

INCH-POUND

MIL-M-38510/338B
10 February 2004
SUPERSEDING
MIL-M-38510/338A
22 May 1990

MILITARY SPECIFICATION

MICROCIRCUITS, DIGITAL, BIPOLAR, ADVANCED SCHOTTKY TTL, ARITHMETIC LOGIC UNITS, MONOLITHIC SILICON

Reactivated after 10 February 2004 and may be used for either new or existing design acquisition.

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product herein shall consist of this specification sheet and MIL-PRF 38535

1. SCOPE

1.1 Scope. This specification covers the detail requirements for monolithic silicon, advanced Schottky TTL, arithmetic logic units. Two product assurance classes and a choice of case outlines and lead finishes are provided for each type and are reflected in the complete part number. For this product, the requirements of MIL-M-38510 have been superseded by MIL-PRF-38535, (see 6.3).

1.2 Part or Identifying Number (PIN). The PIN is in accordance with MIL-PRF-38535, and as specified herein.

1.2.1 Device types. The device types are as follows:

<u>Device type</u>	<u>Circuit</u>
01	4-bit arithmetic logic unit
02	Carry look-a-head generator
03	4-bit arithmetic logic unit
04	4-bit arithmetic logic unit

1.2.2 Device class. The device class is the product assurance level as defined in MIL-PRF-38535.

1.2.3 Case outlines. The case outlines 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	GDFP2-F16 or CDFP3-F16	16	Flat pack
J	GDIP1-T24 or CDIP2-T-24	24	Dual-in-line
K	GDFP2-F24 or CDFP3-F24	24	Flat pack
L	GDIP3-T24 or CDIP4-T24	24	Dual-in-line
R	GDIP1-T20 or CDIP2-T20	20	Dual-in-line
S	GDFP2-F20 or CDFP3-F20	20	Flat pack
3	CQCC1-N28	28	Square leadless chip carrier
2	CQCC1-N20	20	Square leadless chip carrier

Comments, suggestions, or questions on this document should be addressed to: Commander, Defense Supply Center Columbus, ATTN: DSCC-VAS, 3990 East Broad St., Columbus, OH 43216-5000, or emailed to bipolar@dscclia.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at www.dodssp.daps.mil.

1.3 Absolute maximum ratings.

Supply voltage range	-0.5 V dc to +7.0 V dc
Input voltage range	-1.2 V dc at -18 mA to +7.0 V dc
Storage temperature range	-65° to +150°C
Maximum power dissipation, per device (P_D) <u>1/</u>	
Device type 01	358 mW
Device type 02	198 mW
Device type 03	490 mW
Device type 04	446 mW
Lead temperature (soldering, 10 seconds)	+300°C
Thermal resistance, junction to case (θ_{JC})	(See MIL-STD-1835)
Junction temperature (T_J) <u>2/</u>	175°C

1.4 Recommended operating conditions.

Supply voltage (V_{CC})	4.5 V minimum to 5.5 V maximum
Minimum high level input voltage (V_{IH})	2.0 V dc
Maximum low level input voltage (V_{IL})	0.8 V dc
Normalized fanout (each output) <u>3/</u> :	
Low level	33 maximum
High level	50 maximum
Case operating temperature range (T_C)	-55° to +125°C

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications and Standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-PRF-38535 - Integrated Circuits (Microcircuits) Manufacturing, General Specification for.

DEPARTMENT OF DEFENSE STANDARDS

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

(Copies of these documents are available online at <http://assist.daps.dla.mil/quicksearch/> or www.dodssp.daps.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

1/ Must withstand the added P_D due to short-circuit test (e.g., I_{OS}).

2/ Maximum junction temperature shall not be exceeded except in accordance with allowable short duration burn-in screening condition in accordance with MIL-PRF-38535.

3/ The device shall fanout in both high and low levels to specified number of inputs of the same device type as that being tested.

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Qualification. Microcircuits furnished under this specification shall be products that are manufactured by a manufacturer authorized by the qualifying activity for listing on the applicable qualified manufacturers list before contract award (see 4.3 and 6.4).

3.2 Item requirements. The individual item requirements 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.

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

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

3.3.2 Truth tables. The truth tables shall be as specified on figure 2.

3.3.3 Logic diagrams. The logic diagrams shall be as specified on figure 3.

3.3.4 Schematic circuits. The schematic circuits shall be maintained by the manufacturer and made available to the qualifying activity and the preparing activity upon request.

3.3.3 Case outlines. The case outlines shall be as specified in 1.2.3.

3.4 Lead material and finish. The lead material and finish shall be in accordance with MIL-PRF-38535 (see 6.6).

3.5 Electrical performance characteristics. The electrical performance characteristics are as specified in table I, and apply over the full recommended case operating temperature range, unless otherwise specified.

3.6 Electrical test requirements. The electrical test requirements for each device class shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table III.

3.7 Marking. Marking shall be in accordance with MIL-PRF-38535.

3.8 Microcircuit group assignment. The devices covered by this specification shall be in microcircuit group number 11 (see MIL-PRF-38535, appendix A).

4. VERIFICATION

4.1 Sampling and inspection. 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 effect the form, fit, or function as described herein.

4.2 Screening. Screening shall be in accordance with MIL-PRF-38535 and shall be conducted on all devices prior to qualification and quality conformance inspection. The following additional criteria shall apply:

- a. The burn-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 burn-in test circuit shall be maintained under document control by 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, except interim electrical parameters test prior to burn-in is optional at the discretion of the manufacturer.
- c. Additional screening for space level product shall be as specified in MIL-PRF-38535.

4.3 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-38535.

4.4 Technology Conformance inspection (TCI). Technology conformance inspection shall be in accordance with MIL-PRF-38535 and herein for groups A, B, C, and D inspections (see 4.4.1 through 4.4.4).

4.4.1 Group A inspection. Group A inspection shall be in accordance with table III of MIL-PRF-38535 and as follows:

- a. Tests shall be as specified in table II herein.
- b. Subgroups 4, 5, and 6 shall be omitted.

4.4.2 Group B inspection. Group B inspection shall be in accordance with table II of MIL-PRF-38535.

4.4.3 Group C inspection. Group C inspection shall be in accordance with table IV of MIL-PRF-38535 and as follows:

- a. End-point electrical parameters shall be as specified in table II herein.
- b. 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 burn-in test circuit shall be maintained under document control by 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 1005 of MIL-STD-883.

4.4.4 Group D inspection. Group D inspection shall be in accordance with table V of MIL-PRF-38535. End-point electrical parameters shall be as specified in table II herein.

4.5 Methods of inspection. Methods of inspection shall be specified as follows:

4.5.1 Voltage and current. All voltages given are referenced to the microcircuit ground terminal. Currents given are conventional and positive when flowing into the referenced terminal.

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
High level output voltage	V _{OH}	V _{CC} = 4.5 V, V _{IL} = 0.8 V, I _{OH} = -1.0 mA, V _{IH} = 2.0 V	All	2.5		V
Low level output voltage	V _{OL}	V _{CC} = 4.5 V, I _{OH} = 20 mA, V _{IH} = 2.0 V, V _{IL} = 0.8 V	All		0.5	V
Input clamp voltage	V _{IC}	V _{CC} = 4.5 V, I _{IN} = -18 mA, T _C = +25°C	All		-1.2	V
High level input current	I _{IH1}	V _{CC} = 5.5 V, V _{IN} = 2.7 V	All		20	μA
	I _{IH2}	V _{CC} = 5.5 V, V _{IN} = 7.0 V	All		100	μA
Low level input current	I _{IL1}	V _{CC} = 5.5 V, V _{IL} = 0.5 V	01	-0.03	-0.6	mA
			02	-0.12	-1.2	
			03, 04	-0.12	-0.6	
	I _{IL2}		01	-0.09	-2.4	mA
			01, 02, 03	-0.10	-2.4	
	I _{IL3}		01	-0.12	-3.6	mA
			02	-0.48	-3.6	
	I _{IL4}		01	-0.15	-4.8	mA
			02	-0.6	-4.8	
	I _{IL5}		02	-3.5	-8.4	mA
I _{IL6}	02	-4.0	-9.6	mA		
Short circuit output current <u>1/</u>	I _{OS}	V _{CC} = 5.5 V, V _{OS} = 0 V	All	-60	-150	mA
Output drive current	I _{OD}	V _{CC} = 4.5 V, V _{OUT} = 2.5 V V _{IN} = 5.5 V	All	60		mA
Supply current	I _{CCL}	V _{CC} = 5.5 V	01		65	mA
			02		36	
	I _{CCH}		01		65	mA
			02		28	
	I _{CC}		03		89	mA
			04		89	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Propagation delay time low to high level, <u>2/</u>		V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4				
$\bar{A}_i$ or $\bar{B}_i$ to $\bar{F}_i$ mode = sum	t _{PLH1}		01	3.0	14.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = sum	t _{PLH2}		01	3.0	16.5	ns
$\bar{A}$ or $\bar{B}$ to C _n + 4 mode = sum	t _{PLH3}		01	5.0	17.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = sum	t _{PLH4}		01	2.5	9.5	ns
C _n to $\bar{F}$	t _{PLH5}		01	2.5	16.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = sum	t _{PLH6}		01	2.5	10.0	ns
C _n to C _n + 4	t _{PLH7}		01	3.0	11.5	ns
$\bar{A}_i$ or $\bar{B}_i$ to $\bar{F}_i$ mode = dif	t _{PLH8}		01	3.0	17.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{F}$ mode = logic	t _{PLH9}		01	3.0	14.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = dif	t _{PLH10}		01	3.0	17.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = dif	t _{PLH11}		01	2.5	11.5	ns
$\bar{A}$ or $\bar{B}$ to C _n + 4 mode = dif	t _{PLH12}		01	5.0	18.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = dif	t _{PLH13}		01	2.5	11.0	ns
$\bar{A}$ or $\bar{B}$ to A = B mode = dif	t _{PLH14}		01	8.0	35.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions $-55^{\circ}\text{C} \leq T_C \leq +125^{\circ}\text{C}$	Device type	Limits		Unit
				Min	Max	
Cn to Cn + x, Cn + 4, Cn + z	t_{PLH1}	$V_{CC} = 5.0 \text{ V}$, $C_L = 50 \text{ pF} \pm 10\%$, See figure 4	02	3.0	11.5	ns
$\bar{P} 0$, $\bar{P} 1$ or $\bar{P} 2$ to Cn + x, Cn + y, or Cn + z	t_{PLH2}		02	2.0	10.5	ns
$\bar{G} 0$, $\bar{G} 1$ or $\bar{G} 2$ to Cn + x, Cn + y, or Cn + z	t_{PLH3}		02	2.0	11.0	ns
$\bar{P} 1$, $\bar{P} 2$ or $\bar{P} 3$ to $\bar{G}$	t_{PLH4}		02	2.0	12.0	ns
$\bar{G} n$ to $\bar{G}$	t_{PLH5}		02	2.5	12.0	ns
$\bar{P} n$ to $\bar{P}$	t_{PLH6}		02	2.5	10.0	ns
Ci to Fi	t_{PLH1}		03	2.5	15.0	ns
Ai to Fi	t_{PLH2}		03	3.0	17.0	ns
Bi to Fi	t_{PLH3}		03	3.0	17.0	ns
Si to Fi	t_{PLH4}		03	3.0	21.0	ns
Ai to $\bar{G}$	t_{PLH5}		03	3.0	13.5	ns
Bi to $\bar{G}$	t_{PLH6}		03	3.0	13.0	ns
Ai to $\bar{P}$	t_{PLH7}		03	2.0	14.0	ns
Bi to $\bar{P}$	t_{PLH8}		03	2.0	14.0	ns
Si to $\bar{G}$	t_{PLH9}		03	3.0	17.0	ns
Si to $\bar{P}$	t_{PLH10}		03	3.0	16.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Cn to Fi	t _{PLH1}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	04	3.0	15.0	ns
Ai to Fi	t _{PLH2}		04	4.0	18.0	ns
Bi to Fi	t _{PLH3}		04	4.0	18.0	ns
Si to Fi	t _{PLH4}		04	4.0	23.5	ns
Ai to OVR	t _{PLH5}		04	6.0	18.5	ns
Bi to OVR	t _{PLH6}		04	6.0	18.5	ns
Ai to Cn + 4	t _{PLH7}		04	3.5	11.5	ns
Bi to Cn + 4	t _{PLH8}		04	3.5	11.5	ns
Si to OVR	t _{PLH9}		04	5.0	19.5	ns
Si to Cn + 4	t _{PLH10}		04	6.5	19.5	ns
Cn to Cn + 4	t _{PLH11}		04	2.0	11.0	ns
Cn to OVR	t _{PLH12}		04	3.0	14.0	ns
Propagation delay time high to low level, <u>2/</u>						
$\bar{A}i$ or $\bar{B}i$ to $\bar{F}i$ mode = sum	t _{PHL1}		01	3.0	14.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = sum	t _{PHL2}		01	3.0	14.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
$\bar{A}$ or $\bar{B}$ to Cn + 4 mode = sum	t _{PHL3}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	01	3.5	16.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = sum	t _{PHL4}		01	3.0	10.0	ns
Cn to $\bar{F}$	t _{PHL5}		01	2.5	12.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = sum	t _{PHL6}		01	2.5	10.0	ns
Cn to Cn + 4	t _{PHL7}		01	3.0	10.0	ns
$\bar{A}$ i or $\bar{B}$ i to $\bar{F}$ i mode = dif	t _{PHL8}		01	3.0	14.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{F}$ mode = logic	t _{PHL9}		01	3.0	15.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = dif	t _{PHL10}		01	3.0	16.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = dif	t _{PHL11}		01	2.5	12.5	ns
$\bar{A}$ or $\bar{B}$ to Cn + 4 mode = dif	t _{PHL12}		01	4.0	17.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = dif	t _{PHL13}		01	2.5	11.5	ns
$\bar{A}$ or $\bar{B}$ to A = B mode = dif	t _{PHL14}		01	5.5	21.0	ns
Cn to Cn + x, Cn + y, Cn + z	t _{PHL1}		02	2.5	11.0	ns
$\bar{P}$ 0, $\bar{P}$ 1 or $\bar{P}$ 2 to Cn + x, Cn + y, or Cn + z	t _{PHL2}		02	1.0	7.0	ns
$\bar{G}$ 0, $\bar{G}$ 1 or $\bar{G}$ 2 to Cn + x, Cn + y, or Cn + z	t _{PHL3}		02	1.0	7.0	ns
$\bar{P}$ 1, $\bar{P}$ 2 or $\bar{P}$ 3 to $\bar{G}$	t _{PHL4}		02	2.5	10.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
$\overline{G}_n$ to $\overline{G}$	t _{PHL5}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	02	2.5	10.0	ns
$\overline{P}_n$ to $\overline{P}$	t _{PHL6}		02	1.5	8.0	ns
Ci to Fi	t _{PHL1}		03	2.5	12.0	ns
Ai to Fi	t _{PHL2}		03	3.0	15.0	ns
Bi to Fi	t _{PHL3}		03	3.0	16.0	ns
Si to Fi	t _{PHL4}		03	3.0	16.0	ns
Ai to $\overline{G}$	t _{PHL5}		03	3.0	13.5	ns
Bi to $\overline{G}$	t _{PHL6}		03	3.0	13.5	ns
Ai to $\overline{P}$	t _{PHL7}		03	3.0	12.5	ns
Bi to $\overline{P}$	t _{PHL8}		03	3.0	12.5	ns
Si to $\overline{G}$	t _{PHL9}		03	3.0	18.0	ns
Si to $\overline{P}$	t _{PHL10}		03	3.0	18.0	ns
Cn to Fi	t _{PHL1}		04	2.5	11.0	ns
Ai to Fi	t _{PHL2}		04	3.5	14.0	ns
Bi to Fi	t _{PHL3}		04	3.5	14.0	ns
Si to Fi	t _{PHL4}		04	4.0	16.5	ns
Ai to OVR	t _{PHL5}		04	5.0	14.5	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions $-55^{\circ}\text{C} \leq T_C \leq +125^{\circ}\text{C}$	Device type	Limits		Unit
				Min	Max	
Bi to OVR	t_{PHL6}	$V_{\text{CC}} = 5.0 \text{ V}$, $C_L = 50 \text{ pF} \pm 10\%$, See figure 4	04	5.0	14.5	ns
Ai to Cn + 4	t_{PHL7}		04	3.5	14.5	ns
Bi to Cn + 4	t_{PHL8}		04	3.5	14.5	ns
Si to OVR	t_{PHL9}		04	5.0	19.0	ns
Si to Cn + 4	t_{PHL10}		04	5.0	17.5	ns
Cn to Cn + 4	t_{PHL11}		04	2.0	12.0	ns
Cn to OVR	t_{PHL12}		04	2.5	13.0	ns

1/ Not more than one output should be shorted at a time.

2/ In Ai, Bi, Fi, and Si, $i = 0, 1, 2,$ or 3 .

TABLE II. Electrical test requirements.

MIL-PRF-38535 test requirements	Subgroups (see table III)	
	Class S devices	Class B devices
Interim electrical parameters	1	1
Final electrical test parameters	1*, 2, 3, 7, 9, 10, 11	1*, 2, 3, 7, 9
Group A test requirements	1, 2, 3, 7, 8, 9, 10, 11	1, 2, 3, 7, 8, 9, 10, 11
Group B electrical test parameters when using the method 5005 QCI option	1, 2, 3, 7, 8, 9, 10, 11	N/A
Group C end-point electrical parameters	1, 2, 3, 7, 8, 9, 10, 11	1, 2, 3
Group D end-point electrical parameters	1, 2, 3	1, 2, 3

*PDA applies to subgroup 1.

Terminal number	Device type 01		Device type 02		Device 03	Device 04
	Cases J, K, and L	Case 3	Cases E and F	Case 2	Cases R, S, and 2	Cases R, S, and 2
1	$\bar{B}0$	N/C	$\bar{G}1$	N/C	A1	A1
2	$\bar{A}0$	$\bar{B}0$	$\bar{P}1$	$\bar{G}1$	B1	B1
3	S3	$\bar{A}0$	$\bar{G}0$	$\bar{P}1$	A0	A0
4	S2	S3	$\bar{P}0$	$\bar{G}0$	B0	B0
5	S1	S2	$\bar{G}3$	$\bar{P}0$	S0	S0
6	S0	S1	$\bar{P}3$	N/C	S1	S1
7	Cn	S0	$\bar{P}$	$\bar{G}3$	S2	S2
8	M	N/C	GND	$\bar{P}3$	F0	F0
9	$\bar{F}0$	Cn	Cn + z	$\bar{P}$	F1	F1
10	$\bar{F}1$	M	$\bar{G}$	GND	GND	GND
11	$\bar{F}2$	$\bar{F}0$	Cn + y	N/C	F2	F2
12	GND	$\bar{F}1$	Cn + x	Cn + z	F3	F3
13	$\bar{F}3$	$\bar{F}2$	Cn	$\bar{G}$	$\bar{G}$	OVR
14	A = B	GND	$\bar{G}2$	Cn + y	$\bar{P}$	Cn + 4
15	$\bar{P}$	N/C	$\bar{P}2$	Cn + x	Cn	Cn
16	Cn + 4	$\bar{F}3$	V _{CC}	N/C	B3	B3
17	$\bar{G}$	A = B		Cn	A3	A3
18	$\bar{B}3$	$\bar{P}$		$\bar{G}2$	B2	B2
19	$\bar{A}3$	Cn + 4		$\bar{P}2$	A2	A2
20	$\bar{B}2$	$\bar{G}$		V _{CC}	V _{CC}	V _{CC}
21	$\bar{A}2$	$\bar{B}3$				
22	$\bar{B}1$	N/C				
23	$\bar{A}1$	$\bar{A}3$				
24	V _{CC}	$\bar{B}2$				
25		$\bar{A}2$				
26		$\bar{B}1$				
27		$\bar{A}1$				
28		V _{CC}				

FIGURE 1. Terminal connections.

