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THIS DRA FOR USE B AND A DEPART AMSC N	Y ALL DI GENCIES MENT OF	EPARTI	MENT IE			9	APP OC	TORE					•	SIZE A	HEI	6		68		]	59	62	-89	966	<b>36</b>

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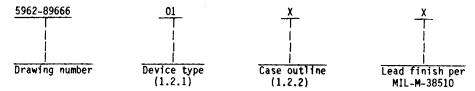
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

5962-E1562

### SCOPE

 $1.1\,$  Scope. This drawing describes device requirements for class B microcircuits in accordance with  $1.\overline{2.1}\,$  of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices".

1.2 Part number. The complete part number shall be as shown in the following example:



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

Device type	Generic number	Circuit function	Access time
01	(see 6.6)	256 X 9-bit parallel FIFO	120 ns
02	(see 6.6)	256 X 9-bit parallel FIFO	80 ns
03	(see 6.6)	256 X 9-bit parallel FIFO	65 ns
04	(see 6.6)	256 X 9-bit parallel FIFO	50 ns
05	(see 6.6)	256 X 9-bit parallel FIFO	40 ns
06	(see 6.6)	256 X 9-bit parallel FIFO	30 ns

1.2.2 Case outlines. The case outlines shall be as designated in appendix C of MIL-M-38510, and as follows:

Outline letter	Case outline
X	D-15 (28-lead, 1.485" x .310" x .230"), dual-in-line package
Ż	D-10 (28-lead, 1.490" x .610" x .232"), dual-in-line package F-11 (28-lead, .740" x .380" x .090"), flat package
V	C-12 (32-terminal, .560" x .458" x .120"), rectangular chip carrier package

1.3 Absolute maximum ratings.

1.4 Recommended operating conditions.

Supply voltage range (V<sub>CC</sub>) - - - - - - - - - - - - - - - 4.5 V dc to 5.5 V dc Minimum high level input voltage (V<sub>IH</sub>) - - - - - - - 2.2 V dc Maximum low level input voltage (V<sub>IL</sub>) - - - - - - - - + 0.8 V dc 2/ Case operating temperature range ( $^{1}$ C) - - - - - - - - - - - - - - - - 55 °C to +I25 °C

1/ Maximum junction temperature may be increased to +175°C during burn-in and steady state life. 2/ 1.5 V undershoots are allowed for 10 ns once per cycle.

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#### 2. APPLICABLE DOCUMENTS

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

**SPECIFICATION** 

MILITARY

MIL-M-38510

- Microcircuits, General Specification for.

STANDARD

MILITARY

MIL-STD-883

- Test Methods and Procedures for Microelectronics.

BULLETIN

MILITARY

MIL-BUL-103

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

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

2.2 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing shall take precedence.

#### 3. REQUIREMENTS

- 3.1 Item requirements. The individual item requirements shall be in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices" and as specified herein.
- 3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-M-38510 and herein.
  - 3.2.1 <u>Terminal connections</u>. The terminal connections shall be as specified on figure 1.
  - 3.2.2 <u>Truth tables</u>. The truth tables shall be as specified on figure 2.
  - 3.2.3 Case outlines. The case outlines shall be in accordance with 1.2.2 herein.
- 3.3 Electrical performance characteristics. Unless otherwise specified herein, the electrical performance characteristics are as specified in table I and shall apply over the full case operating temperature range.
- $\circ$ .4 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table I.
- 3.5 Marking. Marking shall be in accordance with MIL-STD-883 (see 3.1 herein). The part shall be marked with the part number listed in 1.2 herein. In addition, the manufacturer's part number may also be marked as listed in MIL-BUL-103 (see 6.6 herein).

