 4. Test circuit and switching waveforms.

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TABLE II. Electrical test requirements.

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

* PDA applies to subgroup 1 and 7.

4.3.1 Group A inspection.

- a. Tests shall be as specified in table II herein.
- b. Subgroups 4, 5, 6, 8A and 8B in table I, method 5005 of MIL-STD-883 shall be omitted.
- c. Subgroup 7 shall include verification of the truth table specified on figure 2 herein.

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 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.
 - (2) $T_A = +125^{\circ}\text{C}$, minimum.
 - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

5. PACKAGING

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

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6. NOTES

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

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

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

6.4 Record of users. Military and industrial users shall inform Defense Supply Center Columbus when a system application requires configuration control and the applicable SMD. DSCC will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronics 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 sources of supply. Approved sources of supply 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.

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STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 98-10-20

Approved sources of supply for SMD 5962-87560 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>
5962-8756001EA	0EU86	AS10H524C16/883C
5962-8756001FA	<u>3/</u>	10H524/BFAJC
5962-87560012A	0EU86	AS10H524EC20/883C
5962-8756001XA	0EU86	AS10H524F16/883C

- 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.
- 3/ No longer available from the approved source of supply

Vendor CAGE
number

0EU86

Vendor name
and address

Austin Semiconductor Inc.
8701 Cross Park Dr.
Austin, TX 78754-4566

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