Device type 01

Mode select inputs				Active LOW operands & Fn Outputs		Active High operands & Fn Outputs	
S3	S2	S1	S0	Logic (M = H)	Arithmetic** (M = L) (Cn = L)	Logic (M = H)	Arithmetic** (M = L) (Cn = H)
L	L	L	L	$\overline{A}$	A minus 1	$\overline{A}$	A
L	L	L	H	$\overline{AB}$	AB minus 1	$\overline{A + B}$	A + B
L	L	H	L	$\overline{A} + B$	$A\overline{B}$ minus 1	$\overline{A} B$	A + $\overline{B}$
L	L	H	H	Logic 1	minus 1	Logic 0	minus 1
L	H	L	L	$\overline{A + B}$	A plus (A + $\overline{B}$)	$\overline{AB}$	A plus $A\overline{B}$
L	H	L	H	$\overline{B}$	AB plus (A + $\overline{B}$)	$\overline{B}$	(A + B) plus $A\overline{B}$
L	H	H	L	$\overline{A \oplus B}$	A minus B minus 1	$A \oplus B$	A minus B minus 1
L	H	H	H	$A + \overline{B}$	A + $\overline{B}$	$A\overline{B}$	$A\overline{B}$ minus 1
H	L	L	L	$\overline{A} B$	A plus (A + B)	$\overline{A} + B$	A plus AB
H	L	L	H	$A \oplus B$	A plus B	$\overline{A \oplus B}$	A plus B
H	L	H	L	B	$A\overline{B}$ plus (A + B)	B	(A + $\overline{B}$) plus AB
H	L	H	H	A + B	A + B	AB	AB minus 1
H	H	L	L	Logic 0	A plus A*	Logic 1	A plus A*
H	H	L	H	$A\overline{B}$	AB plus A	$A + \overline{B}$	(A + B) plus A
H	H	H	L	AB	$A\overline{B}$ minus A	A + B	(A + $\overline{B}$) plus A
H	H	H	H	A	A	A	A minus 1

* Each bit is shifted to the next more significant position.

** Arithmetic operations expressed in 2's complement notation.

H = HIGH voltage level.

L = LOW voltage level.

FIGURE 2. Truth tables.

Device type 02

Inputs									Outputs				
Cn	$\bar{G} 0$	$\bar{P} 0$	$\bar{G} 1$	$\bar{P} 1$	$\bar{G} 2$	$\bar{P} 2$	$\bar{G} 3$	$\bar{P} 3$	Cn + x	Cn + y	Cn + z	$\bar{G}$	$\bar{P}$
X	H	H							L				
L	H	X							L				
X	L	X							H				
H	X	L							H				
X	X	X	H	H						L			
X	H	H	H	X						L			
L	H	X	H	X						L			
X	X	X	L	X						H			
X	L	X	X	L						H			
H	X	L	X	L						H			
X	X	X	X	X	H	H					L		
X	X	X	H	H	H	X					L		
X	H	H	H	X	H	X					L		
L	H	X	H	X	H	X					L		
X	X	X	X	X	L	X					H		
X	X	X	L	X	X	L					H		
X	L	X	X	L	X	L					H		
H	X	L	X	L	X	L					H		
	X		X	X	X	X	H	H				H	
	X		X	X	H	H	H	X				H	
	X		H	H	H	X	H	X				H	
	H		H	X	H	X	H	X				H	
	X		X	X	X	X	L	X				L	
	X		X	X	L	X	X	L				L	
	X		L	X	X	L	X	L				L	
	L		X	L	X	L	X	L				L	
		H		X		X		X					H
		X		H		X		X					H
		X		X		H		X					H
		X		X		X		H					H
		L		L		L		L					L

H = HIGH voltage level

L = LOW voltage level

X = Immaterial

FIGURE 2. Truth tables - Continued.

Device type 03

Function	Inputs						Outputs					
	S0	S1	S2	Cn	An	Bn	F0	F1	F2	F3	$\bar{G}$	$\bar{P}$
Clear	0	0	0	X	X	X	0	0	0	0	0	0
B minus A	1	0	0	0	0	0	1	1	1	1	1	0
				0	0	1	0	1	1	1	0	0
				0	1	0	0	0	0	0	1	1
				0	1	1	1	1	1	1	1	0
				1	0	0	0	0	0	0	1	0
				1	0	1	1	1	1	1	0	0
				1	1	0	1	0	0	0	1	1
				1	1	1	0	0	0	0	1	0
A minus B	0	1	0	0	0	0	1	1	1	1	1	0
				0	0	1	0	0	0	0	1	1
				0	1	0	0	1	1	1	0	0
				0	1	1	1	1	1	1	1	0
				1	0	0	0	0	0	0	1	0
				1	0	1	1	0	0	0	1	1
				1	1	0	1	1	1	1	0	0
				1	1	1	0	0	0	0	1	0
A plus B	1	1	0	0	0	0	0	0	0	0	1	1
				0	0	1	1	1	1	1	1	0
				0	1	0	1	1	1	1	1	0
				0	1	1	0	1	1	1	0	0
				1	0	0	1	0	0	0	1	1
				1	0	1	0	0	0	0	1	0
				1	1	0	0	0	0	0	1	0
				1	1	1	1	1	1	1	0	0
A $\oplus$ B	0	0	1	X	0	0	0	0	0	0	1	1
				X	0	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	0
				X	1	1	0	0	0	0	0	0
A + B	1	0	1	X	0	0	0	0	0	0	1	1
				X	0	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1
				X	1	1	1	1	1	1	1	0
AB	0	1	1	X	0	0	0	0	0	0	0	0
				X	0	1	0	0	0	0	1	1
				X	1	0	0	0	0	0	0	0
				X	1	1	1	1	1	1	1	0
Preset	1	1	1	X	0	0	1	1	1	1	1	1
				X	0	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1
				X	1	1	1	1	1	1	1	0

1 = HIGH voltage level

0 = LOW voltage level

X = Immaterial

FIGURE 2. Truth tables - Continued.

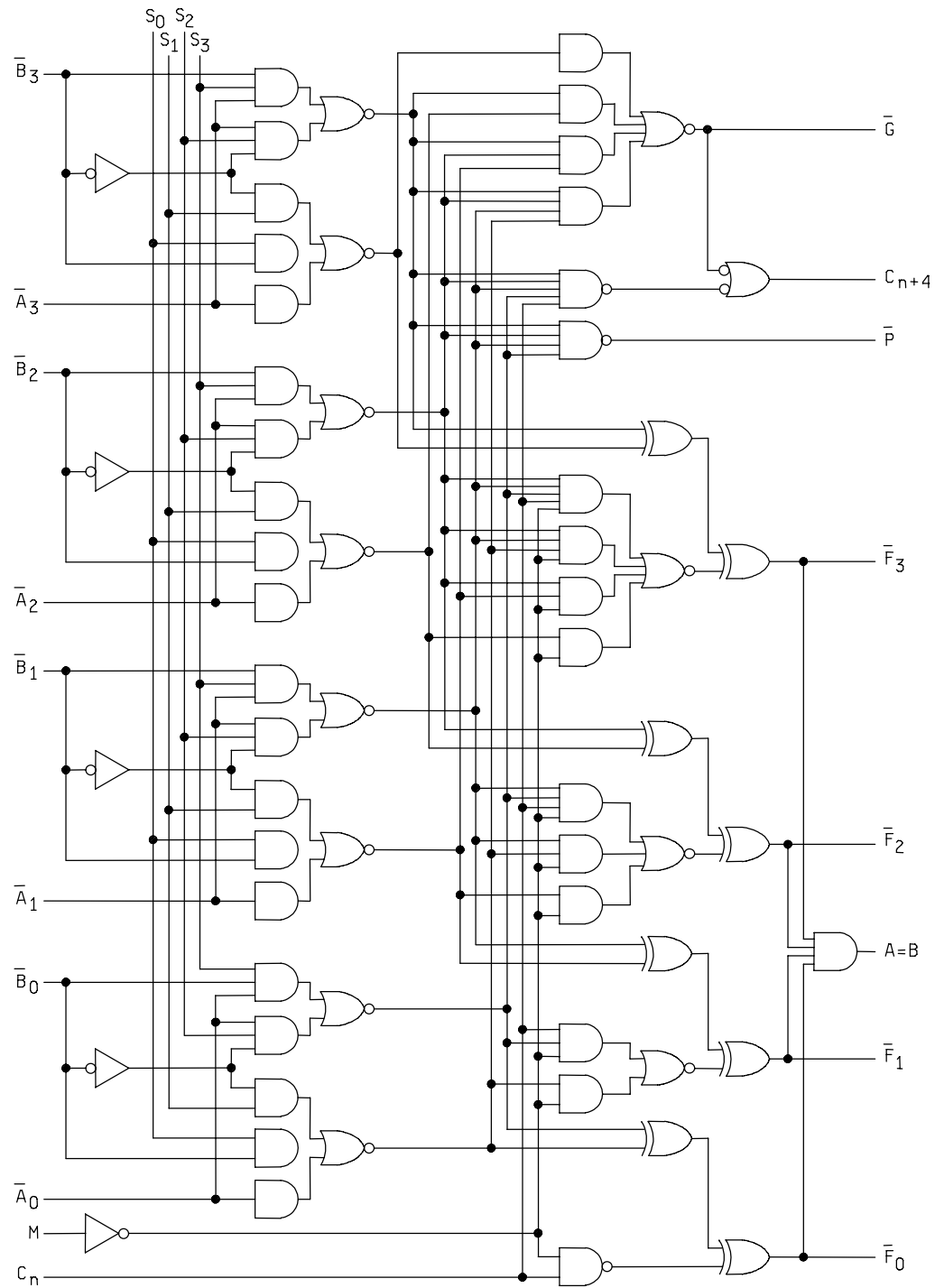
Device type 04

Function	Inputs						Outputs					
	S0	S1	S2	Cn	An	Bn	F0	F1	F2	F3	OVR	Cn + 4
Clear	0	0	0	0	X	X	0	0	0	0	1	1
				1	X	X	0	0	0	0	1	1
B minus A	1	0	0	0	0	0	1	1	1	1	0	0
				0	0	1	0	1	1	1	0	1
				0	1	0	0	0	0	0	0	0
				0	1	1	1	1	1	1	0	0
				1	0	0	0	0	0	0	0	1
				1	0	1	1	1	1	1	0	1
				1	1	0	1	0	0	0	0	0
				1	1	1	0	0	0	0	0	1
A minus B	0	1	0	0	0	0	1	1	1	1	0	0
				0	0	1	0	0	0	0	0	0
				0	1	0	0	1	1	1	0	1
				0	1	1	1	1	1	1	0	0
				1	0	0	0	0	0	0	0	1
				1	0	1	1	0	0	0	0	0
				1	1	0	1	1	1	1	0	1
				1	1	1	0	0	0	0	0	1
A plus B	1	1	0	0	0	0	0	0	0	0	0	0
				0	0	1	1	1	1	1	0	0
				0	1	0	1	1	1	1	0	0
				0	1	1	0	1	1	1	0	1
				1	0	0	1	0	0	0	0	0
				1	0	1	0	0	0	0	0	1
				1	1	0	0	0	0	0	0	1
				1	1	1	1	1	1	1	0	1
A $\oplus$ B	0	0	1	X	0	0	0	0	0	0	0	0
				X	0	1	1	1	1	1	0	0
				0	1	0	1	1	1	1	0	0
				X	1	1	0	0	0	0	1	1
				1	1	0	1	1	1	1	1	1
A + B	1	0	1	X	0	0	0	0	0	0	0	0
				X	0	1	1	1	1	1	0	0
				X	1	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1
AB	0	1	1	X	0	0	0	0	0	0	1	1
				X	0	1	0	0	0	0	0	0
				X	1	0	0	0	0	0	1	1
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1
Preset	1	1	1	X	0	0	1	1	1	1	0	0
				X	0	1	1	1	1	1	0	0
				X	1	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1

1 = HIGH voltage level
0 = LOW voltage level
X = Immaterial

FIGURE 2. Truth tables - Continued.

DEVICE TYPE 01

FIGURE 3. Logic diagram.

DEVICE TYPE 02

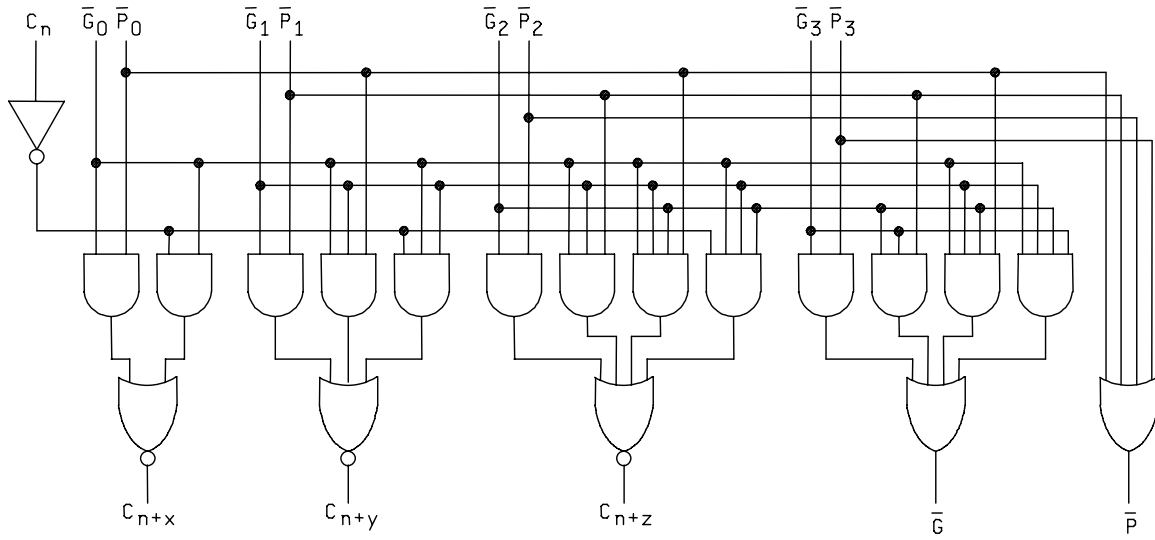
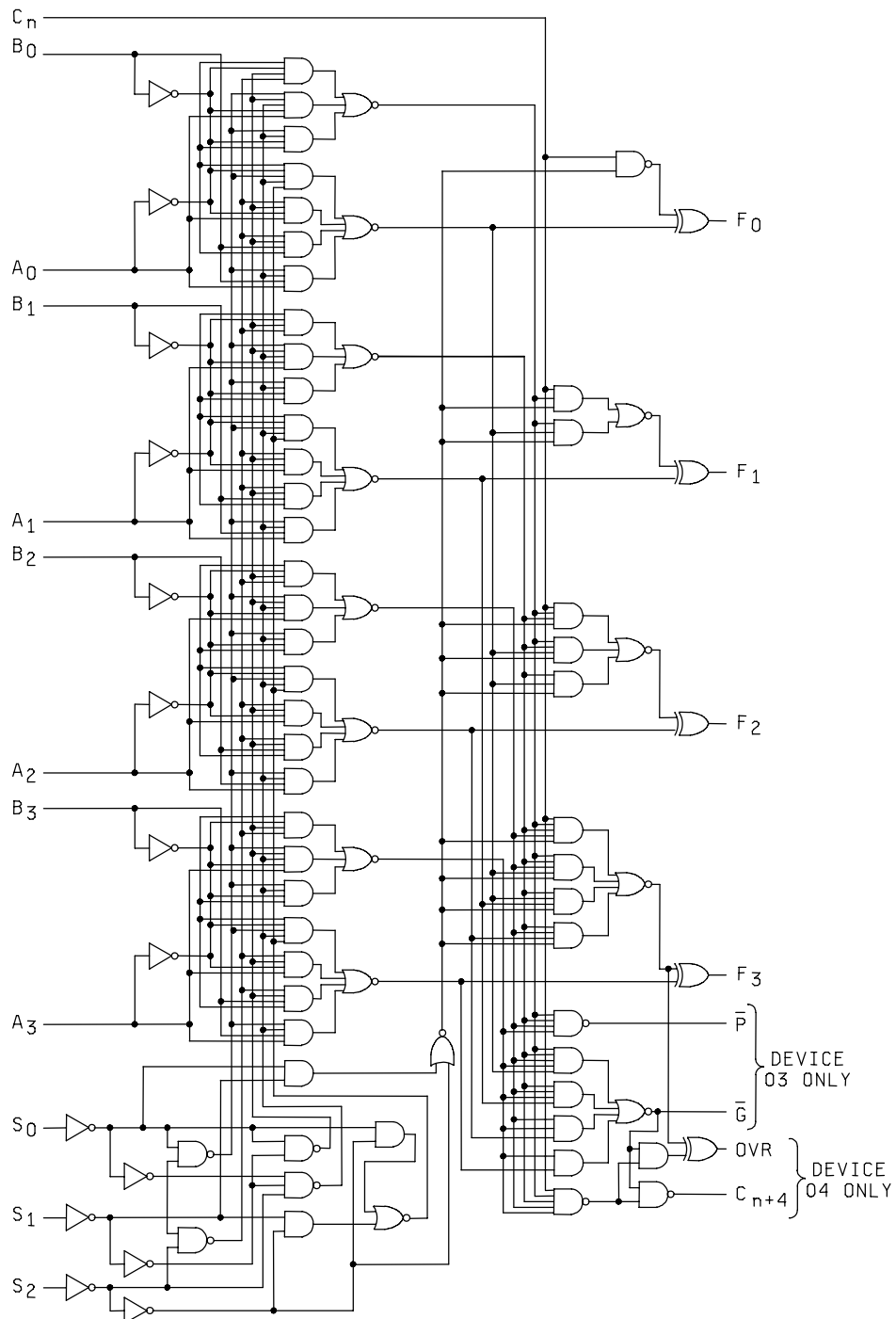
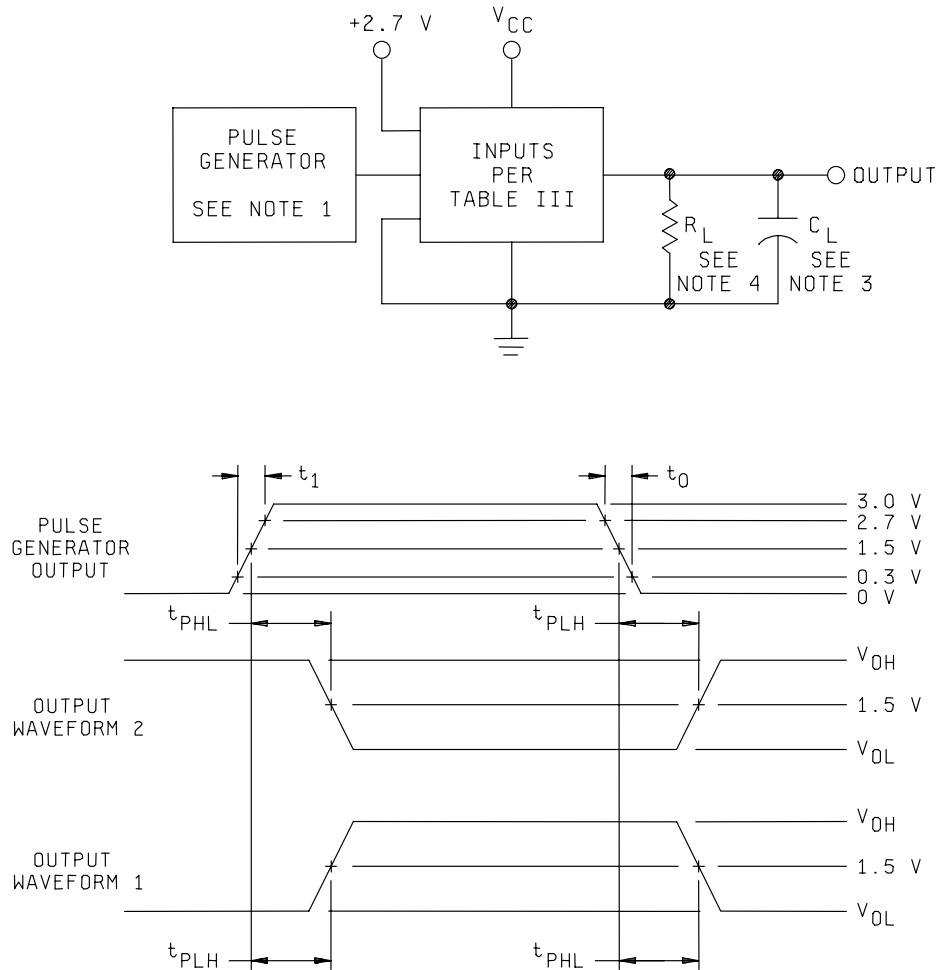


FIGURE 3. Logic diagram - Continued.