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Test	  Symbol		Conditi	ons		   Grou	рΑ	  Device	ļ   Lin	ni ts	l l Un
	   	-55  V <sub>SS</sub> = 0   unless	°C < T <sub>C</sub> < V, 4.5 V otherwis	+125 C < V <sub>CC</sub> < e speci	5.5 V fied	subgr   	oup s	types	   Min	Max	   
Input leakage current	ILI	0.0 V <	AIN ? ACC			1, 2	2, 3	A11	-10	10	   μ/ 
Output leakage current	LLO	0.0 V <	V <sub>OUT</sub> < V <sub>C</sub>	c, R >	/IH	   1, 2 	2, 3	   A11 	   -10   	10	   μ.
Output low voltage	V OL	V <sub>CC</sub> = 4. V <sub>IL</sub> = 0.	5 V, I <sub>OL</sub> 8 V, V <sub>IH</sub>	= 8.0 m/ = 2.2 V	١,	1, 2	, 3	A11 		0.4	'   
Output high voltage	I OH	V <sub>CC</sub> = 4.   V <sub>IL</sub> = 0.	5 V, 1 <sub>OH</sub> 8 V, V <sub>IH</sub>	= -2.0 r = 2.2 V	nA,	1, 2	, 3	A11 	2.4		,
Operating supply current	I CC1	f = fs;   V <sub>CC</sub> = 5.	outputs o 5 V	pen,	1	1, 2	, 3	01,02, 03,04	   	100	m
	! ! !	f = 20 M V <sub>CC</sub> = 5.	Hz, outpu 5 V	ts open,		 	•	05,06		140	
Standby power supply current	I I CC2	  R = W =  outputs	RS = FT/R open	T = VIH,		1, 2	, 3	01,02, 03,04		15	m
	<u>i</u>	i				<u> </u>		05,06		20	
Power down current	1 <sub>CC3</sub>	All inpu outputs	ts = V <sub>CC</sub>	-0.2 V,		1, 2	, 3	A11		900	μ <b>/</b>
Input capacitance	CIN	V <sub>I</sub> = 0 V T <sub>A</sub> = +2	, f = 1.0 5°C, see	MHz. 4.3.1c		4		A11	 	8	ρF
Output capacitance	I I <sup>C</sup> out I	V <sub>0</sub> = 0 V   T <sub>A</sub> = +25	of = 1.0 c, see 4	MHz, .3.1c		4		All		8	pF
Shift frequency	fs	C <sub>L</sub> = 30	pF, see f	igures 3	and 4	9, 10	, 11	01		7.0	Mi
	<u> </u>	! !				İ	1	02	1	10	
	! !	! !				l	]	03		12.5	
	} 	 			i	l	1	04	Ţ	15	•
	ļ Į	] 			I		]	05		20	
	l 	 				! !		06		25	
See footnotes at end of	table.										
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TABL	TABLE I. Electrical performance characteristics - Continued.											
Test	Symbol	   -5!  V <sub>SC</sub> = 0	Condit 5°C < T <sub>C</sub> < V, 4.5 V s otherwi	ions < +125°(	5.5 V	   Group  subgr	p A oups	Device   types	L Min	imits     Max	Unit	
	<u> </u>	unles	s otherwi	se spec	fied	i I		<u>i</u>		1	<u> </u>	
Read cycle time	tRC	CL = 30	pF, see	figures	3 and 4	9, 10	, 11	01	140	<u> </u>	ns	
		 				İ	-	02	100	<u> </u>	<u> </u>	
	İ	İ					-	03	80	<u> </u>	<u> </u>	
	İ	i i				   	-	04	65	<u> </u>	1	
	İ	i I				   	_	05	50	<u> </u>	<u> </u>	
	<u> </u>	i T			-	   		06	40		<u> </u>	
Access time	tA	i i				9, 10	, 11	01		120	<u> </u>	
	į	;   					7	02	-	80	<u> </u>	
		!   					į	03		65		
								04		50	 	
							)   	05		40	1	
***************************************	<u> </u>							06		30		
Read recovery time	t <sub>RR</sub>					9, 10,	, 11	01,02	20		l   ns	
					1		1	03,04	15			
	<u> </u>							05,06	10	<u> </u>		
Read pulse width	t <sub>RPW</sub>					9, 10,	. 11   	01	120	ļ	l   ns	
							   	02	80	! 		
							 	03	65			
					j		 	04	50		   	
	j j I i						   	05	40			
	i i				i			06	30	<u> </u>	<u> </u>	
See footnotes at end of	table.											
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	DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444				REVISION	LEVEL		l	SHEET	5		

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TABLE I. Electrical performance characteristics - Continued. Test |Symbol | Conditions | -55°C < T<sub>C</sub> < +125°C |V<sub>SS</sub> = 0 V, 4.5 V < V<sub>CC</sub> < 5.5 V | unless otherwise specified Group A | Device Limits Unit |subgroups| types Min Max Read pulse low to data  $|t_{RLZ}|$  bus at low Z  $|\underline{1}/$ 10 ns 05,06 5.0 Write pulse low to data  $t_{WLZ}$  bus at low Z  $\frac{1}{2}$ 19, 10, 111 01,02 20 ns 03,04 15 05 10 5.0 Data valid from read 19, 10, 11 ATT 5.0 ns pulse high Read pulse high to data  $t_{RHZ}$  bus at high Z  $\frac{1}{2}$ 19, 10, 11 01 35 ns 02,03, 30 04 05 25 Write cycle time twc 9, 10, 11 01 140 ns 100 03 80 04 65 05 50 40 Write pulse width 9, 10, 11| 120 | twpw ns 80 02 65 04 50 05 40 See footnotes at end of table. **STANDARDIZED** SIZE Α 5962-89666 **MILITARY DRAWING DEFENSE ELECTRONICS SUPPLY CENTER REVISION LEVEL** SHEET DAYTON, OHIO 45444 6

