

MILITARY SPECIFICATION

MICROCIRCUITS, DIGITAL, BIPOLAR, ADVANCED LOW POWER  
 SCHOTTKY TTL, SHIFT REGISTERS, CASCADABLE, MONOLITHIC SILICON

This amendment forms a part of MIL-M-38510/376(USAF), dated 30 September 1983, and is approved for use within the Department of the Air Force and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Title: Delete and substitute as printed above.

1.1: Delete "outline/lead finish" and substitute "outline and lead finishes".

1.2.1, Circuit column: Following "universal", add "cascadable" (two places).

1.3, thermal resistance, delete and substitute:

"Thermal resistance, junction to case ( $\theta_{JC}$ ):

Cases R and S - - - - - (See MIL-M-38510, appendix C)  
 Case 2 - - - - - 0.08°C/mW 2/"

1.3, junction temperature: Following "( $T_J$ )", add "3/".

Following footnote 1/, add:

2/ When a thermal resistance value is included in MIL-M-38510, appendix C, it shall supersede the value stated herein."

3/ Maximum junction temperature shall not be exceeded except for allowable short duration burn-in screening condition in accordance with method 5004 of MIL-STD-883."

PAGE 2

1.4: Following "Supply voltage", add "( $V_{CC}$ )". Following "Case operating temperature range", add "( $T_C$ )".

1.4, Minimum clock pulse width, delete and substitute:

"Minimum clock pulse width:

Device types 01 and 02:

Case R - - - - - 20 ns at +125°C and -55°C  
 Cases S and 2 - - - - - 16.5 ns at +25°C"

PAGE 3

TABLE 1, Conditions column,  $V_{OH2}$ : Delete " $V_{IH} = 2.0$  V" and substitute " $V_{IH} = 2.0$  V".  $V_{OL1}$  and  $V_{OL2}$ : Delete " $V_{IL} = 0.8$  V" and substitute " $V_{IL} = 0.8$  V".

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3.2.4, delete and substitute the following:

"3.2.4 Schematic circuits. Schematic circuits shall be submitted to the preparing activity prior to inclusion of a manufacturer's device in the specification and shall be submitted to the qualifying activity and agent activity (DESC-ECS) as a prerequisite for qualification. All qualified manufacturers' schematics shall be maintained by the agent activity and will be available upon request."

3.6, second sentence: Delete in its entirety.

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TABLE II, test requirement column: Delete "Initial" and substitute "Interim".

TABLE II, Group A test requirements, Class B devices column: Add "B," following "7,".

4.2b: Delete "Initial" and substitute "Interim" (two places).

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4.4.3b(3): Delete "appendix B of MIL-M-38510 and".

6.1: Delete in its entirety.

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TABLE III, subgroup 3: Delete " $T_C = +125^{\circ}C$ " and substitute " $T_C = -55^{\circ}C$ ".

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\* TABLE III, device type 01, Test no. 192, pins 4, 6, 13, and 15:  
Delete "H" and substitute "L".

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Footnote 12/, item C, delete and substitute: "C - The output voltages shall be  $H \geq 1.5$  V and  $L \leq 1.5$  V".

Footnote 14/, table heading: Delete "(Min in  $\mu A$  for circuits" and substitute "Min/Max Limits in  $\mu A$  for circuits".

Footnote 15/, delete and substitute: "15/ 10 limits for circuits B and C shall be -30 to -100 mA."

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6.4: Delete "Electrical ground (common terminal)" and substitute "Ground zero voltage potential."

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The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

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Air Force - 17

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Air Force - 11, 19, 85, 99  
DLA - ES

Preparing activity:  
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Agent:  
DLA - ES

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