DEVICE TYPES 03 AND 04

FIGURE 3. Logic diagram - Continued.



NOTES:

1. Pulse generator has the following characteristics: $t_1 = t_0 \leq 2.5$ ns, $PRR \leq 1$ MHz, $Z_{OUT} \approx 50\Omega$.
2. Inputs not under test are at ground.
3. $C_L = 50$ pF $\pm 10\%$.
4. $R_L = 499\Omega \pm 5\%$.
5. Voltage measurements are to be made with respect to network ground terminal.

FIGURE 4. Switching time waveforms (circuit for all device types).

TABLE III. Group A inspection for device type 01.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				Case 3 J/	Test no.	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	Min	Max	
1 Tc = 25°C	V _{OH}	3006		1	8.8 V	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V					2.5		V
				2	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V							"
				3	2.0 V	"	"	"	"	"	"	"							"
				4	0.8 V	"	"	"	"	"	"	0.8 V	2.0 V	-1.0 mA					"
				5	"	"	"	"	"	"	"	"	"						"
				6	"	"	"	"	"	"	"	"	"						"
				7	"	"	"	"	"	"	"	"	"						"
	OL	3007		8	2.0 V	"	"	"	0.8 V	0.8 V	0.8 V	0.8 V						0.5	"
				9	"	"	"	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V							"
				10	"	"	0.8 V	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V							"
				11	"	0.8 V	2.0 V	"	"	"	"	2.0 V	2.0 V	20 mA					"
				12	"	"	"	"	"	"	"	"	"						"
				13	"	"	"	"	"	"	"	"	"			20 mA			"
				14	"	"	"	"	"	"	"	"	"						"
V	IC			15	"	"	"	"	"	"	"	"	"						"
				16	-18 mA	-18 mA	"	"	"	"	"	"	"						"
				17	"	"	-18 mA	"	"	"	"	"	"						"
				18	"	"	"	-18 mA	"	"	"	"	"						"
				19	"	"	"	"	"	"	"	"	"						"
				20	"	"	"	"	-18 mA	"	"	"	"						"
				21	"	"	"	"	"	-18 mA	"	"	"						"
				22	"	"	"	"	"	"	-18 mA	"	"						"
				23	"	"	"	"	"	"	"	"	"						"
				24	"	"	"	"	"	"	"	"	"						"
				25	"	"	"	"	"	"	"	"	"						"
				26	"	"	"	"	"	"	"	"	"						"
				27	"	"	"	"	"	"	"	"	"						"
				28	"	"	"	"	"	"	"	"	"						"
I	IH1	3010		29	"	"	"	"	"	"	"	"	"						"
				30	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	2.7 V						"
				31	"	2.7 V	"	"	"	"	"	"	0.0 V					20	μA
				32	"	0.0 V	"	"	"	"	"	"	"						"
				33	"	"	"	"	"	"	"	"	"						"
				34	"	"	"	"	"	"	"	"	"						"
				35	2.7 V	"	"	"	"	"	"	"	"						"
				36	0.0 V	"	"	"	"	"	"	"	"						"
				37	"	"	"	"	"	"	"	"	"						"
				38	"	"	"	"	"	"	"	"	"						"
																			"
																			"
																			"
																			"
																			"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
1 $T_c = 25^\circ\text{C}$	V_{OH}	3006	Case 3 J/	F 3	A = B	P	Ch+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	G	2.5		V
							-1.0 mA	-1.0 mA	2.0 V	2.0 V	2.0 V	0.8 V	0.8 V	0.8 V	4.5 V	Ch+4			
						-1.0 mA				2.0 V	2.0 V	2.0 V	2.0 V	2.0 V		P			
									0.8 V		0.8 V		0.8 V			F 0			
																F 1			
																F 2			
																F 3			
	I_C	3007						20 mA		0.8 V	2.0 V		2.0 V			G		0.5	V
							20 mA			2.0 V	0.8 V		0.8 V			Ch+4			
						20 mA			2.0 V	2.0 V	2.0 V		2.0 V			P			
										0.8 V		0.8 V		0.8 V		F 0			
																F 1			
																F 2			
																F 3			
	I_{H1}	3010			20 mA					2.0 V		2.0 V		2.0 V		A = B			
																B 0		-1.2	
																A 0			
									-18 mA							B 3			
										-18 mA						A 3			
											-18 mA	-18 mA				B 2			
																A 2			
													-18 mA			B 1			
														-18 mA		A 1			
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.5 V	M		20	μA
														0.0 V		A 0			
														2.7 V		A 1			
												2.7 V		0.0 V		A 2			
										2.7 V		0.0 V				A 3			
										0.0 V						B 0			
													2.7 V			B 1			
											2.7 V		0.0 V			B 2			
									2.7 V		0.0 V					B 3			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				1	2	3	4	5	6	7	8	9	10	11	12		Min	Max	
1 Tc = 25°C	I _{HL}	3010	39	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND	S0		20	μA
		"	40	0.0 V	"	2.7 V	"	0.0 V	2.7 V	0.0 V	0.0 V	"	"	"	"	S3			"
		"	41	5.5 V	"	0.0 V	"	2.7 V	"	"	"	"	"	"	"	S1			"
		"	42	"	"	0.0 V	2.7 V	0.0 V	"	"	"	"	"	"	"	S2			"
		"	43	"	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	2.7 V	5.5 V	"	"	"	"	Cn			"
	H _{FE}	"	44	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	7.0 V	7.0 V	"	"	"	M		100	"
		"	45	"	7.0 V	"	"	"	"	"	0.0 V	"	"	"	"	A 0			"
		"	46	"	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1			"
		"	47	"	"	"	"	"	"	"	"	"	"	"	"	A 2			"
		"	48	"	"	"	"	"	"	"	"	"	"	"	"	A 3			"
		"	49	7.0 V	"	"	"	"	"	"	"	"	"	"	"	B 0			"
		"	50	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1			"
		"	51	"	"	"	"	"	"	"	"	"	"	"	"	B 2			"
		"	52	"	"	"	"	"	"	"	"	"	"	"	"	B 3			"
		"	53	"	"	"	"	"	7.0 V	"	"	"	"	"	"	S0			"
		"	54	"	"	7.0 V	"	"	0.0 V	"	"	"	"	"	"	S3			"
		"	55	5.5 V	"	0.0 V	"	7.0 V	"	"	"	"	"	"	"	S1			"
		"	56	"	"	0.0 V	7.0 V	0.0 V	"	"	"	"	"	"	"	S2			"
		"	57	"	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	7.0 V	5.5 V	"	"	"	"	Cn			"
	I _{L1}	3009	58	"	"	"	"	"	"	"	0.5 V	0.5 V	"	"	"	M	2/	2/	mA
	I _{L2}	"	59	0.5 V	"	"	"	"	"	"	5.5 V	"	"	"	"	B 0			"
		"	60	5.5 V	"	"	"	"	"	"	"	"	"	"	"	B 1			"
		"	61	"	"	"	"	"	"	"	"	"	"	"	"	B 2			"
		"	62	"	"	"	"	"	"	"	"	"	"	"	"	B 3			"
		"	63	"	0.5 V	"	"	"	"	"	"	"	"	"	"	A 0			"
		"	64	"	5.5 V	"	"	"	"	"	"	"	"	"	"	A 1			"
		"	65	"	"	"	"	"	"	"	"	"	"	"	"	A 2			"
		"	66	"	"	"	"	"	"	"	"	"	"	"	"	A 3			"
		"	67	"	"	"	"	"	0.5 V	"	"	"	"	"	"	S0			"
		"	68	"	"	0.5 V	"	"	5.5 V	"	"	"	"	"	"	S3			"
	I _{L3}	"	69	0.0 V	"	5.5 V	"	0.5 V	"	"	"	"	"	"	"	S1			"
		"	70	"	"	0.0 V	0.5 V	0.0 V	0.0 V	0.0 V	0.0 V	"	"	"	"	S2			"
		"	71	"	0.0 V	0.0 V	0.0 V	"	"	0.5 V	0.0 V	"	"	"	"	Cn			"
		"	72	"	"	5.5 V	"	"	"	"	"	"	"	"	"	G	-60	-150	"
		3011	73	"	"	0.0 V	"	"	"	0.0 V	"	"	"	"	"	Cn+4			"
	I _{L4} OS	"	74	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	"	"	"	"	P			"
		"	75	"	"	"	"	"	"	"	"	0.0 V	"	"	"	F 0			"
		"	76	"	"	"	"	"	"	"	"	"	0.0 V	"	"	F 1			"
		"	77	"	"	"	"	"	"	"	"	"	"	0.0 V	"	F 2			"
		"	78	"	"	"	"	"	"	"	"	"	"	"	"	F 3			"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
1 Tc = 25°C	I _{H1}	3010	Case 3 J/	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	S0		20	μA
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.5 V	S3			
									5.5 V		5.5 V		5.5 V			S1			
																S2			
										5.5 V		5.5 V		5.5 V		Cn			
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V		M	100		
																A 0			
														7.0 V		A 1			
	I _{H2}											7.0 V		0.0 V		A 2			
												0.0 V				A 3			
										7.0 V						B 0			
										0.0 V						B 1			
											7.0 V		7.0 V			B 2			
											7.0 V		0.0 V			B 3			
									7.0 V		0.0 V					S0			
									0.0 V							S3			
	I _{L1} I _{L2}	3009							5.5 V		5.5 V		5.5 V			S1			
										5.5 V						S2			
												5.5 V		5.5 V		Cn			
																M	2/	2/	mA
																B 0			
													0.5 V			B 1			
											0.5 V		5.5 V			B 2			
									0.5 V		5.5 V					B 3			
	I _{L3}								5.5 V							A 0			
																A 1			
												0.5 V		5.5 V		A 2			
										0.5 V		5.5 V				A 3			
										5.5 V						S0			
																S3			
									0.0 V		0.0 V		0.0 V			S1			
																S2			
	I _{L4} OS	3011						0.0 V	5.5 V	5.5 V				0.0 V		Cn	-60	-150	
							0.0 V		0.0 V	0.0 V						G			
						0.0 V			5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V		Cn+4			
									5.5 V							P			
																F 0			
																F 1			
																F 2			
				0.0 V												F 3			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits	Unit
1 Tc = 25°C	I _{oo}		Case 3 J	2	3	4	5	6	7	9	10	11	12	13	14		Min	Max
			Test no.	B 0	A 0	S 3	S 2	S 1	S 0	C n	M	F 0	F 1	F 2	GND		60	
			79	4.5 V	4.5 V	4.5 V	4.5 V	GND	4.5 V						GND	G		mA
			80	"	"	"	GND	GND	GND	GND					"	Cn + 4		"
			81	"	"	"	GND	4.5 V	4.5 V						"	P		"
			82	"	"	"	GND	4.5 V	"	"	4.5 V	2.5 V			"	F 0		"
			83	"	"	"	"	"	"	"	"	2.5 V	2.5 V		"	F 1		"
			84	"	"	"	"	"	"	"	"		2.5 V	2.5 V	"	F 2		"
			85	"	"	"	"	"	"	"	"				"	F 3		"
			86	"	"	"	"	"	"	"	"				"	A = B		"
2 Tc = 25°C	GCL	3005	87	0.0 V	0.0 V	5.5 V	5.5 V	5.5 V	5.5 V	0.0 V	5.5 V					V _{OC}	65	"
			88	0.0 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	0.0 V	5.5 V					V _{CC}	65	"
			Same tests, terminal conditions, and limits as for subgroup 1, except T _C = +125°C and V _{IC} tests are omitted.															
			3014	A	B	A	B	B	B	B	B	B	B	B	B	GND		
			89	A	B	A	A	B	B	B	B	B	B	B	B	GND		
			90	B	"	"	A	"	"	"	A	"	"	"	"	"		
			91	A	"	"	B	"	"	"	B	"	"	"	"	"		
			92	B	A	A	B	"	"	"	B	"	"	"	"	"		
			93	A	B	B	A	"	"	"	A	"	"	"	"	"		
			94	B	"	"	A	B	"	"	A	"	"	"	"	"		
3 Tc = 25°C	Functional	J	95	"	"	"	B	"	"	"	B	"	"	"	"	"		
			96	"	"	"	A	"	"	"	"	"	"	"	"	"		
			97	"	"	"	A	"	"	"	"	"	"	"	"	"		
			98	"	"	"	B	"	"	"	"	"	"	"	"	"		
			99	A	"	"	A	"	"	"	"	"	"	"	"	"		
			100	B	"	"	B	"	"	"	"	"	"	"	"	"		
			101	A	"	"	B	"	"	"	"	"	"	"	"	"		
			102	A	"	"	B	"	"	"	"	"	"	"	"	"		
			103	B	"	"	A	"	"	"	"	"	"	"	"	"		
			104	B	"	"	B	"	"	"	"	"	"	"	"	"		
			105	A	A	"	"	"	"	"	"	"	"	"	"	"		
			106	B	"	"	"	"	"	"	"	"	"	"	"	"		
			107	"	"	"	"	"	"	"	"	"	"	"	"	"		
			108	"	"	"	"	"	"	"	"	"	"	"	"	"		
			109	A	"	"	"	"	"	"	"	"	"	"	"	"		
			110	B	"	"	"	"	"	"	"	"	"	"	"	"		
			111	A	A	"	"	"	"	"	"	"	"	"	"	"		
			112	"	B	A	"	"	"	"	"	"	"	"	"	"		
			113	"	A	B	A	"	"	"	"	"	"	"	"	"		
8 Repeat subgroups 7 at T _C = +125°C and T _C = -55°C.			114	B	A	"	B	"	"	"	"	"	"	"	"	"		
			115	"	"	"	"	"	"	"	"	"	"	"	"	"		
			116	"	"	"	"	"	"	"	"	"	"	"	"	"		
			117	A	"	"	"	"	"	"	"	"	"	"	"	"		
			118	A	A	"	"	"	"	"	"	"	"	"	"	"		
			119	B	B	"	"	"	"	"	"	"	"	"	"	"		
			120	A	B	"	"	"	"	"	"	"	"	"	"	"		
			121	"	A	"	"	"	"	"	"	"	"	"	"	"		
			122	"	B	A	"	"	"	"	"	"	"	"	"	"		
			123	B	A	"	"	"	"	"	"	"	"	"	"	"		
			124	A	A	"	"	"	"	"	"	"	"	"	"	"		
			125	A	B	"	"	"	"	"	"	"	"	"	"	"		
			126	B	A	"	"	"	"	"	"	"	"	"	"	"		
			127	B	B	"	"	"	"	"	"	"	"	"	"	"		
			128	A	A	"	"	"	"	"	"	"	"	"	"	"		

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Limits		Unit	
				16	17	18	19	20	21	23	24	25	26	27	28	Min	Max		
1	I _{oo}		Test no.	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	Measured terminal		mA	
			79					2.5 V	GND	GND	4.5 V	4.5 V	4.5 V	4.5 V	G				
			80								4.5 V	GND		GND		Cn+4			
			81								4.5 V		4.5 V			P			
			82									GND		GND		F 0			
			83												GND	F 1			
			84													F 2			
			85	2.5 V								4.5 V		4.5 V			F 3		
			86								0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	A = B		
			87								0.0 V	5.5 V	0.0 V	5.5 V	5.5 V	V _{CC}	65		
2			CGI							0.0 V	5.5 V	0.0 V	5.5 V	5.5 V	V _{CC}				
			3005																
			3005																
			3014																
			3014																
			3014																
			3014																
			3014																
			3014																
			3014																
3	Functional		89	L	L	L	H	L	A	B	B	B	B	B	B	4/	All outputs		
			90	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			91	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			92	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			93	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			94	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			95	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			96	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			97	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			98	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
7	T _C = 25°C		99	L	"	"	"	"	"	"	"	"	"	"	"	"			
			100	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			101	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			102	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			103	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			104	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			105	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			106	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			107	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			108	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
8			109	H	"	"	"	"	"	"	"	"	"	"	"	"			
			110	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			111	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			112	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			113	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			114	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			115	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			116	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			117	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			118	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			119	H	"	"	"	"	"	"	"	"	"	"	"	"			
			120	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			121	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			122	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			123	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			124	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			125	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			126	L	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			127	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			128	H	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
8	Repeat subgroups 7 at T _C = +125°C and T _C = -55°C.																		

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	Timing conditions (V _{DD} = 5.0 V, V _{SS} = 0 V, T _C = 25°C)																								Measured terminal	Limits		Unit		
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	Min	Max														
9 T _C = 25°C	t _{PHL1}	3003 Fig. 4	Case 3 J	2	3																												
			Test no.	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND																		
			129	0.0 V	IN	2.7 V	0.0 V	0.0 V	2.7 V	0.0 V	0.0 V																						
			130	"	0.0 V	"	"	"	"	"	"		OUT																				
			131	"	"	"	"	"	"	"	"																						
			132	"	"	"	"	"	"	"	"																						
			133	"	"	"	"	"	"	"	"																						
			133	IN	"	"	"	"	"	"	"																						
			134	0.0 V	"	"	"	"	"	"	"																						
			135	"	"	"	"	"	"	"	"																						
			136	"	"	"	"	"	"	"	"																						
			137	"	"	IN	"	"	"	"	"																						
			138	"	0.0 V	"	"	"	"	"	"																						
			139	"	"	"	"	"	"	"	"																						
140	"	"	"	"	"	"	"	"																									
141	IN	"	"	"	"	"	"	"																									
142	0.0 V	"	"	"	"	"	"	"																									
143	"	"	"	"	"	"	"	"																									
144	"	"	"	"	"	"	"	"																									
145	IN	2.7 V	"	"	"	"	"	"																									
146	0.0 V	IN	"	"	"	"	"	"																									
147	"	"	"	"	"	"	"	"																									
148	"	"	"	"	"	"	"	"																									
149	"	2.7 V	"	"	"	"	"	"																									
150	"	"	"	"	"	"	"	"																									
151	"	"	"	"	"	"	"	"																									
152	IN	"	"	"	"	"	"	"																									
153	0.0 V	IN	"	"	"	"	"	"																									
154	"	"	"	"	"	"	"	"																									
155	"	"	"	"	"	"	"	"																									
156	"	2.7 V	"	"	"	"	"	"																									
157	"	"	"	"	"	"	"	"																									
158	"	"	"	"	"	"	"	"																									