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Test	  Symbol	Coi	nditions		Group A	Device	Lir	nits	  Un
		-55°C <  V <sub>SS</sub> = 0 V, 4   unless othe	Tr < +125°(	5.5 V fied	Isubaroup	si types	Min	Max	
Write recovery time	twR	  C <sub>L</sub> = 30 pF, s	see figures	3 and 4	   9, 10, 1	01,02	20		   n
	į	j i				03,04	15		-
	<del>- į</del>	i T		-		05,06	10		<u> </u>
Data setup time	t <sub>DS</sub>	İ			9, 10, 1	01,02	40	 	i n
	İ					03,04	30		_
	į	į				05	20		<u> </u>
	<u> </u>	 				06	18		1
Data hold time	t <sub>DH</sub>			ļ	9, 10, 11	01,02,	10		r
						04	5.0		1
	<u> </u>	   				05,06	0.0		_
Reset cycle time	tRSC				9, 10, 11	01	140		1
	Ì	 		İ		02	100		<u> </u>
	İ			j		03	80	·	<u> </u>
	İ			İ		04	65		<u> </u>
						05	50		¦ T
	<del> </del>	Ī		į		06	40		-
Reset pulse width	Itas			į	9, 10, 11	01	120		i n
				j		i 02	i 80 i		i
				1		03	i 65 i		į T
						<u>  04</u>	j 50 j		į T
				1		05 	40		į T
	T			] ]	<del></del>	06	30		<u>i</u>
Reset recovery time	tRSR			}	9, 10, 11	01,02	20		j n
				<b>i</b> 		03,04	15	···	İ T
ee footnotes at end o	f table.		<del></del>		· · · · · · · · · · · · · · · · · · ·	05,06	10		İ
STANDARD			ZE			<del></del>			
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TABLE I. Electrical performance characteristics - Continued. Symbol Test Conditions Group A | Device Limits Unit -55°C < 7<sub>C</sub> < +125°C ly<sub>SS</sub> = 0 V, 4.5 V < V<sub>CC</sub> < 5.5 V unless otherwise specified |subgroups| types Min Reset setup time  $|C_L = 30 \text{ pF}$ , see figures 3 and 4|9, 10, 11| 120 ItRSS ns 80 03 65 04 05 40 06 30 Retransmit cycle time | t<sub>RTC</sub> 9, 10, 11 01 140 ns 100 03 80 04 65 05 50 40 Retransmit pulse width |tRT 9, 10, 11 01 120 ns 80 03 65 04 50 05 40 06 30 Retransmit recovery time 9, 10, 11 01,02 20 tRTR ns 03,04 15 05,06 10 See footnotes at end of table. **STANDARDIZED** SIZE A 5962-89666 **MILITARY DRAWING** DEFENSE ELECTRONICS SUPPLY CENTER **REVISION LEVEL** SHEET DAYTON, OHIO 45444 8

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TABL	TABLE I. Electrical performance characteristics - Continued.													
Test	  Symbol 	     -5f	Condit	ions < +125°(	C	   Grou  subgr	p A oups	  Device   types	L1	imits	Unit			
		V <sub>SS</sub> = 0 unless	5°C < T <sub>C</sub> < V, 4.5 V s otherwis	≤ V <sub>CC</sub> se spec	< 5.5 V ified	   			Min	Max	İ			
Reset to empty flag low	tefL		pF, see			9, 10	, 11	01		140	ns			
							-	02	<u> </u>	100	<u> </u>			
								03	1	80	 			
	İ					   		04	<u> </u>	65	-			
	į						-	05	<del> </del>	50	<del> </del>			
	<u>i</u>	i T			-	<u> </u> 		06	<u> </u> 	40	<del> </del>			
Read low to empty flag low	t <sub>KEF</sub>	   				9, 10	, 11	01,02	,	60	ns			
						!   		04		45	 			
	<u> </u>	ĺ				<u> </u>		05,06		30	<del> </del>			
Read high to full flag high	t <sub>RFF</sub>	 				9, 10	, 11   	01,02,	,	60	ns			
	i i	İ				   	ו ! ד	04		45	 			
	į į	 				   	י    ד	05		35	 			
	<u>i i</u>	   			7	! 		06	<del> </del>	30	<u> </u>			
Write high to empty flay high	twer	 				9, 10,	, 11   	01,02, 03	<u> </u> 	60	ns			
	j 1	   			į		!       T	04	<u> </u>	45	    -			
	i i	 			İ		į I	05	<del> </del>	35	   <del> </del>			
	<u> </u>	 				   		06	<u> </u>	30	<u> </u>			
Write low to full flag low	t <sub>WFF</sub>	 			İ	9, 10,	, 11   	01,02, 03	<u> </u> 	60	ns			
	i i	I			I	!   	I I T	04		45	 			
	, <b>i</b> I <b>i</b>				j		i T	05	<u> </u>	35	   			
	İ			<del></del>	<u>j</u>		<u> </u>	06	<u> </u>	30	<u> </u>			
See footnotes at end of	table.													
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TABLE I. Electrical performance characteristics - Continued. Test | Conditions |  $-55^{\circ}\text{C} < T_{\text{C}} < +125^{\circ}\text{C} |$  |  $V_{\text{SS}} = 0 \text{ V, } 4.5 \text{ V} \le V_{\text{CC}} < 5.5 \text{ V} |$  | unless otherwise specified | Symbol . Limits Group A | Device Unit |subgroups| types Min Max Reset to half-full and full flag high  $|C_L = 30 pF$ , see figures 3 and 4|9, 10, 11| theh, 140 ns **t**FFH 100 03 80 04 65 05 50 40 Read/Write to XO low txoL 9, 10, 11 01 120 80 65 04 50 05 40 30 Read/Write to  $\overline{\text{XO}}$  high 9, 10, 111 01 120 02 80 03 65 04 50 40 30  $\overline{\text{XI}}$  pulse width 9, 10, 111 txI 120 ns 02 80 65 04 50 40 05 06 30 See footnotes at end of table. **STANDARDIZED** SIZE A 5962-89666 **MILITARY DRAWING DEFENSE ELECTRONICS SUPPLY CENTER REVISION LEVEL** SHEET DAYTON, OHIO 45444 10

