

Qualification requirements have been reinstated for device type 03.

INCH-POUND

MIL-M-38510/4C  
AMENDMENT 2  
12 March 1996  
SUPERSEDING  
AMENDMENT 1  
1 December 1995

MILITARY SPECIFICATION

Inactive for new design as of 30 October 1995

MICROCIRCUITS, DIGITAL, TTL,  
MULTIPLE NOR GATES, MONOLITHIC SILICON

This amendment forms a part of MIL-M-38510/004C, dated 25 February 1977, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.1, delete and substitute:

"1.1 Scope. This specification covers the detail requirements for monolithic silicon, TTL, multiple nor gates. Qualification requirements are removed for device type 03. For the remaining device types 01, 02, and 04, two product assurance classes and a choice of case outlines and lead finishes are provided and are reflected in the complete part number. All device types are inactive for new design after 30 October 1995."

\*1.1 Delete in its entirety from previous amendment and change as follows:

"1.1 Scope. This specification covers the detail requirements for monolithic silicon, TTL, multiple nor gates. Two product assurance classes and a choice of case outlines and lead finishes are provided and are reflected in the complete part number. All device types are inactive for new design after 30 October 1995."

PAGE 2

3.1 Detail specification. Add the following sentence, "Certification and Qualification requirements have been removed for device type 03."

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PAGE 4

3.7 Marking. Add the following sentence "The JAN or J certification mark shall not be used for device type 03."

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4.2 Qualification inspection. Add the following sentence, "Qualification inspection is not required for device type 03."

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6.2 Delete in its entirety, and replace as follows: "Intended use. Microcircuits conforming to this specification are intended for Government microcircuit applications (original equipment) and logistic purposes. Device type 03 is intended for use for logistic support of existing equipment."

\*6.2 Delete in its entirety from previous amendment and replace as follows:

"6.2 Intended use. Microcircuits conforming to this specification are intended for use for Government microcircuit applications (original equipment) and logistic purposes."

6.3 Ordering data. Paragraphs d - f, delete and replace as follows,

"d. Requirements for notification of change of product or process to the contracting activity for device type 03. In addition, to the notification to the qualifying activity for device type 03 if applicable."

"e. Requirements for packaging and packing, device type 03. Requirement for product assurance options, device types 01, 02, and 04."

"f. For device types 01, 02, and 04, requirements for failure analysis (including required test condition of method 5003 of MIL-STD-883), corrective action, and reporting of results, if applicable."

Add the following sentence, "i. For device types 01, 02, and 04, requirements for "JAN" marking."

\*6.3 Ordering data. Delete paragraphs d - f and replace as follows:

"d. Requirements for notification of change of product or process to procuring activity in addition to notification to the qualifying activity, if applicable."

"e. Requirements for packaging and packing."

"f. Requirements for failure analysis (including required test condition of method 5003), corrective action and reporting of results, if applicable."

Delete paragraph "i" in its entirety from previous amendment.

6.6 Delete in its entirety and replace as follows:

"6.6 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 or reliability factors equivalent to MIL-M-38510 device types and may have slight physical variations in relation to case size. The presence of this information shall 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-M-38510.

<u>Military device type</u>	<u>Generic-industry type</u>
01	5402
02	5423
03 1/	5425
04	5427

1/ Qualification requirements removed for this device type."

\*6.6 Delete in its entirety from previous amendment and replace as follows:

"6.6 Substitutability. Microcircuits covered by this specification will replace the following commercial device types:

<u>Military device type</u>	<u>Generic-industry type</u>
01	5402
02	5423
03	5425
04	5427 "

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6.7 Add:

"6.7 Generic test data. This shall apply only for device types 01, 02, and 04. Generic test data may be used to satisfy the requirements of 4.4.3. Group C generic test data shall be on data codes no more than one year old and on a die in the same microcircuit group (see appendix E of MIL-M-38510) with the same material, design and process and from the same plant as the die represented. Group D (see 4.4.4) generic data shall be on date codes no more than one year old and on the same package type (see terms, definitions, and symbols of MIL-M-38510) and from the same plant as the package represented. The vendor is required to retain the generic data for a period of not less than 36 months from the date of shipment."

\*6.7 Generic test data. Delete in its entirety.

NOTE: The margins of this amendment are marked with an asterisk to indicate where changes 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.

CONCLUDING MATERIAL

Custodians:

Army - ER  
Navy - EC  
Air Force - 17

Preparing activity:  
DLA-ES

Review activities:

Army - MI  
Air Force - 19, 85, 99

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