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
9 Tc = 25°C	t_{PHL1}	3003 Fig. 4	Test no.	$\bar{F} 3$	A = B	$\bar{P}$	Cnt+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{CC}	$\bar{A} 0$ to $\bar{F} 0$	3.0	10.0	ns
			129						0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
			130						"	"	"	0.0 V	"	IN	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
			131						"	IN	"	0.0 V	"	0.0 V	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
			132	OUT					"	0.0 V	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
			133						"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
			134						"	"	IN	"	0.0 V	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
			135						IN	"	0.0 V	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
			136	OUT					0.0 V	"	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 0$	"	9.0	"
			137						0.0 V	"	"	"	"	IN	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
			138						"	"	"	IN	"	0.0 V	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
			139						"	IN	"	0.0 V	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
			140	OUT					"	0.0 V	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
			141						"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
			142						"	"	IN	"	0.0 V	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
			143						IN	"	0.0 V	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
			144	OUT					0.0 V	"	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 3$	4.0	10.0	"
t	t_{PH2}	"	145	OUT					0.0 V	2.7 V	"	2.7 V	"	2.7 V	"	$\bar{A} 0$ to $\bar{F} 1$	"	"	"
			146						"	0.0 V	"	0.0 V	"	0.0 V	"	$\bar{A} 0$ to $\bar{F} 2$	"	"	"
			147						"	"	"	2.7 V	"	2.7 V	"	$\bar{A} 0$ to $\bar{F} 3$	"	"	"
			148	OUT					"	"	"	IN	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"	"	"
			149	OUT					"	"	"	0.0 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 2$	"	"	"
			150						"	"	"	2.7 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 3$	"	"	"
			151	OUT					"	"	"	2.7 V	"	IN	"	$\bar{B} 0$ to $\bar{F} 3$	"	10.5	"
			152	OUT					"	2.7 V	"	2.7 V	"	2.7 V	"	$\bar{A} 0$ to $\bar{F} 1$	"	"	"
			153						"	0.0 V	"	0.0 V	"	0.0 V	"	$\bar{A} 0$ to $\bar{F} 2$	"	"	"
			154						"	"	"	2.7 V	"	2.7 V	"	$\bar{A} 0$ to $\bar{F} 3$	"	"	"
t	t_{PH2}	"	155	OUT					"	"	"	IN	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"	"	"
			156	OUT					"	"	"	0.0 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 2$	"	"	"
			157						"	"	"	2.7 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 3$	"	"	"
			158	OUT					"	"	"	2.7 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 3$	"	"	"
			159						"	"	"	2.7 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 3$	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				1	2	3	4	5	6	7	8	9	10	11	12		Min	Max	
9 Tc = 25°C	t _{PHL3}	3003 Fig. 4	159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174	B 0	A 0	S 3	S 2	S 1	S 0	C n	M	F 0	F 1	F 2	GND	A 0 to Cn + 4	3.5	12.0	ns
				2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn + 4	"	"	"
				IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn + 4	"	"	"
				2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn + 4	"	"	"
				0.0 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to Cn + 4	5.0	13.0	"
				2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to Cn + 4	"	"	"
t	t _{PH3}		175 176 177 178 179 180 181 182	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn + 4	"	"	"
				IN	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"
				2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn + 4	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn + 4	"	"	"
				"	IN	"	"	"	"	"	"	"	"	"	"	A 0 to P	3.0	7.5	"
				0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"
t	t _{PH4}		183 184 185 186 187 188 189 190	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"
				0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"
				2.7 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to P	2.5	"	"
				0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"
				IN	2.7 V	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"
				0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
9 Tc = 25°C	t_{PHL3}	3003 Fig. 4	Test no.	$\bar{F} 3$	A = B	$\bar{P}$	Cn+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{CC}	A 0 to Cn + 4	3.5	12.0	ns
			159						2.7 V	0.0 V	2.7 V	0.0 V	2.7 V	0.0 V	5.0 V	A 0 to Cn + 4			
			160						"	"	2.7 V	0.0 V	0.0 V	IN	"	A 1 to Cn + 4	"	"	"
			161						"	"	0.0 V	IN	2.7 V	0.0 V	"	A 2 to Cn + 4	"	"	"
			162						0.0 V	IN	2.7 V	0.0 V	"	"	"	A 3 to Cn + 4	"	"	"
			163						2.7 V	0.0 V	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			164						"	"	"	"	IN	"	"	B 1 to Cn + 4	"	"	"
			165						"	"	IN	"	2.7 V	"	"	B 2 to Cn + 4	"	"	"
			166						IN	"	2.7 V	"	"	"	"	B 3 to Cn + 4	"	"	"
			167						2.7 V	"	"	"	"	"	"	A 0 to Cn + 4	5.0	13.0	"
t	$PH3$	"	168						"	"	"	"	0.0 V	IN	"	A 1 to Cn + 4	"	"	"
			169						"	"	0.0 V	IN	2.7 V	0.0 V	"	A 2 to Cn + 4	"	"	"
			170						0.0 V	IN	2.7 V	0.0 V	"	"	"	A 3 to Cn + 4	"	"	"
			171						2.7 V	0.0 V	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			172						"	"	"	"	IN	"	"	B 1 to Cn + 4	"	"	"
			173						"	"	IN	"	2.7 V	"	"	B 2 to Cn + 4	"	"	"
			174						IN	"	2.7 V	"	2.7 V	"	"	B 3 to Cn + 4	"	"	"
			175			OUT			0.0 V	"	0.0 V	"	0.0 V	"	"	A 0 to $\bar{P}$	3.0	7.5	"
			176			"			"	"	0.0 V	"	2.7 V	IN	"	A 1 to $\bar{P}$	"	"	"
			177			"			"	"	2.7 V	IN	0.0 V	0.0 V	"	A 2 to $\bar{P}$	"	"	"
t	$PH4$	"	178			"			2.7 V	IN	0.0 V	0.0 V	"	"	"	A 3 to $\bar{P}$	"	"	"
			179			"			0.0 V	0.0 V	"	"	"	"	"	B 0 to $\bar{P}$	"	"	"
			180			"			"	"	"	"	IN	2.7 V	"	B 1 to $\bar{P}$	"	"	"
			181			"			"	"	IN	2.7 V	0.0 V	0.0 V	"	B 2 to $\bar{P}$	"	"	"
			182			"			IN	2.7 V	0.0 V	0.0 V	"	"	"	B 3 to $\bar{P}$	"	"	"
			183			"			0.0 V	0.0 V	"	"	"	"	"	A 0 to $\bar{P}$	2.5	"	"
			184			"			"	"	"	"	2.7 V	IN	"	A 1 to $\bar{P}$	"	"	"
			185			"			"	"	2.7 V	IN	0.0 V	0.0 V	"	A 2 to $\bar{P}$	"	"	"
			186			"			2.7 V	IN	0.0 V	0.0 V	"	"	"	A 3 to $\bar{P}$	"	"	"
			187			"			0.0 V	0.0 V	"	"	"	"	"	B 0 to $\bar{P}$	"	"	"
t	$PH4$	"	188			"			"	"	"	"	IN	2.7 V	"	B 1 to $\bar{P}$	"	"	"
			189			"			"	"	IN	2.7 V	0.0 V	0.0 V	"	B 2 to $\bar{P}$	"	"	"
			190			"			IN	2.7 V	0.0 V	0.0 V	"	"	"	B 3 to $\bar{P}$	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				2	3	4	5	6	7	8	9	10	11	12	14		Min	Max	
9 Tc = 25°C	I _{PH5} I _{PH6} PHL6	3003 Fig. 4	191 192 193 194 195 196 197 198 199 200	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND	Cn to F 0	3.0	8.5	ns
				"	2.7 V	"	"	"	"	IN	"	OUT	"	"	"	Cn to F 0	3.0	8.5	"
				"	IN	"	"	"	"	0.0 V	"	"	"	"	"	A 0 to G	2.5	7.5	"
				2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
				IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
				"	0.0 V	IN	"	"	"	"	"	"	"	"	"	A 0 to G	"	"	"
t	PHL7 PHL8	PHL7 PHL8	201 202 203 204 205 206 207 208	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
				IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
				0.0 V	2.7 V	"	"	"	"	IN	"	"	"	"	"	Cn to Cn + 4	3.0	8.0	"
t	PHL8	PHL8	209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226	2.7 V	0.0 V	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	"	OUT	"	"	"	A 0 to F 0	"	11.0	"
				"	IN	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"
				"	2.7 V	"	"	"	"	"	"	"	"	OUT	"	A 2 to F 2	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
				IN	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
				0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	B 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
				"	IN	"	"	"	"	"	"	OUT	"	"	"	A 0 to F 0	"	12.0	"
				"	2.7 V	"	"	"	"	"	"	"	"	OUT	"	A 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
				IN	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
t	PHL8	PHL8	223 224 225 226	0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	B 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"
				"	2.7 V	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
				IN	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
				0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	B 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
9	I_{PH5}	3003 Fig. 4	Test no.	$\bar{F} 3$	A = B	$\bar{P}$	Cn+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{CC}	Cn to $\bar{F} 0$	3.0	8.5	ns
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	5.0V	Cn to $\bar{F} 0$	3.0	8.5	"
								OUT	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	"	A 0 to $\bar{G}$	2.5	7.5	"
									"	"	2.7V	0.0V	0.0V	IN	"	$\bar{A} 1$ to $\bar{G}$	"	"	"
									"	"	0.0V	IN	2.7V	0.0V	"	$\bar{A} 2$ to $\bar{G}$	"	"	"
									0.0V	IN	2.7V	0.0V	"	"	"	$\bar{A} 3$ to $\bar{G}$	"	"	"
									2.7V	0.0V	"	"	"	"	"	$\bar{B} 0$ to $\bar{G}$	"	"	"
									"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{G}$	"	"	"
									"	"	IN	"	2.7V	"	"	$\bar{B} 2$ to $\bar{G}$	"	"	"
									IN	"	2.7V	"	"	"	"	$\bar{B} 3$ to $\bar{G}$	"	"	"
t	$PLH6$								2.7V	"	"	"	"	"	"	$\bar{A} 0$ to $\bar{G}$	"	"	"
									"	"	"	"	0.0V	IN	"	$\bar{A} 1$ to $\bar{G}$	"	"	"
									"	"	0.0V	IN	2.7V	0.0V	"	$\bar{A} 2$ to $\bar{G}$	"	"	"
									0.0V	IN	2.7V	0.0V	"	"	"	$\bar{A} 3$ to $\bar{G}$	"	"	"
									2.7V	0.0V	"	"	"	"	"	$\bar{B} 0$ to $\bar{G}$	"	"	"
									"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{G}$	"	"	"
									"	"	IN	"	2.7V	"	"	$\bar{B} 2$ to $\bar{G}$	"	"	"
									IN	"	2.7V	"	2.7V	"	"	$\bar{B} 3$ to $\bar{G}$	"	"	"
							OUT		0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	"	Cn to Cn+4	3.0	8.0	"
							OUT		"	"	"	"	"	"	"	Cn to Cn+4	"	8.5	"
t	$PLH7$ $PLH8$								"	"	"	"	"	"	"	A 0 to $\bar{F} 0$	"	11.0	"
									"	"	"	"	"	IN	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
									"	"	"	IN	"	2.7V	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
									"	IN	"	2.7V	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
									"	2.7V	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
									"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
									"	"	IN	"	0.0V	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
									IN	"	0.0V	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
							0.0V		0.0V	"	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 0$	"	12.0	"
									"	"	"	"	"	IN	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
t	$PLH8$								"	"	"	IN	"	2.7V	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
									"	"	"	IN	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
									"	IN	"	2.7V	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
									"	2.7V	"	"	"	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
									"	"	"	"	"	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
									"	"	"	"	IN	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
									"	"	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 0$	"	"	"
									"	"	IN	"	0.0V	"	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
									"	"	IN	"	0.0V	"	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
									"	"	0.0V	"	0.0V	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
t									"	"	IN	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
									"	"	"	"	"	IN	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
									"	"	IN	"	0.0V	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
									"	"	"	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
									"	"	"	"	0.0V	"	"	$\bar{A} 0$ to $\bar{F} 0$	"	"	"
									"	"	"	"	0.0V	"	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
									IN	"	0.0V	"	0.0V	"	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
									"	"	"	"	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
									"	"	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
									"	"	IN	"	0.0V	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
																	Min	Max	
9 Tc = 25°C	t _{PHL9}	3003 Fig. 4	227	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND	A 0 to F 0	3.0	10.0	ns
			228	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"
			229	"	"	"	"	"	"	"	"	"	"	OUT	"	A 2 to F 2	"	"	"
			230	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
			231	IN	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
			232	0.0 V	"	"	"	"	"	"	"	"	OUT	"	"	B 1 to F 1	"	"	"
			233	"	"	"	"	"	"	"	"	"	"	OUT	"	B 2 to F 2	"	"	"
			234	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
			235	"	IN	"	"	"	"	"	"	OUT	"	"	"	A 0 to F 0	3.5	9.5	"
			236	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"
			237	"	"	"	"	"	"	"	"	"	"	OUT	"	A 2 to F 2	"	"	"
			238	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
t	t _{PHL10}		239	IN	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
			240	0.0 V	"	"	"	"	"	"	"	"	OUT	"	"	B 1 to F 1	"	"	"
			241	"	"	"	"	"	"	"	"	"	"	OUT	"	B 2 to F 2	"	"	"
			242	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
			243	IN	2.7 V	"	"	"	"	2.7 V	0.0 V	"	"	"	"	B 0 to F 3	3.0	12.0	"
			244	2.7 V	IN	"	"	"	"	0.0 V	"	"	OUT	"	"	A 0 to F 1	"	"	"
			245	"	"	"	"	"	"	"	"	"	"	OUT	"	A 0 to F 2	"	"	"
			246	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 3	"	"	"
			247	"	2.7 V	"	"	"	"	"	"	"	"	"	"	A 2 to F 3	"	"	"
			248	0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	A 1 to F 2	"	"	"
			249	0.0 V	"	"	"	"	"	2.7 V	"	"	"	"	"	A 1 to F 3	"	"	"
			250	IN	"	"	"	"	"	2.7 V	"	"	"	"	"	B 0 to F 3	4.0	"	"
t	t _{PLH10}		251	2.7 V	IN	"	"	"	"	0.0 V	"	"	OUT	"	"	A 0 to F 1	"	"	"
			252	"	"	"	"	"	"	"	"	"	"	OUT	"	A 0 to F 2	"	"	"
			253	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 3	"	"	"
			254	"	2.7 V	"	"	"	"	"	"	"	"	"	"	A 2 to F 3	"	"	"
			255	0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	A 1 to F 2	"	"	"
			256	0.0 V	"	"	"	"	"	2.7 V	"	"	"	"	"	A 1 to F 3	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Limits		Measured terminal	Unit
				16	17	18	19	20	21	23	24	25	26	27	28	Min	Max		
9 Tc = 25°C	t_{PHL9}	3003 Fig. 4	Case 3 J	$\bar{F} 3$	A = B	$\bar{P}$	Cn+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{CC}	3.0	10.0	$\bar{A} 0$ to $\bar{F} 0$	ns
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	"	"	$\bar{A} 1$ to $\bar{F} 1$	"
									"	"	"	IN	"	0.0 V	"	"	"	$\bar{A} 2$ to $\bar{F} 2$	"
				OUT					"	IN	"	0.0 V	"	"	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"
									0.0 V	0.0 V	"	"	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"
									"	"	"	"	IN	"	"	"	"	$\bar{B} 1$ to $\bar{F} 1$	"
									"	"	IN	"	0.0 V	"	"	"	"	$\bar{B} 2$ to $\bar{F} 2$	"
				OUT					IN	"	0.0 V	"	"	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"
									0.0 V	"	"	"	"	"	"	3.5	9.5	$\bar{A} 0$ to $\bar{F} 0$	"
									"	"	"	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 1$	"
									"	"	"	IN	"	0.0 V	"	"	"	$\bar{A} 2$ to $\bar{F} 2$	"
				OUT					"	IN	"	0.0 V	"	"	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"
									0.0 V	0.0 V	"	"	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"
									"	"	"	"	IN	"	"	"	"	$\bar{B} 1$ to $\bar{F} 1$	"
t	t_{PHL9}			OUT					"	"	IN	"	0.0 V	"	"	"	"	$\bar{B} 2$ to $\bar{F} 2$	"
				OUT					IN	"	0.0 V	"	"	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"
									0.0 V	2.7 V	"	"	"	"	"	3.0	12.0	$\bar{B} 0$ to $\bar{F} 0$	"
									"	0.0 V	"	"	2.7 V	"	"	"	"	$\bar{A} 0$ to $\bar{F} 1$	"
									"	"	2.7 V	"	"	2.7 V	"	"	"	$\bar{A} 0$ to $\bar{F} 2$	"
				OUT					2.7 V	"	"	2.7 V	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"
				OUT					2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"
									0.0 V	"	"	0.0 V	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"
				OUT					"	"	0.0 V	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"
				OUT					"	2.7 V	"	"	0.0 V	0.0 V	"	4.0	"	$\bar{B} 0$ to $\bar{F} 3$	"
									"	0.0 V	"	"	2.7 V	0.0 V	"	"	"	$\bar{A} 0$ to $\bar{F} 1$	"
									"	"	2.7 V	"	"	2.7 V	"	"	"	$\bar{A} 0$ to $\bar{F} 2$	"
				OUT					2.7 V	"	"	2.7 V	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"
				OUT					2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"
t	t_{PHL10}								0.0 V	"	"	0.0 V	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"
									"	2.7 V	"	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"
				OUT					"	2.7 V	"	"	0.0 V	0.0 V	"	"	"	$\bar{B} 0$ to $\bar{F} 3$	"
									"	0.0 V	"	"	2.7 V	0.0 V	"	"	"	$\bar{A} 0$ to $\bar{F} 1$	"
									"	"	2.7 V	"	"	2.7 V	"	"	"	$\bar{A} 0$ to $\bar{F} 2$	"
				OUT					2.7 V	"	"	2.7 V	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"
									2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"
				OUT					2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"
									"	"	0.0 V	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"
				OUT					"	2.7 V	"	"	0.0 V	0.0 V	"	4.0	"	$\bar{B} 0$ to $\bar{F} 3$	"
									"	0.0 V	"	"	2.7 V	0.0 V	"	"	"	$\bar{A} 0$ to $\bar{F} 1$	"
									"	"	2.7 V	"	"	2.7 V	"	"	"	$\bar{A} 0$ to $\bar{F} 2$	"
				OUT					2.7 V	"	"	2.7 V	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"
				OUT					2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"
									0.0 V	"	"	0.0 V	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"
t	t_{PHL10}			OUT					"	"	0.0 V	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"
									"	2.7 V	"	"	0.0 V	0.0 V	"	"	"	$\bar{B} 0$ to $\bar{F} 3$	"
									"	0.0 V	"	"	2.7 V	0.0 V	"	"	"	$\bar{A} 0$ to $\bar{F} 1$	"
									"	"	2.7 V	"	"	2.7 V	"	"	"	$\bar{A} 0$ to $\bar{F} 2$	"
				OUT					2.7 V	"	"	2.7 V	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"
									2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"
				OUT					2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"
									0.0 V	"	"	0.0 V	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"
				OUT					"	2.7 V	"	"	0.0 V	0.0 V	"	4.0	"	$\bar{B} 0$ to $\bar{F} 3$	"
									"	0.0 V	"	"	2.7 V	0.0 V	"	"	"	$\bar{A} 0$ to $\bar{F} 1$	"
									"	"	2.7 V	"	"	2.7 V	"	"	"	$\bar{A} 0$ to $\bar{F} 2$	"
				OUT					2.7 V	"	"	2.7 V	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"
				OUT					2.7 V	"	"	IN	"	"	"	"	"	$\bar{A} 2$ to $\bar{F} 3$	"
									0.0 V	"	"	0.0 V	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"
				OUT					"	"	0.0 V	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				1	2	3	4	5	6	7	8	9	10	11	12		Min	Max	
9 Tc = 25°C	t_{PHL1}	3003 Fig. 4	257	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND	A 0 to G	2.5	10.0	ns
			258	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
			259	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
			260	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
			261	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
			262	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
			263	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
			264	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
			265	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to G	3.0	9.0	"
			266	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
t	t_{PHL2}		267	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
			268	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
			269	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
			270	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
			271	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
			272	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
			273	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to Cn + 4	5.0	13.0	"
			274	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to Cn + 4	"	"	"
			275	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn + 4	"	"	"
			276	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn + 4	"	"	"
t	t_{PHI2}		277	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			278	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"
			279	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn + 4	"	"	"
			280	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn + 4	"	"	"
			281	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to Cn + 4	"	14.0	"
			282	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to Cn + 4	"	"	"
			283	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn + 4	"	"	"
			284	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn + 4	"	"	"
			285	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			286	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"
			287	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn + 4	"	"	"
			288	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn + 4	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Limits		Measured terminal	Unit
				16	17	18	19	20	21	23	24	25	26	27	28	Min	Max		
9 Tc = 25°C	t_{PHL11}	3003 Fig. 4	Test no.	$\bar{F} 3$	A = B	$\bar{P}$	Cn+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{cc}				
			257					OUT	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	2.5	10.0	$\bar{A} 0$ to $\bar{G}$	ns
			258					"	"	"	"	0.0 V	2.7 V	IN	"	"	"	$\bar{A} 1$ to $\bar{G}$	"
			259					"	"	"	2.7 V	IN	0.0 V	0.0 V	"	"	"	$\bar{A} 2$ to $\bar{G}$	"
			260					"	2.7 V	IN	0.0 V	0.0 V	"	"	"	"	"	$\bar{A} 3$ to $\bar{G}$	"
			261					"	0.0 V	0.0 V	"	"	"	"	"	"	"	$\bar{B} 0$ to $\bar{G}$	"
			262					"	"	"	"	"	IN	"	"	"	"	$\bar{B} 1$ to $\bar{G}$	"
			263					"	"	"	IN	"	0.0 V	"	"	"	"	$\bar{B} 2$ to $\bar{G}$	"
			264					"	IN	"	0.0 V	"	"	"	"	"	"	$\bar{B} 3$ to $\bar{G}$	"
			265					"	0.0 V	"	"	"	"	"	"	3.0	9.0	$\bar{A} 0$ to $\bar{G}$	"
			266					"	"	"	"	"	2.7 V	IN	"	"	"	$\bar{A} 1$ to $\bar{G}$	"
			267					"	"	"	2.7 V	IN	0.0 V	0.0 V	"	"	"	$\bar{A} 2$ to $\bar{G}$	"
			268					"	2.7 V	IN	0.0 V	0.0 V	"	"	"	"	"	$\bar{A} 3$ to $\bar{G}$	"
			269					"	0.0 V	0.0 V	"	"	"	"	"	"	"	$\bar{B} 0$ to $\bar{G}$	"
t	t_{PHL12}		270					"	"	"	"	"	IN	"	"	"	"	$\bar{B} 1$ to $\bar{G}$	"
			271					"	"	"	IN	"	0.0 V	"	"	"	"	$\bar{B} 2$ to $\bar{G}$	"
			272					"	IN	"	0.0 V	"	"	"	"	"	"	$\bar{B} 3$ to $\bar{G}$	"
			273				OUT		0.0 V	"	"	"	"	"	"	5.0	13.0	$\bar{A} 0$ to Cn+4	"
			274				"		"	"	"	"	2.7 V	IN	"	"	"	$\bar{A} 1$ to Cn+4	"
			275				"		"	"	2.7 V	IN	0.0 V	0.0 V	"	"	"	$\bar{A} 2$ to Cn+4	"
			276				"		2.7 V	IN	0.0 V	0.0 V	"	"	"	"	"	$\bar{A} 3$ to Cn+4	"
			277				"		0.0 V	0.0 V	"	"	"	"	"	"	"	$\bar{B} 0$ to Cn+4	"
			278				"		"	"	"	"	IN	"	"	"	"	$\bar{B} 1$ to Cn+4	"
			279				"		"	"	IN	"	0.0 V	"	"	"	"	$\bar{B} 2$ to Cn+4	"
			280				"		IN	"	0.0 V	"	"	"	"	"	"	$\bar{B} 3$ to Cn+4	"
			281				"		0.0 V	"	"	"	"	"	"	"	14.0	$\bar{A} 0$ to Cn+4	"
			282				"		"	"	"	"	2.7 V	IN	"	"	"	$\bar{A} 1$ to Cn+4	"
			283				"		"	"	2.7 V	IN	0.0 V	0.0 V	"	"	"	$\bar{A} 2$ to Cn+4	"
t	t_{PHL12}		284				"		2.7 V	IN	0.0 V	0.0 V	"	"	"	"	"	$\bar{A} 3$ to Cn+4	"
			285				"		0.0 V	0.0 V	"	"	"	"	"	"	"	$\bar{B} 0$ to Cn+4	"
			286				"		"	"	"	"	IN	"	"	"	"	$\bar{B} 1$ to Cn+4	"
			287				"		"	"	IN	"	0.0 V	"	"	"	"	$\bar{B} 2$ to Cn+4	"
			288				"		IN	"	0.0 V	"	0.0 V	"	"	"	"	$\bar{B} 3$ to Cn+4	"
			288				"		"	"	0.0 V	"	0.0 V	"	"	"	"	$\bar{B} 3$ to Cn+4	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L 3 $\downarrow$ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit	
				2	3	4	5	6	7	8	9	10	11	12	Min		Max			
9 T _c = 25°C	I _{PHL13}	3003 Fig. 4	289	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND	A 0 to P	2.5	9.5	ns	
			290	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"
			291	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"
			292	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"
			293	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"
			294	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"
			295	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"
			296	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"
			297	"	IN	"	"	"	"	"	"	"	"	"	"	"	A 0 to P	"	8.0	"
			298	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"
			299	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"
			300	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"
			301	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"
			302	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"
			303	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"
			304	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"
10	P _{HL14}	"	305	"	IN	"	"	"	"	"	"	"	"	"	"	A 0 to A = B	5.5	13.5	"	
			306	"	2.7 V	"	"	"	"	"	"	"	"	"	"	A 1 to A = B	"	"	"	
			307	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to A = B	"	"	"	
			308	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to A = B	"	"	"	
			309	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to A = B	"	"	"	
			310	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to A = B	"	"	"	
			311	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to A = B	"	"	"	
			312	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to A = B	"	"	"	
			313	"	IN	"	"	"	"	"	"	"	"	"	"	A 0 to A = B	11.0	27.0	"	
			314	"	2.7 V	"	"	"	"	"	"	"	"	"	"	A 1 to A = B	"	"	"	
			315	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to A = B	"	"	"	
			316	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to A = B	"	"	"	
			317	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to A = B	"	"	"	
			318	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to A = B	"	"	"	
			319	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to A = B	"	"	"	
			320	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to A = B	"	"	"	
10	Same tests and terminal conditions as for subgroup 9, except T _c = +125°C and use limits from table I.																			
11	Same tests and terminal conditions as for subgroup 9, except T _c = -55°C and use limits from table I.																			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit	
				16	17	18	19	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1		V _{cc}	Min		Max
9 T _c = 25°C	t _{PHL3}	3003 Fig. 4	Case 3 J/	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{cc}	A 0 to P	2.5	9.5	ns	
			Test no.	289		OUT			0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	A 1 to P	"	"	"
			290		"				"	"	"	"	"	"	0.0 V	"	"	"	"	
			291		"				"	"	"	"	"	"	0.0 V	"	"	"	"	
			292		"				"	"	"	"	"	"	"	"	"	"	"	
			293		"				"	"	"	"	"	"	"	"	"	"	"	
			294		"				"	"	"	"	"	"	2.7 V	"	"	"	"	
			295		"				"	"	"	"	IN	2.7 V	0.0 V	"	"	"	"	
			296		"				IN	2.7 V	0.0 V	0.0 V	"	"	"	"	"	"	"	
			297		"				0.0 V	0.0 V	"	"	"	"	"	"	"	"	8.0	"
			298		"				"	"	"	"	"	"	"	IN	"	"	"	"
			299		"				"	"	"	"	"	IN	0.0 V	"	"	"	"	"
			300		"				"	"	"	"	"	0.0 V	"	"	"	"	"	"
			301		"				"	"	"	"	"	0.0 V	"	"	"	"	"	"
			302		"				"	"	"	"	"	"	IN	2.7 V	"	"	"	"
			303		"				"	"	"	"	IN	2.7 V	0.0 V	0.0 V	"	"	"	"
			304		"				"			IN	2.7 V	0.0 V	"	"	"	"	"	"
10	PHL4	PHL4	305		OUT				IN	2.7 V	0.0 V	0.0 V	"	2.7 V	"	A 0 to A = B	5.5	13.5	"	
			306		"				"	"	"	"	2.7 V	"	IN	"	"	"	"	
			307		"				"	"	"	"	IN	"	2.7 V	"	"	"	"	
			308		"				"	"	"	"	2.7 V	"	"	"	"	"	"	
			309		"				"	"	"	"	2.7 V	"	"	"	"	"	"	
			310		"				"	"	"	"	"	"	IN	"	"	"	"	
			311		"				"	"	"	"	IN	"	0.0 V	"	"	"	"	
			312		"				"	"	IN	"	0.0 V	"	"	"	"	"	"	
			313		"				"	"	0.0 V	"	"	"	"	"	"	"	"	"
			314		"				"	"	"	"	"	"	"	IN	"	11.0	27.0	"
			315		"				"	"	"	"	"	IN	"	2.7 V	"	"	"	"
			316		"				"	"	"	"	"	2.7 V	"	"	"	"	"	"
			317		"				"	"	"	2.7 V	"	"	"	"	"	"	"	"
			318		"				"	"	"	"	"	"	IN	"	"	"	"	"
			319		"				"	"	"	"	IN	"	0.0 V	"	"	"	"	"
			320		"				"	"	IN	"	0.0 V	"	0.0 V	"	"	"	"	"
			10	Same tests and terminal conditions as for subgroup 9, except T _c = +125°C and use limits from table I.																
11	Same tests and terminal conditions as for subgroup 9, except T _c = -55°C and use limits from table I.																			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