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TABLI	TABLE I. Electrical performance characteristics - Continued.													
Test	Symbol		Condition	ons		Gr	oup	A	Device	 	mits	  Unit		
		-55  V <sub>SS</sub> = 0   unless	°C < T <sub>C</sub> < V, 4.5 V < otherwise	+125 C ≥ V <sub>CC</sub> ≥ e speci	5.5 V fied	sub   	grou	is qu	types	Min	Max			
XI recovery time	txIR	C <sub>L</sub> = 30	pF, see f	igures	3 and 4	9,	10,	11	All	10		ns		
XI setup time	txis	 				9,	10,	11	All	15	   	ns		
Retransmit setup time	tRTS				i	9,	10,	11	01	120	 	l   ns		
	İ	;   						     	02	80	<u> </u>	-		
						!   		1	03	65				
	İ					! 		ļ	04	50	İ	 		
	İ					İ		į	05	40		<u> </u>		
	<u> </u>	!   			-				06	30		<u> </u>		
Read pulse width after EF high	t <sub>RPE</sub>				'	9,	ΙΟ,	11	01	120		ns		
<b>g</b>	į							į	02	80	<u>i</u>	<u> </u>		
	į į					,   		į	03	65	<u> </u>	   		
								į	04	50		<u> </u>		
	 							ļ	05	40	<u> </u>	<u> </u>		
	i I					i		_¦	06	30	<u> </u>			
Write low to half-full flay low	twHF					9,	lO,	11	01	<u> </u>	140	ns		
	 					 		į	02	<del> </del>	100	 		
	į							į	03	<del> </del>	80	 		
	1							j	04	ļ	65			
	i I				İ	İ		į T	05	<u> </u>	50	1		
	<u>i i</u>				i	<u> </u>			06	<u>i</u>	40	<u> </u>		
See footnotes at end of	table.													
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TABL	E I. <u>El</u>	ectrical performance characterist	tics - Cont	inued.			
Test	  Symbol		   Group A		   <u>L</u> i	mits	lUnit
	   	$ V_{SS}  = 0$ V, $ V_{SS}  = 0$ V, $ V_{SS}  = 0$ V, $ V_{SS}  = 0$ V $ $	subgroups   	l types	   Min 	   Max 	 
Read high to half-full flag high	t <sub>RHF</sub>	$ C_L = 30 \text{ pF}$ , see figures 3 and 4	9, 10, 11	01		140	ns
				02		100	
	1	1   		03		80	
		 	! !	04		65	 
	 		 	05		50	<u> </u>
		 		06		   40	 
Write pulse width after FF high	!  twpF	 	9, 10, 11	01	120		ns
rr mign	! !	 		02	80	 	<u> </u>
				03	65		1
			. ]	04	50		<u> </u>
			<u> </u>	05	40		[ 
	! 	l 	 	06	30		

- 1/ If not tested, shall be guaranteed to the limits specified in table I.
- 2/ Only applies to read data flow-through mode.
- 3.6 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in MIL-BUL-103 (see 6.6 herein). The certificate of compliance submitted to DESC-ECS prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-STD-883 (see 3.1 herein) and the requirements herein.
- 3.7 Certificate of conformance. A certificate of conformance as required in MIL-STD-883 (see 3.1 herein) shall be provided with each lot of microcircuits delivered to this drawing.
- 3.8 Notification of change. Notification of change to DESC-ECS shall be required in accordance with ML-STD-883 (see 3.1 herein).
- 3.9 Verification and review. DESC, DESC's agent, and the acquiring activity retain the option to review the manufacturer's facility and applicable required documentation. Offshore documentation shall be made available onshore at the option of the reviewer.