- 1/ For cases 3 pins not referenced are N/C.
- 2/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I_{IL1}	58	-.25/- .60	-.03/- .60	-.25/- .60
I_{IL2}	59-66	-.75/-1.8	-.09/-1.8	-.75/-1.8
I_{IL3}	67-70	-1.0/-2.4	-.12/-2.4	-1.0/-2.4
I_{IL4}	71	-1.25/-3.0	-.15/-3.0	-1.25/-3.0

- 3/ $H \geq 1.5$ V, $L \leq 1.5$ V ; A = 2.5 V, B = 0.5 V.
- 4/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit	
				Case 2 J	Test no.	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2		P 2	V _{cc}		Min
1 Tc = 25°C	V _{OH}	3006		1	2.0V	0.8V	2.0V	2.0V	0.8V	-1.0 mA	GND					2.0V	2.0V	0.8V	4.5V	P	2.5		V	
				2	2.0V	2.0V	2.0V	"	2.0V	"	"	"	-1.0 mA				2.0V	0.8V	2.0V	"	Cn + z	"	"	
				3	0.8V	0.8V	0.8V	"	"	"	"	"	"		-1.0 mA			2.0V	0.8V	"	G	"	"	
				4	0.8V	2.0V	2.0V	"	"	"	"	"	"			-1.0 mA		0.8V	2.0V	2.0V	"	Cn + y	"	"
				5	2.0V	2.0V	0.8V	"	"	"	"	"	"					0.8V	2.0V	2.0V	"	Cn + x	"	"
	OL	3007		6	2.0V	0.8V	2.0V	0.8V	2.0V	0.8V	20 mA	"				-1.0 mA	2.0V	2.0V	0.8V	"	P	0.5	"	
				7	0.8V	0.8V	0.8V	0.8V	2.0V	2.0V	"	"	20 mA				"	"	2.0V	"	Cn + z	"	"	
				8	2.0V	2.0V	2.0V	2.0V	0.8V	"	"	"	"		20 mA		"	"	"	"	G	"	"	
				9	"	"	0.8V	0.8V	2.0V	"	"	"	"			20 mA		"	"	"	Cn + y	"	"	
				10	"	"	2.0V	2.0V	2.0V	"	"	"	"				20 mA	"	"	"	Cn + x	"	"	
				11	-18 mA						"	"	"							"	G 1	-1.2	"	"
I	IC		12		-18 mA						"								"	P 1	"	"	"	
			13			-18 mA						"								"	G 0	"	"	"
			14				-18 mA					"								"	P 0	"	"	"
			15					-18 mA				"								"	G 3	"	"	"
			16						-18 mA			"								"	P 3	"	"	"
			17								-18 mA	"						-18 mA		"	Cn	"	"	"
			18									"								"	G 2	"	"	"
			19									"							-18 mA	"	P 2	"	"	"
			20	2.7V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	"						5.5V	0.0V	0.0V	5.5V	G 1	20	μA
			21	0.0V	2.7V	0.0V	"	"	"	"	"	"						0.0V	"	"	"	P 1	"	"
			22	0.0V	0.0V	2.7V	"	"	"	"	"	"						5.5V	"	"	"	G 0	"	"
I	IH1		23	"	"	0.0V	2.7V	"	"	"	"					0.0V	"	"	"	"	P 0	"	"	
			24	"	"	"	0.0V	2.7V	"	"	"	"					5.5V	"	"	"	G 3	"	"	
			25	"	"	"	"	0.0V	2.7V			"					0.0V	"	"	"	P 3	"	"	
			26	"	"	"	"	"	0.0V			"					2.7V	"	"	"	Cn	"	"	
			27	"	"	"	"	"	"			"					5.5V	2.7V	"	"	G 2	"	"	
			28	"	"	"	"	"	"			"					0.0V	0.0V	2.7V	"	P 2	"	"	
			29	7.0V	"	"	"	"	"	"	"	"					5.5V	"	0.0V	"	G 1	100	"	
			30	0.0V	7.0V	"	"	"	"	"	"	"					0.0V	"	"	"	P 1	"	"	
			31	"	0.0V	7.0V	"	"	"	"	"	"					5.5V	"	"	"	G 0	"	"	
			32	"	"	0.0V	7.0V	"	"	"	"	"					0.0V	"	"	"	P 0	"	"	
			33	"	"	"	0.0V	7.0V	"	"	"	"					5.5V	"	"	"	G 3	"	"	
I	IH2		34	"	"	"	"	0.0V	7.0V	"					0.0V	"	"	"	"	P 3	"	"		
			35	"	"	"	"	"	"	0.0V						7.0V	"	"	"	Cn	"	"		
			36	"	"	"	"	"	"	"	"					5.5V	7.0V	"	"	G 2	"	"		
			37	"	"	"	"	"	"	"	"	"					0.0V	0.0V	7.0V	"	P 2	"	"	
I	IL1	3009		38	5.5V	5.5V	5.5V	5.5V	5.5V	"					0.5V	5.5V	5.5V	"	Cn	2/	2/	mA		

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F, Case 2 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit
				G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{cc}		Min	Max	
1	T _c = 25°C	3009	IL ₂ IL ₃ IL ₄ IL ₅ IL ₆ OS	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	0.5 V							5.5 V	5.5 V	5.5 V	5.5 V	P 3	2/	2/	mA
				"	"	"	"	"	5.5 V							"	"	0.5 V	"	P 2	"	"	"
				"	0.5 V	"	"	"	"							"	"	5.5 V	"	P 1	"	"	"
				"	5.5 V	"	0.5 V	"	"							"	"	"	"	P 0	"	"	"
				"	"	"	5.5 V	0.5 V	"							0.0 V	"	"	"	G 3	"	"	"
				"	"	0.5 V	"	5.5 V	"							"	"	"	"	G 0	"	"	"
				"	"	5.5 V	"	"	"							"	0.5 V	"	"	G 2	"	"	"
				"	0.5 V	"	"	"	"							"	0.5 V	"	"	G 1	"	"	"
				5.5 V	5.5 V	"	"	"	"	0.0 V						5.5 V	5.5 V	"	"	P	-60	-150	"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V			0.0 V				5.5 V	0.0 V	0.0 V	"	Cn + z	"	"	"
				5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V				0.0 V			0.0 V	5.5 V	5.5 V	"	G	"	"	"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V					0.0 V		5.5 V	"	"	"	Cn + y	"	"	"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V						0.0 V	5.5 V	"	"	"	Cn + x	"	"	"
2	T _c = 25°C	3011	OO	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	2.5 V						4.5 V	4.5 V	0.0 V	4.5 V	P	60		"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V				2.5 V			"	"	"	"	Cn + z	"	"	"
				4.5 V	4.5 V	4.5 V	4.5 V	4.5 V	4.5 V							"	"	"	"	G	"	"	"
				"	"	0.0 V	0.0 V	4.5 V	"					2.5 V		"	"	"	"	Cn + y	"	"	"
				"	"	0.0 V	0.0 V	4.5 V	"						2.5 V	"	"	"	"	Cn + x	"	"	"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	0.0 V	0.0 V	5.5 V	V _{cc}	"	28	"
				5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V							0.0 V	5.5 V	0.0 V	5.5 V	V _{cc}	"	36	"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V				"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V				"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V				"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V				"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V				"
				0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V				"
3	T _c = 25°C	3014	Func- tional test J	B	B	B	B	B	B	L	GND	H	L	H	H	B	B	B	A/	All outputs			
				"	A	"	B	"	"	H	"	"	"	"	"	"	"	"	"	"			
				"	B	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	B	"	"	A	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
8	T _c = 25°C	3004 Fig. 4	t _{PHL1}	2.7 V	0.0 V	2.7 V	0.0 V	0.0 V	0.0 V		GND				OUT	IN	2.7 V	0.0 V	5.0 V	Cn to Cn + x	3.0	9.0	ns
				"	"	"	"	"	"		"			OUT		"	"	"	"	Cn to Cn + y	"	"	"
				"	"	"	"	"	"		"	OUT				"	"	"	"	Cn to Cn + z	"	"	"
				"	"	"	"	"	"		"			OUT		"	"	"	"	Cn to Cn + x	"	"	"
				"	"	"	"	"	"		"			OUT		"	"	"	"	Cn to Cn + y	"	"	"
				"	"	"	"	"	"		"			OUT		"	"	"	"	Cn to Cn + z	"	"	"

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F, Case 2 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		Min	Max	
9	t_{PH2}	3004 Fig. 4	80	$\bar{G}$ 1	$\bar{P}$ 1	$\bar{G}$ 0	$\bar{P}$ 0	$\bar{G}$ 3	$\bar{P}$ 3	$\bar{P}$	GND	Cn + z	$\bar{G}$	Cn + y	Cn + x	Cn	$\bar{G}$ 2	$\bar{P}$ 2	5.0 V	$\bar{P}$ 0 to Cn + x	1.0	5.0	ns
			81	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	$\bar{P}$ 0 to Cn + y	"	"	"
			82	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{P}$ 0 to Cn + z	"	"	"
			83	"	IN	"	0.0 V	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{P}$ 1 to Cn + y	"	"	"
			84	"	IN	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{P}$ 1 to Cn + z	"	"	"
		PHL2	85	"	0.0 V	"	"	"	"	"	"	OUT	"	"	"	"	"	IN	"	$\bar{P}$ 2 to Cn + z	"	"	"
			86	"	"	"	IN	"	"	"	"	"	"	"	OUT	"	"	0.0 V	"	$\bar{P}$ 0 to Cn + x	2.5	8.5	"
			87	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{P}$ 0 to Cn + y	"	"	"
			88	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{P}$ 0 to Cn + z	"	"	"
			89	"	IN	"	0.0 V	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{P}$ 1 to Cn + y	"	"	"
		PHL3	90	"	IN	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{P}$ 1 to Cn + z	"	"	"
			91	"	0.0 V	"	"	"	"	"	"	OUT	"	"	"	"	"	IN	"	$\bar{P}$ 2 to Cn + z	"	"	"
			92	2.7 V	0.0 V	IN	0.0 V	0.0 V	0.0 V	"	"	"	"	"	OUT	0.0 V	2.7 V	0.0 V	"	$\bar{G}$ 0 to Cn + x	1.0	5.2	"
			93	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{G}$ 0 to Cn + y	"	"	"
			94	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{G}$ 0 to Cn + z	"	"	"
		PHL3	95	"	"	"	2.7 V	"	"	"	"	"	"	"	OUT	2.7 V	"	"	"	$\bar{G}$ 0 to Cn + x	"	"	"
			96	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{G}$ 0 to Cn + y	"	"	"
			97	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{G}$ 0 to Cn + z	"	"	"
			98	IN	"	2.7 V	0.0 V	"	"	"	"	"	"	OUT	"	0.0 V	"	"	"	$\bar{G}$ 1 to Cn + y	"	"	"
			99	"	2.7 V	"	"	"	"	"	"	OUT	"	"	"	2.7 V	"	"	"	$\bar{G}$ 1 to Cn + z	"	"	"
			100	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{G}$ 1 to Cn + y	"	"	"
			101	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	$\bar{G}$ 1 to Cn + z	"	"	"
		PHL3	102	"	0.0 V	"	2.7 V	"	"	"	"	"	"	OUT	"	"	"	"	"	$\bar{G}$ 1 to Cn + y	"	"	"
			103	"	"	"	2.7 V	"	"	"	"	OUT	"	"	"	"	IN	"	"	$\bar{G}$ 1 to Cn + z	"	"	"
			104	2.7 V	"	"	0.0 V	"	"	"	"	"	"	"	"	0.0 V	"	"	"	$\bar{G}$ 2 to Cn + z	"	"	"
			105	"	"	"	2.7 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	$\bar{G}$ 2 to Cn + z	"	"	"
			106	"	2.7 V	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	$\bar{G}$ 2 to Cn + z	"	"	"
			107	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	$\bar{G}$ 2 to Cn + z	"	"	"