STANDARDIZED MILITARY DRAWING	SIZE A			5962-89666	
DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444		REVISION LEV	/EL	SHEET 12	

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	<del>- 1</del>					
Device types	<del></del>		-	All		
Case outline	s	Χ, Υ,	and Z		U	
Terminal numbe	r T	_	T	erminal symbol		 
1		W			NC	
<u> </u>	İ	Dg	ı	į	W	į
1 3	- 1	Dg		 	D <sub>8</sub>	- 1
4	!	D2		1	D <sub>3</sub>	į
5	i	D		j	D <sub>2</sub>	
6	į	D <sub>C</sub>		ļ	$D_1$	į
7		מ		i	D <sub>O</sub>	
8	ļ	FF		ļ	XI	į
9		Q <sub>C</sub>		i I	FF	1
10	İ	Q <sub>1</sub>		į	$Q_0$	į
11	ľ	Q <sub>2</sub>		- 1	$Q_1$	
12	ĺ	Q3		į	NC	į
13	ľ	Q8			Q <sub>2</sub>	i 
14	ļ	GN		1	Q <sub>3</sub>	į
15		Ŕ			Q <sub>8</sub>	İ
16	1	Q4		į	GND	į
17	ļ	Q <sub>5</sub>		l l	NC	1
18	j	Q <sub>6</sub>		j	R	j
19	1	Q <sub>7</sub>		ļ	ν Q4	1
20	į		/RF	j	Q5	İ
21	l l		EF		Q <sub>6</sub>	Į.
22	į	RS		j	Q <sub>7</sub>	
23	i	FL/RT		1	₹7 <b>Х</b> 0/н <b>г</b>	l I
24	į	D <sub>7</sub>		į	EF	į
25		D <sub>6</sub>			RS	
26	!	D <sub>5</sub>		į	FE/RT	
1 27	1	D <sub>4</sub>		1	NC	
28	İ	v <sub>C</sub>		į	D <sub>7</sub>	į
1 29	 		-	 	D <sub>6</sub>	1
30	į		_	į	D <sub>6</sub> D <sub>5</sub>	İ
31	l I	~-	_	1	D5 D4	1
32	į		_	į	V <sub>CC</sub>	
1					•66	
	FIGURE 1	1. Termin	al con	nections.		
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# Reset and transmit Single device configuration/width expansion mode

Mode		Input	s	Internal status			Outputs	
	RS	RT	XI	   Read pointer 	Write pointer	EF	FF	HF
Reset Retransmit	0	   X   0	0	   Location zero   Location zero	   Location zero   Unchanged	0   X	1 1 X	1 X
Read/Write	1	1	0	Increment (see note)	Increment (see note)	Х	X	X

NOTE: Pointer will increment if flag is high.

## Reset and first load Depth expansion/compound expansion mode

     Mode	   	Inpu	ts	Internal	status	Out	puts
 	RS	FL	XI	Read pointer	Write pointer	EF	FF
Reset first   device	0	0	See  note 2	Location zero	Location zero	   0 	1
Reset all other	0	1	See  note 2	Location zero	Location zero	0	1
Read/Write	1	X	See  note 2	i X i	X	i x	i x I

# NOTES:

- RS = Reset input, FL/RT = First load/retransmit, EF = Empty flag output, FF = Full flag output, XI = Expansion input, and HF = Half-full flag output
  - 0 = Low level voltage 1 = High level voltage

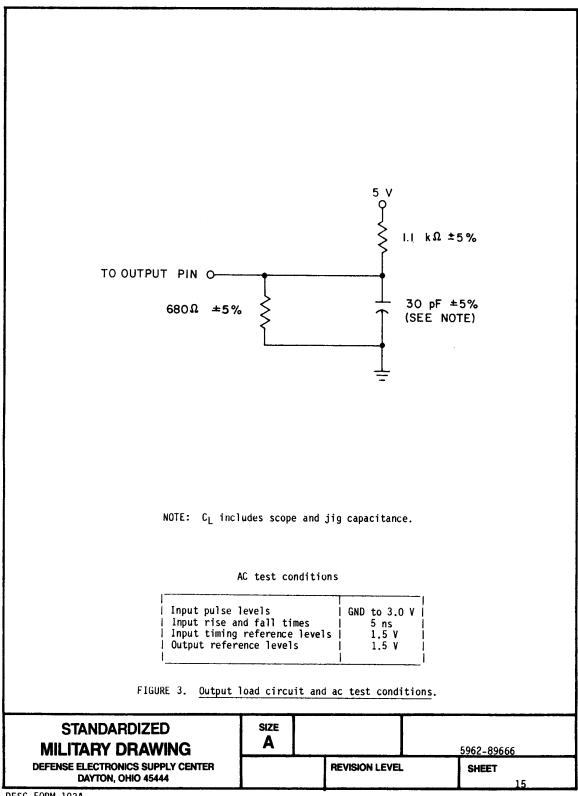
  - X = Don't care
- 2.  $\overline{XI}$  is connected to  $\overline{XO}$  of previous device.