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 J Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit
																					Min	Max	
9	t_{PH3}	3004 Fig. 4	108	$\bar{G} 1$	$\bar{P} 1$	$\bar{G} 0$	$\bar{P} 0$	$\bar{G} 3$	$\bar{P} 3$	$\bar{P}$	GND	Cn + z	$\bar{G}$	Cn + y	Cn + x	Cn	$\bar{G} 2$	$\bar{P} 2$	V_{CC}	$\bar{G} 0$ to Cn + x	2.5	8.5	ns
				2.7 V	0.0 V	IN	0.0 V	0.0 V	0.0 V					OUT	OUT			0.0 V	5.0	$\bar{G} 0$ to Cn + y	"	"	"
				"	"	"	"	"	"		"							"	"	$\bar{G} 0$ to Cn + z	"	"	"
				"	"	"	2.7 V	"	"	"	"				OUT	2.7 V	"	"	"	$\bar{G} 0$ to Cn + x	"	"	"
				"	"	"	"	"	"		"			OUT		"	"	"	"	$\bar{G} 0$ to Cn + y	"	"	"
				"	"	"	"	"	"		"	OUT				"	"	"	"	$\bar{G} 0$ to Cn + z	"	"	"
				IN	"	2.7 V	0.0 V	"	"	"	"			OUT		0.0 V	"	"	"	$\bar{G} 1$ to Cn + y	"	"	"
				"	2.7 V	"	"	"	"	"	"	OUT				2.7 V	"	"	"	$\bar{G} 1$ to Cn + z	"	"	"
				"	"	"	"	"	"	"	"			OUT		"	"	"	"	$\bar{G} 1$ to Cn + y	"	"	"
				"	"	"	"	"	"	"	"	OUT				"	"	"	"	$\bar{G} 1$ to Cn + z	"	"	"
				"	0.0 V	"	2.7 V	"	"	"	"			OUT		"	"	"	"	$\bar{G} 2$ to Cn + z	"	"	"
				2.7 V	"	"	0.0 V	"	"	"	"					0.0 V	IN	"	"	$\bar{G} 2$ to Cn + z	"	"	"
				"	"	"	2.7 V	"	"	"	"					2.7 V	"	"	"	$\bar{G} 2$ to Cn + z	"	"	"
				"	2.7 V	"	0.0 V	"	"	"	"					"	"	2.7 V	"	$\bar{G} 2$ to Cn + z	"	"	"
				"	0.0 V	"	"	2.7 V	"	"	"		OUT			0.0 V	2.7 V	0.0 V	"	$\bar{G} 2$ to Cn + z	"	"	"
				"	IN	0.0 V	"	2.7 V	"	"	"					"	"	IN	"	$\bar{P} 1$ to $\bar{G}$	"	8.0	"
				"	0.0 V	"	2.7 V	"	"	"	"					"	"	"	"	$\bar{P} 2$ to $\bar{G}$	"	"	"
				0.0 V	0.0 V	"	0.0 V	"	IN		"					"	"	0.0 V	"	$\bar{P} 3$ to $\bar{G}$	"	"	"
t	t_{PH4}	"	127	2.7 V	IN	"	0.0 V	"	0.0 V		"		"			"	"	0.0 V	"	$\bar{P} 1$ to $\bar{G}$	"	10.0	"
				2.7 V	0.0 V	"	2.7 V	"	0.0 V		"		"			"	"	IN	"	$\bar{P} 2$ to $\bar{G}$	"	"	"
				0.0 V	"	"	0.0 V	"	IN		"		"			"	"	0.0 V	"	$\bar{P} 3$ to $\bar{G}$	"	"	"
				2.7 V	"	IN	"	"	0.0 V		"		"			2.7 V	"	"	"	$\bar{G} 0$ to $\bar{G}$	"	7.5	"
				IN	"	2.7 V	"	"	"		"		"			"	"	"	"	$\bar{G} 1$ to $\bar{G}$	"	"	"
				IN	2.7 V	0.0 V	"	"	"		"		"			"	"	"	"	$\bar{G} 1$ to $\bar{G}$	"	"	"
				2.7 V	0.0 V	2.7 V	"	"	"		"		"			"	IN	"	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				"	2.7 V	0.0 V	"	"	"		"		"			"	"	"	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				"	0.0 V	0.0 V	"	"	"		"		"			"	"	2.7 V	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				"	0.0 V	2.7 V	"	IN	"		"		"			"	2.7 V	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	2.7 V	0.0 V	"	"	"		"		"			"	"	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	0.0 V	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	0.0 V	"	"	"	2.7 V		"		"			"	"	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
t	t_{PH5}	"	130	2.7 V	"	IN	"	"	0.0 V		"		"			2.7 V	"	"	"	$\bar{G} 0$ to $\bar{G}$	"	"	"
				IN	"	2.7 V	"	"	"		"		"			"	"	"	"	$\bar{G} 1$ to $\bar{G}$	"	"	"
				IN	2.7 V	0.0 V	"	"	"		"		"			"	"	"	"	$\bar{G} 1$ to $\bar{G}$	"	"	"
				2.7 V	0.0 V	2.7 V	"	"	"		"		"			"	IN	"	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				"	2.7 V	0.0 V	"	"	"		"		"			"	"	"	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				"	0.0 V	0.0 V	"	"	"		"		"			"	"	2.7 V	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				"	0.0 V	2.7 V	"	IN	"		"		"			"	2.7 V	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	2.7 V	0.0 V	"	"	"		"		"			"	"	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	0.0 V	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	0.0 V	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				"	"	"	"	"	"		"		"			"	"	"	"	$\bar{G} 3$ to $\bar{G}$	"	"	"

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit		
				2	3	4	5	7	8	9	10	12	13	14	15	17	18	19	20		Min	Max			
9	t_{PLH5} $T_C = 25^{\circ}\text{C}$	3004 Fig. 4	Case 2 $\bar{I}$ /	$\bar{G} 1$	$\bar{P} 1$	$\bar{G} 0$	$\bar{P} 0$	$\bar{G} 3$	$\bar{P} 3$	$\bar{P}$	GND	Cn + z	$\bar{G}$	Cn + y	Cn + x	Cn	$\bar{G} 2$	$\bar{P} 2$	V_{CC}	$\bar{G} 0$ to $\bar{G}$	3.0	10.5	ns		
			Test no.	140	2.7 V	0.0 V	IN	0.0 V	2.7 V	0.0 V			OUT					2.7 V	2.7 V	0.0 V	5.0 V	$\bar{G} 0$ to $\bar{G}$			
				141	IN	0.0 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	$\bar{G} 1$ to $\bar{G}$	"	"	"
				142	IN	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	$\bar{G} 1$ to $\bar{G}$	"	"	"
				143	2.7 V	0.0 V	2.7 V	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				144	"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				145	"	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	$\bar{G} 2$ to $\bar{G}$	"	"	"
				146	"	0.0 V	2.7 V	"	IN	"	"	"	"	"	"	"	"	"	2.7 V	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				147	"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
				148	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"
PHL6			149	"	"	"	"	"	2.7 V		"		"			"	"	0.0 V	"	$\bar{G} 3$ to $\bar{G}$	"	"	"		
			150	0.0 V	"	"	IN	0.0 V	0.0 V	OUT	"						0.0 V	0.0 V	"	"	$\bar{P} 0$ to $\bar{P}$	1.5	5.5	"	
			151	"	IN	"	0.0 V	"	"	"	"	"					"	"	"	"	$\bar{P} 1$ to $\bar{P}$	"	"	"	
			152	"	0.0 V	"	"	"	"	"	"	"					"	"	IN	"	$\bar{P} 2$ to $\bar{P}$	"	"	"	
			153	"	"	"	"	"	"	IN	"	"	"				"	"	0.0 V	"	$\bar{P} 3$ to $\bar{P}$	"	"	"	
			154	"	"	"	IN	"	0.0 V	"	"	"	"				"	"	"	"	$\bar{P} 0$ to $\bar{P}$	2.5	7.5	"	
			155	"	IN	"	0.0 V	"	"	"	"	"	"				"	"	"	"	$\bar{P} 1$ to $\bar{P}$	"	"	"	
PLH6			156	"	0.0 V	"	"	"	"	"				"	"	"	IN	"	$\bar{P} 2$ to $\bar{P}$	"	"	"			
			157	"	"	"	"	"	"	IN	"	"	"				"	"	0.0 V	"	$\bar{P} 3$ to $\bar{P}$	"	"	"	
10	Same tests, terminal conditions, and limits as for subgroup 9, except $T_C = +125^{\circ}\text{C}$ and use limits from table I.																								
11	Same tests, terminal conditions and limits as for subgroup 9, except $T_C = -55^{\circ}\text{C}$ and use limits from table I.																								

1/ For case 2 pins not referenced are NC.

2/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B
I_{IL1}	38	-0.5/-1.2	-0.5/-1.2
I_{IL2}	39	-1.0/-2.4	-0.1/-2.4
I_{IL3}	40	-1.5/-3.6	-1.5/-3.6
I_{IL4}	41 - 43	-2.0/-4.8	-1.5/-3.6
I_{IL5}	44 - 45	-3.5/-8.4	-3.5/-8.4
I_{IL6}	46	-4.0/-9.6	-4.0/-9.6

3/ $H \geq 1.5$ V, $L \leq 1.5$ V; A = 2.5 V, B = 0.5 V.

4/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{CC}		Min	Max	
1 Tc = 25°C	V _{OH}	3006	1	0.8V	0.8V	0.8V	0.8V	0.8V	0.8V	0.8V	-1mA	-1mA	GND						0.8V	0.8V	0.8V	0.8V	4.5V	F0	2.5	V	
			2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	F1	"	"	
			3	"	"	"	"	"	"	"	"	"	"	"	"	-1mA				"	"	"	"	"	F2	"	"
			4	"	"	"	"	"	"	"	"	"	"	"	"	-1mA				"	"	"	"	"	F3	"	"
			5	"	"	"	"	"	"	"	"	"	"	"	"		-1mA				"	"	"	"	G	"	"
			6	"	2.0V	"	2.0V	0.8V	"	2.0V					"				-1mA	2.0V	2.0V	"	2.0V	"	P	"	"
			7	"	"	"	"	2.0V	2.0V	0.8V	-1mA			"	"					0.8V	"	"	"	"	F0	"	"
			8	"	"	"	"	"	"	"	-1mA			"	"					"	"	"	"	"	F1	"	"
			9	"	"	"	"	"	"	"	"		-1mA		"					"	"	"	"	"	F2	"	"
			10	"	"	"	"	"	"	"	"		"		"		-1mA			"	"	"	"	"	F3	"	"
			11	"	"	"	"	"	"	"	"		"		"		-1mA			"	"	"	"	"	G	"	"
			12	"	0.8V	"	0.8V	"	"	2.0V					"				-1mA	0.8V	2.0V	"	0.8V	"	P	"	"
			13	2.0V	2.0V	2.0V	2.0V	"	0.8V	"	-1mA			"	"					2.0V	2.0V	2.0V	2.0V	"	F0	"	"
			14	"	"	"	"	"	"	"	-1mA			"	"					"	"	"	"	"	F1	"	"
			15	"	"	"	"	"	"	"	"			"	"	-1mA				"	"	"	"	"	F2	"	"
			16	"	"	"	"	"	"	"	"			"	"	-1mA				"	"	"	"	"	F3	"	"
			17	"	"	"	"	"	"	"	"			"	"		-1mA			"	"	"	"	"	G	"	"
OL		3007	18	0.8V	2.0V	0.8V	2.0V	0.8V	2.0V	0.8V	2.0mA		"						0.8V	2.0V	0.8V	2.0V	"	F0	0.5	"	
			19	"	"	"	"	"	"	2.0mA			"	"					"	"	"	"	"	F1	"	"	
			20	"	"	"	"	"	"	"		2.0mA		"					"	"	"	"	"	F2	"	"	
			21	"	"	"	"	"	"	"		"		"		2.0mA				"	"	"	"	"	F3	"	"
			22	2.0V	0.8V	2.0V	0.8V	"	"	"				"				2.0mA		0.8V	2.0V	0.8V	2.0V	"	G	"	"
			23	"	0.8V	"	0.8V	"	"	"				"					2.0mA	0.8V	"	0.8V	"	P	"	"	
			24	"	2.0V	"	2.0V	"	0.8V	2.0mA				"						2.0V	2.0V	"	2.0V	"	F0	"	"
			25	"	"	"	"	"	"	"	2.0mA			"		2.0mA				"	"	"	"	"	F1	"	"
			26	"	"	"	"	"	"	"	"			"		2.0mA				"	"	"	"	"	F2	"	"
			27	"	"	"	"	"	"	"	"			"		"	2.0mA			"	"	"	"	"	F3	"	"
			28	"	"	"	"	"	"	"	"			"				2.0mA		"	"	"	"	"	G	"	"
			29	"	"	"	"	"	"	"	"			"					2.0mA	"	"	"	"	"	P	"	"
			30	0.8V	0.8V	0.8V	0.8V	"	2.0V	"	2.0mA			"						0.8V	0.8V	0.8V	0.8V	"	F0	"	"
			31	"	"	"	"	"	"	"	"		2.0mA		"					"	"	"	"	"	F1	"	"
			32	"	"	"	"	"	"	"	"		"		"	2.0mA				"	"	"	"	"	F2	"	"
			33	"	"	"	"	"	"	"	"		"		"	"	2.0mA			"	"	"	"	"	F3	"	"
			34	"	"	"	"	"	"	"	"		"		"			2.0mA		"	"	"	"	"	G	"	"
35	"	"	"	"	"	"	"	"		"		"					2.0mA	"	"	"	"	P	"	"			
IC			36	-18mA								"											"	A1	-1.2	"	
			37		-18mA						"			"									"	B1	"	"	
			38			-18mA					"			"									"	A0	"	"	
			39				-18mA				"			"									"	B0	"	"	
			40					-18mA			"			"									"	S0	"	"	
			41						-18mA					"									"	S1	"	"	
			42							-18mA				"									"	S2	"	"	
			43											"					-18mA				"	Cn	"	"	
			44											"									"	B3	"	"	
			45											"									"	A3	"	"	
IL1		3009	46								"										-18mA	"	B2	"	"		
			47											"							-18mA	"	A2	"	"		
			48					0.5V						"								-18mA	5.5V	S0	1/	mA	
			49						0.5V					"									"	S1	"	"	
			50							0.5V				"									"	S2	"	"	

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits Min	Test limits Max	Unit
1 Tc = 25°C	I _{L2}	3009	51	0.5 V									GND				P	Cn	B3	A3	B2	A2	V _{CC}	5.5 V	1/	1/	mA
			52		0.5 V																			B1			"
			53			0.5 V																		A0			"
			54				0.5 V																	B0			"
			55															0.5 V						Cn			"
			56																0.5 V					B3			"
			57																		0.5 V			A3			"
			58																			0.5 V		B2			"
			59																				A2			"	"
			60	2.7 V																				A1		20	μA
			61		2.7 V																			B1			"
			62			2.7 V																		A0			"
			63				2.7 V																	B0			"
			64					2.7 V																S0			"
			65						2.7 V															S1			"
			66							2.7 V														S2			"
			67															2.7 V						Cn			"
			68																					B3			"
			69																	2.7 V				A3			"
			70																		2.7 V			B2			"
2	I _{H2}	3010	71																					A2			"
			72	7.0 V																		2.7 V		A1		100	"
			73		7.0 V																			B1			"
			74			7.0 V																		A0			"
			75				7.0 V																	B0			"
			76					7.0 V																S0			"
			77						7.0 V															S1			"
			78							7.0 V														S2			"
			79																					Cn			"
			80																					B3			"
			81																					A3			"
			82																					B2			"
			83																					A2			"
			84	GND	GND	GND	GND	4.5 V	GND	GND	0.0 V													F0	-60	-150	mA
			85									0.0 V												F1			"
			86											0.0 V										F2			"
			87												0.0 V									F3			"
			88													0.0 V								G			"
			89		4.5 V		4.5 V	GND		4.5 V							0.0 V		4.5 V					P			"
			90		GND		GND		4.5 V		2.5 V								GND					F0	60		"
			91									2.5 V												F1			"
			92											2.5 V										F2			"
			93												2.5 V									F3			"
			94													2.5 V								G			"
			95														2.5 V							P			"
			96	4.5 V	4.5 V	4.5 V	4.5 V	GND	GND	GND									4.5 V					V _{CC}		89	"
3 Tc = 25°C	Functional tests	3014	97	B	B	B	B	B	B	B	L	L	GND	L	L	L	L	B	B	B	B	B	B	3/	All outputs		
			98		B		B	A			H	H		H	H	H											
			99		A		A				L	H		L	H	L	H										
			100	A	B	A	A	B			L	H		L	L	L											
			101	A	A	A	A	A			H	H		H	H												
			102	B	B	B	B	B			L	L		L	L												
			103	B	A	B	A	B			H	H		H	H	L											
			104	A	B	A	A	B			H	L		L	L	H	H										

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max			
7 T _c = 25°C	Functional tests 	3014	105	A	A	A	A	A	B	B	L	L	GND	L	L	H	L	A	A	A	A	A	A	3I	All				
			106	B	B	B	B	B	A	"	H	H	"	H	H	"	L	B	B	B	B	B	B	B	outputs				
			107	B	A	B	A	"	"	L	L	"	L	"	"	"	"	H	"	A	B	A	B	"	"				
			108	A	B	A	B	"	"	"	L	H	"	H	"	"	"	L	"	"	B	A	B	A	"	"			
			109	A	A	A	A	"	"	"	H	H	"	H	"	"	"	H	"	"	A	A	A	A	"	"			
			110	B	B	A	B	"	"	"	L	L	"	L	"	"	"	"	"	"	B	B	A	B	"	"			
			111	B	A	B	A	"	"	"	H	L	"	L	"	"	"	"	H	"	A	B	A	B	"	"			
			112	A	B	A	A	"	"	"	H	L	"	L	"	"	"	"	L	"	B	A	A	A	"	"			
			113	A	A	A	A	"	"	"	L	L	"	L	"	"	"	"	L	"	A	A	A	A	"	"			
			114	B	B	B	B	A	"	"	L	L	"	L	"	"	"	H	B	B	B	B	B	B	"	"			
			115	B	A	B	A	"	"	"	H	H	"	H	"	"	"	"	"	"	A	B	A	B	"	"			
			116	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"		
			117	A	A	A	A	"	"	"	"	"	"	"	"	"	"	L	"	"	A	A	A	A	"	"			
			118	B	B	B	B	"	"	"	H	L	"	L	"	"	"	H	A	B	B	B	B	B	"	"			
			119	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	B	"	"			
			120	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"		
			121	A	A	A	A	"	"	"	"	H	"	H	"	"	"	L	"	"	A	A	A	A	"	"			
122	B	B	B	B	B	A	"	"	L	L	L	"	"	"	L	H	B	B	B	B	B	"	"						
123	B	A	B	A	"	"	"	"	H	H	"	H	"	"	"	"	"	A	B	A	B	"	"						
124	A	B	A	B	"	"	"	"	"	H	"	H	"	"	"	"	"	"	B	A	B	A	"	"					
125	A	A	A	A	"	"	"	"	L	L	"	L	"	"	L	"	"	A	A	A	A	"	"						
126	B	B	B	B	A	"	"	"	L	L	"	L	"	"	L	H	"	B	B	B	B	"	"						
127	B	A	B	A	"	"	"	"	H	H	"	H	"	"	"	"	"	A	B	A	B	"	"						
128	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"					
129	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	A	A	A	"	"					
130	B	B	B	B	B	A	"	"	L	"	L	"	"	"	L	"	"	B	B	B	B	"	"						
131	B	A	B	A	"	"	"	"	"	"	"	"	"	"	H	H	"	A	B	A	B	"	"						
132	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	L	"	"	B	A	B	A	"	"					
133	A	A	A	A	"	"	"	"	"	H	"	H	"	"	"	"	"	A	A	A	A	"	"						
134	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	B	B	B	B	"	"					
135	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	B	"	"					
136	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"					
8	Same tests, terminal conditions, and limits as for subgroup 7, except T _c = +125°C and T _c = -55°C.																												
9 T _c = 25°C	t _{PH1} Fig. 4	138	GND	GND	GND	GND	2.7 V	GND	GND	OUT	OUT	OUT	GND					IN	GND	GND	GND	5.0 V	Cn to F0	2.5	12	ns			
		139	"	"	"	"	"	"	"	"	"	"	OUT					"	"	"	"	"	Cn to F1	"	"	"			
		140	"	"	"	"	"	"	"	"	"	"	OUT	OUT				"	"	"	"	"	Cn to F2	"	"	"			
		141	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	Cn to F3	"	"	"			
		142	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"			
		143	"	"	"	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	Cn to F1	"	"	"			
		144	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	"	Cn to F2	"	"	"			
		145	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	Cn to F3	"	"	"		
		146	"	"	"	"	2.7 V	2.7 V	"	"	OUT	OUT	"	"	"	"	"	2.7 V	"	"	2.7 V	"	"	Cn to F0	"	"	"		
		147	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"		
		148	"	"	"	"	"	"	"	"	"	"	OUT	OUT			"	"	"	"	"	"	"	Cn to F2	"	"	"		
		149	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	Cn to F3	"	"	"		
		150	"	"	"	"	GND	"	"	GND	OUT	OUT	"	"	"	"	"	"	GND	"	"	"	"	Cn to F0	"	8	"		
		151	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"		
		152	"	"	"	"	"	"	"	"	"	"	OUT	OUT			"	"	"	"	"	"	"	Cn to F2	"	"	"		
		153	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	Cn to F3	"	"	"		
		154	"	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"		
155	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	"	"	Cn to F1	"	"	"				
156	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	Cn to F2	"	"	"				
157	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"				
158	"	"	"	"	2.7 V	"	2.7 V	"	"	OUT	OUT	"	"	"	"	2.7 V	"	"	2.7 V	"	"	Cn to F0	"	"	"				
159	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	"	"	Cn to F1	"	"	"				
160	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	"	Cn to F2	"	"	"				
161	"	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT		"	"	"	"	Cn to F3	"	"	"				

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit
																									Min	Max	
9 Tc = 25°C	t _{PUH2}	3003 Fig. 4	162	A1	2.7 V	IN	2.7 V	GND	GND	OUT	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}	A0 to F0	3.0	15	ns
			163	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			164	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			165	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			166	IN	"	IN	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	GND	"	"	"	"	"	A0 to F0	"	"	"
			167	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			168	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			169	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			170	"	"	IN	"	2.7 V	"	"	OUT	"	"	"	"	"	"	2.7 V	"	"	"	"	"	A0 to F0	"	"	"
			171	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			172	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			173	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			174	"	GND	IN	"	GND	GND	2.7 V	OUT	"	"	"	"	"	"	GND	GND	"	"	"	"	A0 to F0	"	"	"
			175	IN	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			176	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			177	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
	PHL2		178	"	2.7 V	IN	2.7 V	GND	GND	OUT	"	"	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	A0 to F0	3.0	12.5	"
			179	IN	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			180	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			181	"	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			182	"	"	"	"	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	A0 to F0	"	"	"
			183	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			184	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			185	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			186	"	"	IN	"	2.7 V	"	"	OUT	"	"	"	"	"	"	2.7 V	"	"	"	"	"	A0 to F0	"	"	"
			187	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			188	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
			189	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			190	"	GND	IN	"	GND	GND	2.7 V	OUT	"	"	"	"	"	"	GND	GND	"	"	"	"	A0 to F0	"	"	"
			191	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"
			192	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"
	PHL3		193	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	A3 to F3	"	"	"
			194	2.7 V	"	2.7 V	IN	2.7 V	GND	GND	OUT	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B0 to F0	"	15	"
			195	"	IN	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			196	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			197	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B3 to F3	"	"	"
			198	"	"	"	IN	GND	2.7 V	"	OUT	"	"	"	"	"	"	2.7 V	"	"	"	"	"	B0 to F0	"	"	"
			199	"	"	IN	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			200	"	"	"	"	"	"	"	"	OUT	"	OUT	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			201	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"
			202	"	"	IN	"	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"
			203	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			204	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			205	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B3 to F3	"	"	"
			206	"	"	"	IN	GND	GND	2.7 V	OUT	"	"	"	"	"	"	GND	"	"	"	"	"	B0 to F0	"	"	"
			207	"	"	IN	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			208	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			209	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B3 to F3	"	"	"
			210	GND	"	GND	IN	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"
			211	"	IN	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			212	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			213	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"
			214	2.7 V	"	2.7 V	IN	GND	2.7 V	"	OUT	"	"	"	OUT	"	"	"	"	"	"	"	"	B0 to F0	"	"	"
			215	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			216	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			217	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B3 to F3	"	"	"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max			
9 T _c = 25°C	t _{PHL3}	3003 Fig. 4	218	2.7 V		2.7 V	IN				2.7 V	GND	OUT					GND		2.7 V			5.0 V	B0 to F0	3.0	12.5	ns		
			219	"	IN	"	"	"	"	"	OUT	"	OUT					"	"	"	"	"	"	B1 to F1	"	"	"		
			220	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	B2 to F2	"	"	"	
			221	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	IN	"	"	"	B3 to F3	"	"	"	
			222	"	"	"	IN	GND	2.7 V	"	OUT	OUT	"	"				2.7 V	"	"	"	"	"	"	B0 to F0	"	"	"	
			223	"	"	"	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	"	B1 to F1	"	"	"	
			224	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	IN	"	"	B2 to F2	"	"	"	
			225	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	B3 to F3	"	"	"	
			226	"	"	"	"	"	"	"	"	OUT	OUT	"	"				"	"	"	"	"	"	B0 to F0	"	"	"	
			227	"	"	"	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	"	B1 to F1	"	"	"	
			228	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	IN	"	"	B2 to F2	"	"	"	
			229	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			GND	"	"	"	"	B3 to F3	"	"	"	
			230	"	"	"	IN	GND	GND	2.7 V	OUT	OUT	"	"				"	"	"	"	"	"	"	B0 to F0	"	"	"	
			231	"	"	IN	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	"	B1 to F1	"	"	"	
			232	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	IN	"	"	B2 to F2	"	"	"	
			233	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	B3 to F3	"	"	"	
			234	GND	"	GND	IN	2.7 V	"	"	OUT	OUT	"	"				"	"	"	"	"	"	"	B0 to F0	"	"	"	
			235	"	IN	"	"	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	B1 to F1	"	"	"	
			236	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	B2 to F2	"	"	"	
			237	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	B3 to F3	"	"	"	
			238	2.7 V	"	2.7 V	IN	GND	2.7 V	"	OUT	OUT	"	"				"	"	"	IN	"	2.7 V	"	"	B0 to F0	"	"	"
			239	"	IN	"	"	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	B1 to F1	"	"	"	
			240	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	B2 to F2	"	"	"	
			241	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	IN	"	"	"	"	B3 to F3	"	"	"
PLH4	PLH4		242	GND	GND	GND	IN	"	GND	OUT	OUT	"	"				"	"	GND	"	GND	"	"	S0 to F0	"	20.0	"		
			243	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"		
			244	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"		
			245	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"		
			246	"	2.7 V	"	2.7 V	2.7 V	IN	"	OUT	OUT	"	"				2.7 V	2.7 V	"	"	2.7 V	"	"	S1 to F0	"	"	"	
			247	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"	
			248	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"	
			249	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	S1 to F3	"	"	"	
			250	"	GND	"	GND	"	GND	IN	OUT	OUT	"	"				GND	GND	"	"	"	"	"	S2 to F0	"	"	"	
			251	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"	
			252	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	S2 to F2	"	"	"	
PHL4	PHL4		253	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	S2 to F3	"	"	"		
			254	"	"	"	"	"	IN	2.7 V	GND	OUT	OUT	"	"			"	"	"	"	"	"	S0 to F0	"	14.0	"		
			255	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"		
			256	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"		
			257	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"		
			258	"	2.7 V	"	2.7 V	2.7 V	IN	"	OUT	OUT	"	"				2.7 V	2.7 V	"	"	2.7 V	"	"	S1 to F0	"	"	"	
			259	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"	
			260	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"	
			261	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"	
			262	"	GND	"	GND	"	GND	IN	OUT	OUT	"	"				GND	GND	"	"	"	"	"	S2 to F0	"	"	"	
			263	"	"	"	"	"	"	"	"	"	"	OUT				"	"	"	"	"	"	"	S2 to F1	"	"	"	
264	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	S2 to F2	"	"	"				
265	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	S2 to F3	"	"	"				
PHL5	PHL5		266	2.7 V	2.7 V	IN	2.7 V	2.7 V	"	GND		"	"			OUT	"	2.7 V	2.7 V	2.7 V	2.7 V	"	"	A0 to G	"	11.5	"		
			267	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	A1 to G	"	"	"		
			268	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	A2 to G	"	"	"		
			269	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	A3 to G	"	"	"	

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max			
9 T _c = 25°C	t _{PLH5}	3003 Fig. 4	270	GND	GND	IN	GND	GND	2.7 V	GND			GND			OUT		GND	GND	GND	GND	GND	5.0 V	A0 to G	3.0	11.5	ns		
			271	IN	"	GND	"	"	"	"			"			"		"	"	"	"	GND	"	A1 to G	"	"	"		
			272	GND	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to G	"	"	"		
			273	"	"	"	"	"	"	"			"			"		"	"	"	IN	"	GND	"	A3 to G	"	"	"	
			274	"	2.7 V	IN	2.7 V	2.7 V	"	"			"			"		2.7 V	2.7 V	GND	2.7 V	"	"	A0 to G	"	"	"		
			275	IN	"	GND	"	"	"	"			"			"		"	"	"	"	"	"	A1 to G	"	"	"		
			276	GND	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to G	"	"	"		
	PHL5		277	GND	"	"	"	"	"	"			"			"		"	"	"	IN	"	GND	"	A3 to G	"	"	"	
			278	2.7 V	2.7 V	IN	"	"	GND	"			"			"		GND	"	2.7 V	"	2.7 V	"	A0 to G	"	10.0	"		
			279	IN	"	2.7 V	"	"	"	"			"			"		"	"	"	"	2.7 V	"	A1 to G	"	"	"		
			280	2.7 V	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to G	"	"	"		
			281	2.7 V	"	"	"	"	"	"			"			"		"	"	"	IN	"	2.7 V	"	A3 to G	"	"	"	
			282	GND	GND	IN	GND	GND	2.7 V	"			"			"		"	GND	GND	GND	"	2.7 V	"	A0 to G	"	"	"	
			283	IN	"	GND	"	"	"	"			"			"		"	"	"	"	GND	"	A1 to G	"	"	"		
	PLH6		284	GND	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to G	"	"	"		
			285	"	"	"	"	"	"	"			"			"		"	"	"	IN	"	GND	"	A3 to G	"	"	"	
			286	"	2.7 V	IN	2.7 V	2.7 V	"	"			"			"		2.7 V	2.7 V	GND	2.7 V	"	"	A0 to G	"	"	"		
			287	IN	"	GND	"	"	"	"			"			"		"	"	"	"	"	"	A1 to G	"	"	"		
			288	GND	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to G	"	"	"		
			289	"	"	"	"	"	"	"			"			"		"	"	"	IN	"	GND	"	A3 to G	"	"	"	
			290	"	GND	GND	IN	"	GND	"			"			"		GND	GND	GND	GND	"	"	"	B0 to G	"	11.5	"	
			291	"	IN	"	GND	"	"	"			"			"		"	"	"	"	"	"	B1 to G	"	"	"		
			292	"	GND	"	"	"	"	"			"			"		"	"	"	"	"	"	B2 to G	"	"	"		
			293	"	GND	"	"	"	"	"			"			"		"	IN	"	GND	"	"	"	B3 to G	"	"	"	
			294	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"			"			"		"	2.7 V	2.7 V	2.7 V	2.7 V	"	"	B0 to G	"	"	"	
			295	"	IN	"	2.7 V	"	"	"			"			"		"	"	"	"	"	"	"	B1 to G	"	"	"	
			296	"	2.7 V	"	"	"	"	"			"			"		"	"	"	IN	"	"	"	B2 to G	"	"	"	
			297	"	2.7 V	"	"	"	"	"			"			"		"	"	"	IN	"	2.7 V	"	"	B3 to G	"	"	"
			298	"	GND	"	IN	2.7 V	"	"			"			"		"	GND	GND	GND	2.7 V	"	"	B0 to G	"	"	"	
			299	"	IN	"	GND	"	"	"			"			"		"	"	"	"	"	"	"	B1 to G	"	"	"	
			300	"	GND	"	"	"	"	"			"			"		"	"	"	"	IN	"	"	"	B2 to G	"	"	"
			301	"	GND	"	"	"	"	"			"			"		"	IN	"	GND	"	"	"	"	B3 to G	"	"	"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit			
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max				
9 Tc = 25°C	t _{PHL6}	3003 Fig. 4	302	GND	GND	GND	IN	2.7 V	GND	GND			GND			OUT		GND	GND	GND	GND	GND	A2	GND	5.0 V	3.0	10.0	ns		
			303	"	IN	"	GND	"	"	"			"		"		"		"	"	"	"	"	"	B0 to G	"	"	"		
			304	"	GND	"	"	"	"	"			"		"		"		"	"	"	"	"	"	B1 to G	"	"	"		
			305	"	GND	"	"	"	"	"			"		"		"		"	"	"	"	"	"	B2 to G	"	"	"		
			306	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"			"		"		"		2.7 V	2.7 V	2.7 V	2.7 V	"	B0 to G	"	"	"			
			307	"	IN	"	2.7 V	"	"	"			"		"		"		"	"	"	"	"	"	B1 to G	"	"	"		
			308	"	2.7 V	"	"	"	"	"			"		"		"		"	"	"	"	"	"	B2 to G	"	"	"		
			309	"	2.7 V	"	"	"	"	"			"		"		"		"	"	"	"	"	"	B3 to G	"	"	"		
			310	"	GND	"	IN	2.7 V	"	"			"		"		"		"	GND	"	GND	"	"	B0 to G	"	"	"		
			311	"	IN	"	GND	"	"	"			"		"		"		"	"	"	"	"	"	B1 to G	"	"	"		
			312	"	GND	"	"	"	"	"			"		"		"		"	"	"	"	"	"	B2 to G	"	"	"		
			313	"	"	"	"	"	"	"			"		"		"		"	"	"	"	"	"	B3 to G	"	"	"		
			314	GND	"	IN	"	"	GND	"			"		"		"	OUT		GND	GND	"	GND	"	"	A0 to P	2.0	11.0	"	
			315	IN	"	GND	"	"	"	"			"		"		"	"	"	"	"	"	"	"	"	A1 to P	"	"	"	
			316	GND	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	IN	"	"	A2 to P	"	"	"
			317	GND	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	GND	"	"	A3 to P	"	"	"
			318	2.7 V	2.7 V	IN	2.7 V	GND	2.7 V	"			"		"		"	"	"	2.7 V	2.7 V	2.7 V	2.7 V	"	2.7 V	"	A0 to P	"	"	"
			319	IN	"	2.7 V	"	"	"	"			"		"		"	"	"	"	"	"	"	IN	"	"	A1 to P	"	"	"
			320	2.7 V	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	"	"	"	A2 to P	"	"	"
			321	"	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	2.7 V	"	"	A3 to P	"	"	"
			322	"	GND	IN	GND	2.7 V	"	"			"		"		"	"	"	"	GND	2.7 V	GND	"	"	"	A0 to P	"	"	"
			323	IN	"	2.7 V	"	"	"	"			"		"		"	"	"	"	"	"	"	"	"	"	A1 to P	"	"	"
			324	2.7 V	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	IN	"	"	A2 to P	"	"	"
			325	2.7 V	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	2.7 V	"	"	A3 to P	"	"	"
			326	GND	"	IN	"	"	"	GND	"			"		"		"	"	"	"	"	GND	"	"	"	A0 to P	3.0	9.5	"
			327	IN	"	GND	"	"	"	"			"		"		"	"	"	"	"	"	"	"	"	"	A1 to P	"	"	"
			328	GND	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	IN	"	"	A2 to P	"	"	"
			329	GND	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	GND	"	"	A3 to P	"	"	"
			330	2.7 V	2.7 V	IN	2.7 V	GND	2.7 V	"			"		"		"	"	"	2.7 V	2.7 V	2.7 V	2.7 V	"	2.7 V	"	A0 to P	"	"	"
			331	IN	"	2.7 V	"	"	"	"			"		"		"	"	"	"	"	"	"	2.7 V	"	"	A1 to P	"	"	"
			332	2.7 V	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	IN	"	"	A2 to P	"	"	"
			333	"	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	GND	"	"	A3 to P	"	"	"
			334	"	GND	IN	GND	2.7 V	"	"			"		"		"	"	"	"	GND	2.7 V	GND	2.7 V	"	"	A0 to P	"	"	"
			335	IN	"	2.7 V	"	"	"	"			"		"		"	"	"	"	"	"	"	2.7 V	"	"	A1 to P	"	"	"
			336	2.7 V	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	IN	"	"	A2 to P	"	"	"
			337	2.7 V	"	"	"	"	"	"			"		"		"	"	"	"	"	"	"	2.7 V	"	"	A3 to P	"	"	"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}	Min	Max				
9 T _c = 25°C	t _{PUH8}	3003 Fig. 4	338	2.7 V	2.7 V	2.7 V	IN	2.7 V	GND	GND			GND				OUT	2.7 V	2.7 V	2.7 V	2.7 V	2.7 V	5.0 V	B0 to P	2.0	11.0	ns		
			339	"	IN	"	2.7 V	"	"	"			"				"	"	"	"	2.7 V	"	"	B1 to P	"	"	"		
			340	"	2.7 V	"	"	"	"	"			"				"	"	"	"	"	"	"	B2 to P	"	"	"		
			341	"	2.7 V	"	"	"	"	"			"				"	"	IN	"	2.7 V	"	"	B3 to P	"	"	"		
			342	GND	GND	GND	IN	GND	2.7 V	"			"				"	GND	GND	GND	GND	GND	"	B0 to P	"	"	"		
			343	"	IN	"	GND	"	"	"			"				"	"	"	"	"	"	"	B1 to P	"	"	"		
			344	"	GND	"	"	"	"	"			"				"	"	"	"	"	IN	"	B2 to P	"	"	"		
			345	"	GND	"	"	"	"	"			"				"	"	IN	"	2.7 V	"	"	B3 to P	"	"	"		
			346	"	2.7 V	"	IN	2.7 V	"	"			"				"	"	"	"	2.7 V	"	2.7 V	"	B0 to P	"	"	"	
			347	"	IN	"	2.7 V	"	"	"			"				"	"	"	"	"	2.7 V	"	"	B1 to P	"	"	"	
			348	"	2.7 V	"	"	"	"	"			"				"	"	"	"	"	IN	"	"	B2 to P	"	"	"	
			349	"	"	"	"	"	"	"			"				"	"	IN	"	2.7 V	"	2.7 V	"	B3 to P	"	"	"	
	PHL8		350	2.7 V	"	2.7 V	IN	"	GND	"			"				"	"	2.7 V	2.7 V	2.7 V	"	2.7 V	"	B0 to P	3.0	9.5	"	
			351	"	IN	"	2.7 V	"	"	"			"				"	"	"	"	"	"	"	"	B1 to P	"	"	"	
			352	"	2.7 V	"	"	"	"	"			"				"	"	"	"	"	IN	"	"	B2 to P	"	"	"	
			353	"	2.7 V	"	"	"	"	"			"				"	"	"	"	"	2.7 V	"	"	B3 to P	"	"	"	
			354	GND	GND	GND	IN	GND	2.7 V	"			"				"	"	GND	GND	GND	GND	"	GND	"	B0 to P	"	"	"
			355	"	IN	"	GND	"	"	"			"				"	"	"	"	"	"	"	"	B1 to P	"	"	"	
			356	"	GND	"	"	"	"	"			"				"	"	"	"	"	IN	"	"	B2 to P	"	"	"	
			357	"	GND	"	"	"	"	"			"				"	"	IN	"	"	"	"	"	B3 to P	"	"	"	
			358	"	2.7 V	"	IN	2.7 V	"	"			"				"	"	2.7 V	"	2.7 V	"	2.7 V	"	B0 to P	"	"	"	
			359	"	IN	"	2.7 V	"	"	"			"				"	"	"	"	"	2.7 V	"	"	B1 to P	"	"	"	
	PHL9		360	"	2.7 V	"	"	"	"	"			"				"	"	"	"	"	"	"	"	B2 to P	"	"	"	
			361	"	"	"	"	"	"	"			"				"	"	"	"	"	"	2.7 V	"	B3 to P	"	"	"	
			362	2.7 V	"	2.7 V	2.7 V	IN	2.7 V	GND			"				OUT	"	"	GND	2.7 V	2.7 V	2.7 V	"	S0 to G	"	15.0	"	
			363	2.7 V	"	2.7 V	"	2.7 V	IN	GND			"				"	"	"	GND	"	"	2.7 V	"	S1 to G	"	"	"	
			364	GND	"	"	"	2.7 V	GND	IN			"				"	"	"	2.7 V	"	"	"	GND	"	S2 to G	"	"	"
			365	2.7 V	"	2.7 V	"	IN	2.7 V	GND			"				"	"	"	GND	"	"	2.7 V	"	S0 to G	"	13.5	"	
			366	2.7 V	"	2.7 V	"	2.7 V	IN	GND			"				"	"	"	GND	"	"	2.7 V	"	S1 to G	"	"	"	
	PHL10		367	GND	"	"	"	"	2.7 V	GND	IN			"			"	"	"	2.7 V	"	"	"	GND	"	S2 to G	"	"	"
			368	GND	"	"	"	"	"	IN	2.7 V	GND					"	OUT	GND	"	"	"	"	GND	"	S0 to P	"	14.0	"
			369	2.7 V	GND	2.7 V	GND	2.7 V	IN	GND			"				"	"	"	"	GND	2.7 V	GND	2.7 V	"	S1 to P	"	"	"
					370	GND	GND	GND	GND	2.7 V	GND	IN					"	"	"	"	GND	GND	GND	GND	"	S2 to P	"	"	"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max	
9	I _{PH} 10 Tc = 25°C	3003	371	GND	2.7 V	GND	2.7 V	IN	2.7 V	GND			GND				OUT	GND	2.7 V	GND	2.7 V	GND	5.0 V	S0 to P	3.0	13.5	ns
		Fig. 4	372	2.7 V	GND	2.7 V	GND	2.7 V	IN	GND			"				"	"	GND	2.7 V	GND	2.7 V	"	S1 to P	"	"	"
		"	373	GND	GND	GND	GND	2.7 V	GND	IN			"				"	"	GND	GND	GND	GND	"	S2 to P	"	"	"
10	Same tests as subgroup 9, except T _C = +125°C and use limits from table I.																										
11	Same tests as subgroup 10, except T _C = -55°C and use limits from table I.																										