# FIGURE 2. Truth tables.

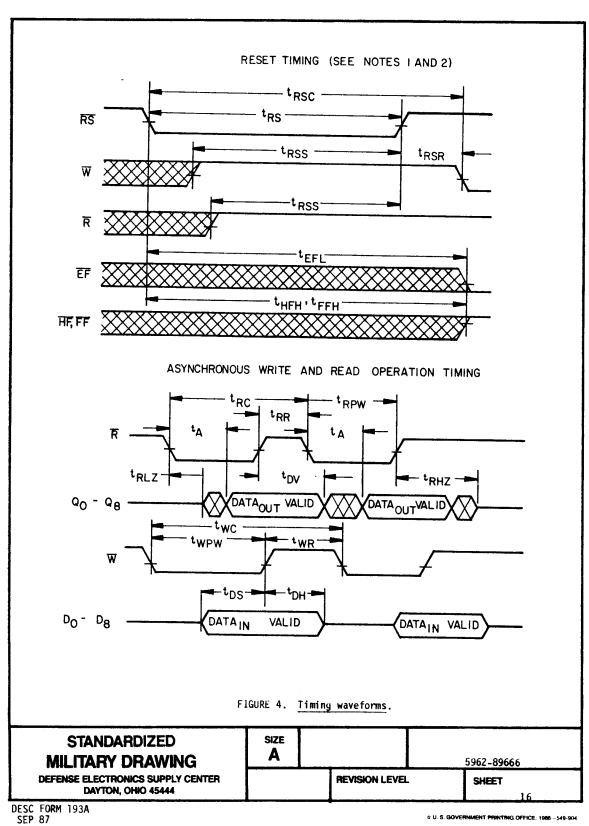
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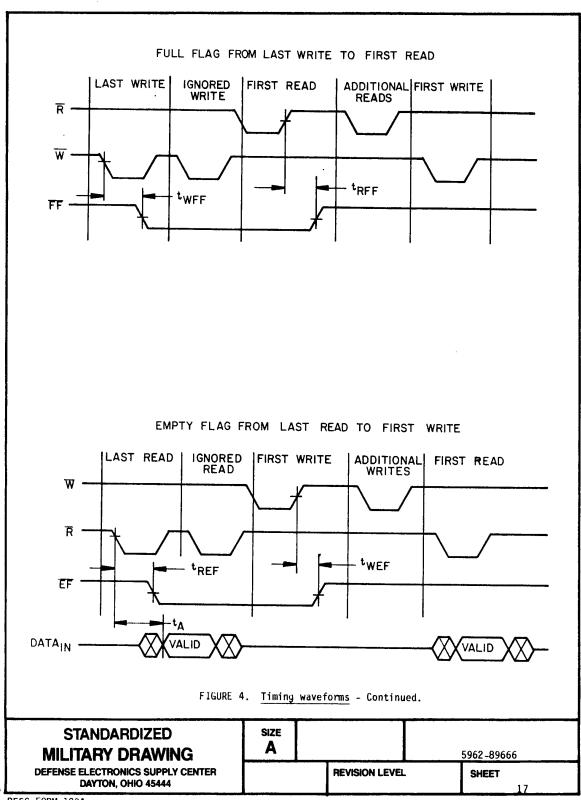
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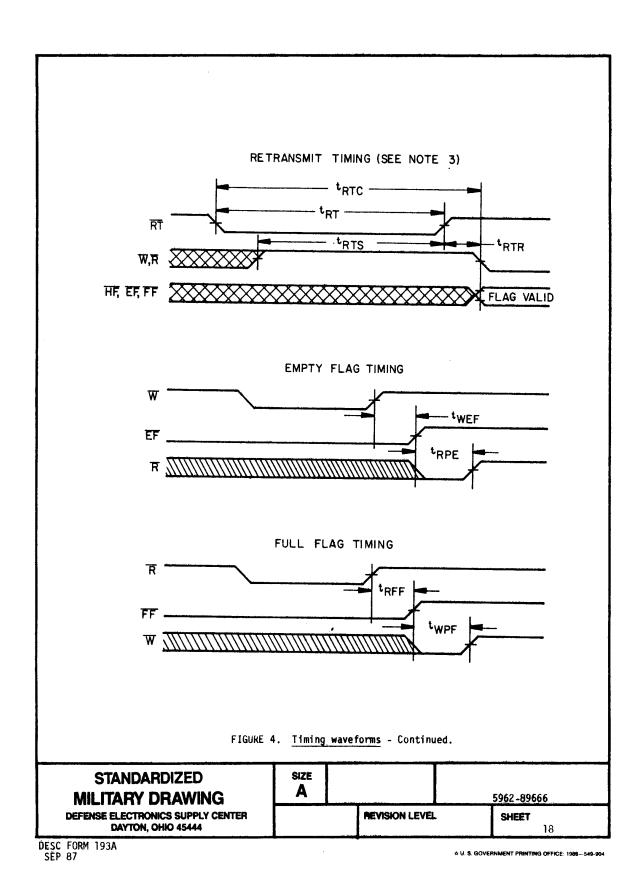