1/ I_L limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I _{L1}	48 - 50		-0.12/-0.6	-0.12/-0.6
I _{L2}	51 - 59		-0.12/-2.4	-0.12/-2.4

2/ H ≥ 1.5 V, L ≤ 1.5 V ; A = 2.5 V, B = 0.5 V.

3/ Perform function sequence at V_{cc} = 4.5 V and repeat at V_{cc} = 5.5 V.

TABLE III. Group A inspection for device type 04.

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test.no.	1	2	3	4	5	6	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	18	19	20	Measured terminal	Test limits	Unit					
1 Tc = 25°C	I _{HI}	3009	60	2.7 V	A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{CC}	A1	Max 20	μA							
			61			2.7 V																					B1							
			62			2.7 V																						A0						
			63				2.7 V																					B0						
			64							2.7 V																		S0						
			65																									S1						
			66										2.7 V															S2						
			67																		2.7 V							Cn						
			68																									B3						
			69																									A3						
			70																									B2						
			71																									A2						
			72	7.0 V																								A1	100					
			73			7.0 V																						B1						
			74				7.0 V																						A0					
			75						7.0 V																				B0					
OS			76								7.0 V																S0							
			77									7.0 V																S1						
			78										7.0 V															S2						
			79																		7.0 V							Cn						
			80																			7.0 V						B3						
			81																				7.0 V					A3						
			82																									B2						
			83																									A2						
			84		GND	GND	GND	GND	GND	GND	4.5 V	GND	GND	GND	0.0 V								GND	GND	GND	7.0 V			F0	-60	-150 mA			
			85		"	"	"	"	"	"	"	"	"	"	0.0 V							"	"	"	"			F1	"					
			86		"	"	"	"	"	"	"	"	"	"	"		0.0 V					"	"	"	"			F2	"					
			87		"	"	"	"	"	"	"	"	"	"	"		"	0.0 V				"	"	"	"			F3	"					
			88		"	"	"	"	"	"	"	"	"	"	"		"	"	0.0 V			"	"	"	"			OVR	"					
			89		4.5 V	"	"	"	4.5 V	"	"	"	"	"	"		"	"			0.0 V	4.5 V	4.5 V	"	4.5 V			Cn + 4	"					
			90		"	GND	"	"	GND	"	4.5 V	4.5 V	4.5 V	2.5 V			"	"				GND	"	"	"			F0	60	"				
			OD			91	"	"	"	"	"	"	"	"	"	2.5 V							"	"	"	"			F1	"				
92	"	"				"	"	"	"	"	"	"	"								"	"	"	"			F2	"						
93	"	"				"	"	"	"	"	"	"	"			2.5 V					"	"	"	"			F3	"						
94	"	"				"	"	"	4.5 V	"	"	"	"			"					"	"	"	"			OVR	"						
95	"	"				"	"	"	"	"	"	"	"			"				2.5 V		"	"	"	"		Cn + 4	"						
96	"	"				"	"	"	"	"	"	"	"			"					2.5 V	"	"	"	"			V _{CC}	89	"				
2	CC																																	
3	Same tests, terminal conditions, and limits as subgroup 1, except T _C = +125°C and V _{IC} tests are omitted.																																	
7	Functional tests	3014	97	B	B	B	B	B	B	B	B	B	L	L	GND	L	L	H	H	B	B	B	B	B	3/	All outputs								
Tc = 25°C	J		98	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"					
			99	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				
			100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
			101	A	B	A	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			102	A	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			103	B	B	B	B	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			104	B	A	B	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			105	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			106	A	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			107	B	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			108	B	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			109	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			110	A	B	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			111	B	B	B	B	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			112	B	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			113	A	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			114	A	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			115	B	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			116	B	A	B	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		

See footnotes at end of device type 04.

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See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits Min	Test limits Max	Unit
9 $T_c = 25^\circ\text{C}$	t_{PLH2}	3003 Fig. 4	167	IN	2.7 V	IN	2.7 V	2.7 V	GND	GND	OUT	OUT	GND	F2	F3	OV	Cn + 4	2.7 V	2.7 V		2.7 V		A2	A0 to F0	4	15	ns
			168									OUT		OUT										A1 to F1			
			169																					A2 to F2			
			170																					A3 to F3			
			171	IN		IN		GND	2.7 V		OUT							GND						A0 to F0			
			172	IN							OUT			OUT										A1 to F1			
			173																					A2 to F2			
			174																					A3 to F3			
			175			IN		2.7 V			OUT							2.7 V						A0 to F0			
			176	IN							OUT													A1 to F1			
			177											OUT								IN		A2 to F2			
			178												OUT									A3 to F3			
			179			IN		GND	GND	2.7 V	OUT							GND						A0 to F0			
			180	IN							OUT													A1 to F1			
			181											OUT										A2 to F2			
			182												OUT									A3 to F3			
			183		2.7 V	IN	2.7 V	2.7 V		GND	OUT							2.7 V	2.7 V		2.7 V			A0 to F0	3.5	12.5	
			184	IN							OUT													A1 to F1			
			185											OUT								IN		A2 to F2			
			186												OUT									A3 to F3			
			187			IN		GND	2.7 V		OUT							GND						A0 to F0			
			188	IN								OUT												A1 to F1			
			189											OUT										A2 to F2			
			190																					A3 to F3			
			191			IN		2.7 V			OUT							2.7 V						A0 to F0			
			192	IN								OUT												A1 to F1			
			193											OUT										A2 to F2			
			194																					A3 to F3			
			195		GND	IN		GND			OUT							GND						A0 to F0			
			196	IN								OUT												A1 to F1			
			197											OUT										A2 to F2			
			198																					A3 to F3			
			199	2.7 V		2.7 V	IN	2.7 V	GND		OUT				OUT									A0 to F0	4	15	
			200		IN						OUT													B1 to F1			
			201											OUT										B2 to F2			
			202												OUT									B3 to F3			
			203				IN	GND	2.7 V		OUT							2.7 V						B0 to F0			
			204		IN						OUT													B1 to F1			
			205											OUT										B2 to F2			
			206																					B3 to F3			
			207				IN	2.7 V			OUT													B0 to F0			
			208		IN							OUT												B1 to F1			
			209											OUT										B2 to F2			
			210																					B3 to F3			
			211				IN	GND			OUT							GND						B0 to F0			
			212		IN									OUT										B1 to F1			
			213																					B2 to F2			
			214																					B3 to F3			
			215	GND			IN	2.7 V			OUT													B0 to F0			
			216		IN							OUT												B1 to F1			
			217											OUT										B2 to F2			
			218												OUT									B3 to F3			
			219	2.7 V			IN	GND	2.7 V		OUT													B0 to F0			
			220		IN							OUT												B1 to F1			
			221											OUT										B2 to F2			
			222												OUT									B3 to F3			

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{CC}	Min	Max				
9 T _C = 25°C	t _{PHL3}	3003 Fig. 4	223	2.7 V	IN	2.7 V	IN	2.7 V	GND	GND	OUT	OUT	"	OUT	"	"	"	GND	"	2.7 V	"	2.7 V	5.0 V	B0 to F0	3.5	12.5	ns		
			224	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"		
			225	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			226	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			227	"	"	"	"	"	IN	GND	2.7 V	"	OUT	"	"	"	"	"	2.7 V	"	"	"	"	"	B0 to F0	"	"	"	
			228	"	"	"	"	"	"	"	"	"	OUT	"	"	OUT	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			229	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			230	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	B3 to F3	"	"	"	
			231	"	"	"	"	"	IN	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"	
			232	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			233	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			234	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	IN	"	"	"	B3 to F3	"	"	"	
			235	"	"	"	"	"	IN	GND	GND	2.7 V	OUT	"	"	"	"	"	GND	"	"	"	"	"	B0 to F0	"	"	"	
			236	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			237	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	IN	"	"	B2 to F2	"	"	"	
			238	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			239	GND	GND	GND	IN	2.7 V	"	"	"	"	OUT	"	"	"	"	"	"	"	"	GND	"	"	"	B0 to F0	"	"	"
			240	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			241	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
			242	"	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	B3 to F3	"	"	"
			243	2.7 V	"	"	2.7 V	IN	GND	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	2.7 V	"	B0 to F0	"	"	"
			244	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"
			245	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	B2 to F2	"	"	"
PH4			246	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"		
			247	GND	GND	GND	IN	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	S0 to F0	4	20		
			248	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"	
			249	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"	
			250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"	
			251	2.7 V	"	"	2.7 V	2.7 V	IN	"	"	"	OUT	"	"	"	"	"	2.7 V	2.7 V	"	2.7 V	"	"	S1 to F0	"	"	"	
			252	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"	
			253	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"	
			254	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"	
			255	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	S2 to F0	"	"	"	
PH4			256	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"		
			257	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F2	"	"	"		
			258	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F3	"	"	"		
			259	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F0	"	14	"	
			260	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"	
			261	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"	
			262	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"	
			263	2.7 V	"	"	2.7 V	2.7 V	IN	"	"	"	OUT	"	"	"	"	"	2.7 V	2.7 V	"	2.7 V	"	"	S1 to F0	"	"	"	
			264	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"	
			265	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"	
PH4			266	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"		
			267	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F0	"	"	"		
			268	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"	
			269	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F2	"	"	"	
			270	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F3	"	"	"	
			271	2.7 V	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	A0 to OVR	6	15.5	"	
			272	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	A1 to OVR	"	"	"	
			273	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	A2 to OVR	"	"	"	
			274	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	A3 to OVR	"	"	"	
			275	"	"	2.7 V	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A0 to OVR	"	"	"	
PH4			276	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"		
			277	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	A2 to OVR	"	"	"		
			278	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	A3 to OVR	"	"	"		
			279	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A0 to OVR	"	"	"		
			280	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"	
			281	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	A2 to OVR	"	"	"	
			282	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	A3 to OVR	"	"	"	
			282	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit	
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{cc}	B0 to Cn + 4	Min	Max		
9 Tc = 25°C	t _{PUH8}	3003 Fig. 4	343	GND	GND	GND	IN	2.7 V	GND	GND										GND	GND	GND	5.0 V	B0 to Cn + 4	3.5	9.5	ns	
			344	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"	
			345	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"
			346	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to Cn + 4	"	"	"
			347	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	B0 to Cn + 4	"	"	"
			348	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	B1 to Cn + 4	"	"	"
			349	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"
			350	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	B3 to Cn + 4	"	"	"	
			351	"	GND	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to Cn + 4	"	"	"
			352	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"
PHL8		353	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"	
		354	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to Cn + 4	"	"	"	
		355	GND	"	GND	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	GND	GND	"	"	B0 to Cn + 4	"	12.0	"	
		356	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"	
		357	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"	
		358	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to Cn + 4	"	"	"
		359	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	B0 to Cn + 4	"	"	"
		360	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"
		361	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"
		362	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	B3 to Cn + 4	"	"	"	
PUH9		363	"	GND	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to Cn + 4	"	"	"	
		364	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"	
		365	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"	
		366	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to Cn + 4	"	"	"	
		367	2.7 V	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	S0 to OVR	5.0	16.5	"
		368	GND	"	GND	"	GND	IN	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to OVR	"	"	"
		369	GND	"	GND	"	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to OVR	"	"	"
		370	2.7 V	"	2.7 V	"	IN	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	S0 to OVR	"	17.0	"
		371	GND	"	GND	"	GND	IN	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to OVR	"	"	"
		372	GND	"	GND	"	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to OVR	"	"	"
PUH10		373	2.7 V	"	2.7 V	"	IN	2.7 V	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to Cn + 4	6.5	16.5	"	
		374	GND	"	GND	"	GND	IN	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to Cn + 4	"	"	"	
		375	2.7 V	GND	2.7 V	GND	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to Cn + 4	"	"	"	
		376	2.7 V	2.7 V	2.7 V	2.7 V	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	S0 to Cn + 4	5.0	16.0	"
		377	GND	2.7 V	GND	2.7 V	GND	IN	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to Cn + 4	"	"	"
		378	2.7 V	GND	2.7 V	GND	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	S2 to Cn + 4	"	"	"
		379	GND	GND	GND	GND	2.7 V	GND	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	2.0	8.0	"
		380	"	"	GND	"	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"
		381	"	2.7 V	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	Cn to Cn + 4	"	"	"
		382	2.7 V	GND	2.7 V	GND	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"
PHL11		383	"	2.7 V	"	2.7 V	"	2.7 V	GND	2.7 V	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	Cn to Cn + 4	"	"	"	
		384	"	"	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
		385	"	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
		386	GND	GND	GND	GND	2.7 V	GND	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	9.0	"	
		387	"	GND	"	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"
		388	"	2.7 V	"	2.7 V	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	Cn to Cn + 4	"	"	"
		389	2.7 V	GND	2.7 V	GND	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	GND	2.7 V	2.7 V	"	Cn to Cn + 4	"	"	"
		390	"	2.7 V	"	2.7 V	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	Cn to Cn + 4	"	"	"
		391	"	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"
		392	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"
PUH12		393	"	GND	"	GND	GND	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	3.0	11.0	"	
		394	"	2.7 V	"	2.7 V	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"	
		395	"	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"
		396	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"
PHL12		397	"	GND	"	GND	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	2.5	10.0	"	
		398	"	2.7 V	"	2.7 V	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	Cn to OVR	"	"	"
		399	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"
		400	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"
10	Same tests as subgroup 9, except T _c = +125°C and use limits from table 1.																											
11	Same tests as subgroup 9, except T _c = -55°C and use limits from table 1.																											

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

1/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I_{IL1}	48 - 50		-0.12/-0.6	
I_{IL2}	51 - 59		-0.12/-2.4	

2/ $H \geq 1.5$ V, $L \leq 1.5$ V; A = 2.5 V, B = 0.5 V.
3/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

5. PACKAGING

5.1 Packaging requirements. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Service or Defense Agency, or within the military service's system command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

6.1 Intended use. Microcircuits conforming to this specification are intended for original equipment design applications and logistic support of existing equipment.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, and date of the specification.

- b. PIN and compliance identifier, if applicable (see 1.2).
- c. Requirements for delivery of one copy of the conformance inspection data pertinent to the device inspection lot to be supplied with each shipment by the device manufacturer, if applicable.
- d. Requirements for certificate of compliance, if applicable.
- e. Requirements for notification of change of product or process to contracting activity in addition to notification to the qualifying activity, if applicable.
- f. Requirements for failure analysis (including required test condition of method 5003 of MIL-STD-883), corrective action, and reporting of results, if applicable.
- g. Requirements for product assurance options.
- h. Requirements for special carriers, lead lengths, or lead forming, if applicable. These requirements should not affect the part number. Unless otherwise specified, these requirements will not apply to direct purchase by or direct shipment to the Government.
- i. Requirements for "JAN" marking.
- j. Packaging requirements (see 5.1).

6.3 Superseding information. The requirements of MIL-M-38510 have been superseded to take advantage of the available Qualified Manufacturer Listing (QML) system provided by MIL-PRF-38535. Previous references to MIL-M-38510 in this document have been replaced by appropriate references to MIL-PRF-38535. All technical requirements now consist of this specification and MIL-PRF-38535. The MIL-M-38510 specification sheet number and PIN have been retained to avoid adversely impacting existing government logistics systems and contractor's parts lists.

6.4 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Manufacturers List QML-38535 whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or purchase orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from DSCC-VQ, 3990 E. Broad Street, Columbus, Ohio 43123-1199.

6.5 Abbreviations, symbols, and definitions. The abbreviations, symbols, and definitions used herein are defined in MIL-PRF-38535, MIL-HDBK-1331, and as follows:

GND Ground zero voltage potential
 I_{IN} Current flowing into an input terminal
 V_{IN} Voltage level at an input terminal

6.6 Logistic support. Lead materials and finishes (see 3.4) are interchangeable. Unless otherwise specified, microcircuits acquired for Government logistic support will be acquired to device class B (see 1.2.2), lead material and finish A (see 3.4). Longer length leads and lead forming should not affect the part number.

6.7 Substitutability. The cross-reference information below is presented for the convenience of users. Microcircuits covered by this specification will functionally replace the listed generic-industry type. Generic-industry microcircuit types may not have equivalent operational performance characteristics across military temperature ranges or reliability factors equivalent to MIL-M-35810 device types and may have slight physical variations in relation to case size. The presence of this information should not be deemed as permitting substitution of generic-industry types for MIL-M-38510 types or as a waiver of any of the provisions of MIL-PRF-38535.

Military device type	Generic-industry type
01	54F181
02	54F182
03	54F381
04	54F382

6.8 Manufacturers' designation. Manufacturers' circuits which form a part of this specification are designated with an "X" as shown in table IV herein.

TABLE IV. Manufacturers' designations.

Device type	Manufacturer's designation		
	Circuit A	Circuit B	Circuit C
	National Semiconductor/ Fairchild Semiconductor	Motorola Inc.	Signetics Corp.
01	X	X	X
02	X	X	
03		X	X
04		X	

6.9 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5962-2014)

Review activities:

Army - MI, SM
Navy - AS, CG, MC, SH, TD
Air Force - 03, 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.