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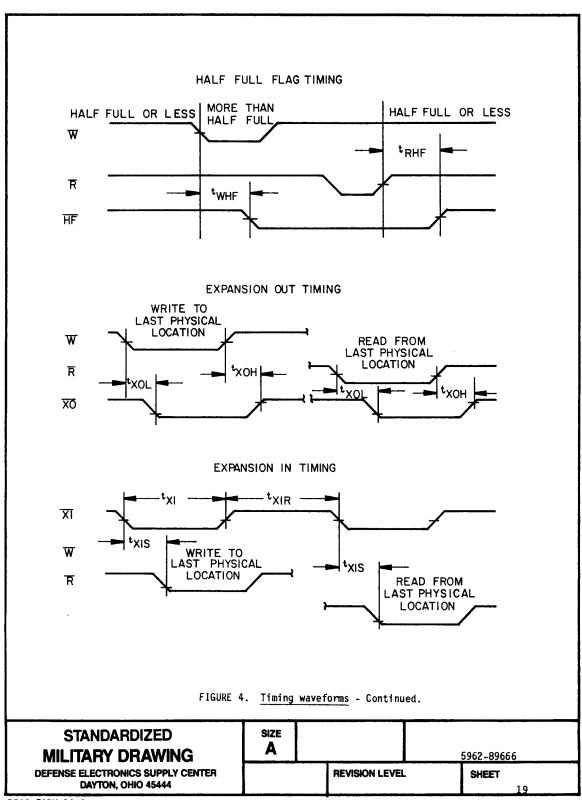




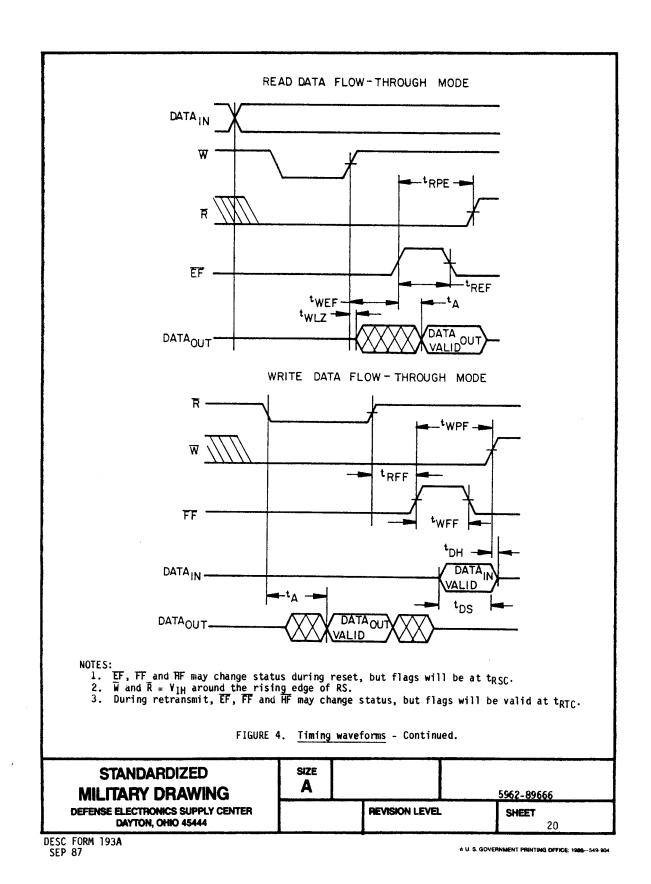
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### 4. QUALITY ASSURANCE PROVISIONS

- 4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with section 4 of MIL-M-38510 to the extent specified in MIL-STD-883 (see 3.1 herein).
- 4.2 <u>Screening</u>. Screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection. The following additional criteria shall apply:
  - a. Burn-in test, method 1015 of MIL-STD-883.
    - Test condition C or D using the circuit submitted with the certificate of compliance (see 3.6 herein).
    - (2)  $T_A = +125$ °C, minimum.
  - b. Interim and final electrical test parameters shall be as specified in table II herein, except interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.
- 4.3 Quality conformance inspection. Quality conformance inspection shall be in accordance with method  $\frac{5005}{5005}$  of MIL-STD-883 including groups A, B, C, and D inspections. The following additional criteria shall apply.
  - 4.3.1 Group A inspection.
    - a. Tests shall be as specified in table II herein.
    - b. Subgroups 5 and 6 in table I, method 5005 of MIL-STD-883 shall be omitted.
    - c. Subgroup 4 ( $C_{\rm IN}$  and  $C_{\rm OUT}$  measurements) shall be measured only for the initial test and after process or design changes which may affect capacitance. Sample size is 15 devices with no failures, and all input and output terminals tested.
    - d. Subgroups 7 and 8 tests shall include verification of the truth table.
  - 4.3.2 Groups C and D inspections.
    - a. End-point electrical parameters shall be as specified in table II herein.
    - b. Steady-state life test conditions, method 1005 of MIL-STD-883:
      - Test condition C or D using the circuit submitted with the certificate of compliance (see 3.6 herein).
      - (2)  $T_A = +125^{\circ}C$ , minimum.
      - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

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

- \* PDA applies to subgroups 1 and 7.
- \*\* See 4.3.1c

#### 5. PACKAGING

- 5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-M-38510.
  - NOTES
- 6.1 Intended use. Microcircuits conforming to this drawing are intended for use when military specifications do not exist and qualified military devices that will perform the required function are not available for OEM application. When a military specification exists and the product covered by this drawing has been qualified for listing on QPL-38510, the device specified herein will be inactivated and will not be used for new design. The QPL-38510 product shall be the preferred item for all applications.
- 6.2 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.
- 6.3 Configuration control of SMD's. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished in accordance with MIL-STD-481 using DD Form 1693, Engineering Change Proposal (Short Form).
- 6.4 Record of users. Military and industrial users shall inform Defense Electronics Supply Center when a system application requires configuration control and the applicable SMD. DESC will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronics devices (FSC 5962) should contact DESC-ECS, telephone (513) 296-6022.
- 6.5 Comments. Comments on this drawing should be directed to DESC-ECS, Dayton, Ohio, 45444, or telephone (513) 296-5375.

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6.6 Approved source of supply. An approved source of supply is listed in MIL-BUL-103. Additional sources will be added to MIL-BUL-103 as they become available. The vendor listed in MIL-BUL-103 has agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DESC-ECS. The approved source of supply listed below is for information purposes only and is current only to the date of the last action of this document.

	<del></del>	<del></del>
   Military drawing   part number   	Vendor   CAGE   number 	Vendor   similar part   number <u>1</u> /
5962-8966601XX	61772	IDT7200L120TCB
5962-8966601YX	61772	IDT7200L120DB
5962-8966601ZX	61772	IDT7200L120XEB
5962-8966601UX	61772	IDT7200L120XEB
5962-8966602XX	61772	I IDT7200L80TCB
5962-8966602YX	61772	I IDT7200L80DB
5962-8966602ZX	61772	I IDT7200L80XEB
5962-8966602UX	61772	I IDT7200L80LB
5962-8966603XX	61772	IDT7200L65TCB
5962-8966603YX	61772	IDT7200L65DB
5962-8966603ZX	61772	IDT7200L65XEB
5962-8966603UX	61772	IDT7200L65LB
5962-8966604XX	61772	1DT7200L50TCB
5962-8966604YX	61772	1DT7200L50DB
5962-8966604ZX	61772	1DT7200L50XEB
5962-8966604UX	61772	1DT7200L50XEB
5962-8966605XX	61772	IDT7200L40TCB
5962-8966605YX	61772	IDT7200L40DB
5962-8966605ZX	61772	IDT7200L40XEB
5962-8966605UX	61772	IDT7200L40LB
5962-8966606XX	61772	IDT7200L30TCB
5962-8966606YX	61772	IDT7200L30DB
5962-8966606ZX	61772	IDT7200L30XEB
5962-8966606UX	61772	IDT7200L30LB

1/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

Vendor CAGE number

Vendor name and address

61772

Integrated Device Technology, Incorporated 1566 Moffett Boulevard Salinas, CA 93905

Point of contact: 3236 Scott Boulevard Santa Clara, CA 95054

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