



**SLOVENSKI STANDARD**  
**SIST EN 190103:2002**

**01-september-2002**

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**Family specification: Digital TTL low power Schottky circuits - Series 54LS, 64LS, 74LS, 84LS**

Family Specification: Digital integrated TTL low power Schottky circuits - Series 54LS, 64LS, 74LS, 84LS

Familienspezifikation: Digitale integrierte TTL low power Schottky-Schaltungen - Serien 54LS, 64LS, 74LS, 84LS

Spécification de famille: Circuits intégrés digitaux TTL low power Schottky - Séries 54LS, 64LS, 74LS, 84LS

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**Ta slovenski standard je istoveten z: EN 190103:1994**

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**ICS:**

31.200	Integrirana vezja, mikroelektronika	Integrated circuits. Microelectronics
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EUROPEAN STANDARD  
 NORME EUROPÉENNE  
 EUROPÄISCHE NORM

EN 190103

May 1994

UDC

Supersedes CECC 90103 Issue 3:1988

Descriptors: Quality, electronic components, digital integrated TTL Low Power Schottky Circuits

English version

Family Specification:  
 Digital Integrated TTL Low Power Schottky Circuits  
 Series 54 LS, 64LS, 74LS, 84LS

Spécification de famille:  
 Circuits intégrés digitaux TTL low  
 power Schottky  
 Séries 54 LS, 64LS, 74LS, 84LS

Familienpezifikation:  
 Digitale integrierte TTL Low  
 Power Schottky-Schaltungen  
 Serien 54 LS, 64LS, 74LS, 84LS

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This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 30 April 1994. CENELEC members are bound to comply with CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the General Secretariat of the CECC or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CECC General Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

**CECC**

European Committee for Electrotechnical Standardization  
 Comité Européen de Normalisation Electrotechnique  
 Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

## Foreword

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This European Standard was prepared by CECC WG 9, "Integrated Circuits".

The text of the draft based on document CECC 90103 Issue 3:1988 (with A1 + A2) was submitted to the formal note for conversion to a European Standard; together with the voting report, circulated as document CECC(Secretariat)3536 it was approved by CECC as EN 190103 on 30 April 1994.

The following dates were fixed:

- latest date of announcement of the EN at national level (doa) 1994-09-01
- latest date of publication of an identical national standard<sup>a</sup> (dop) 1995-03-01
- latest date of withdrawal of conflicting national standards<sup>a</sup> (dow) 1996-03-01

<sup>a</sup> National Standard (excluding National implementation of IECQ Specifications)

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Förderverein für Elektrotechnische Normung (FEN) e. V.  
Cenelec Electronic Components Committee

**CECC**

Système Harmonisé d'Assurance de la Qualité  
des Composants Electroniques

SPECIFICATION DE FAMILLE:  
**CIRCUITS INTEGRES  
DIGITAUX TTL  
LOW POWER SCHOTTKY**  
Séries 54 LS, 64 LS, 74 LS, 84 LS

Harmonized System of Quality Assessment for  
Electronic Components

FAMILY SPECIFICATION:  
**DIGITAL INTEGRATED  
TTL LOW POWER  
SCHOTTKY CIRCUITS**  
Sieres L4 5S, 64 LS, 74 LS, 84 LS

Harmonisiertes Gütebestätigungssystem für  
Bauelemente der Elektronik

FAMILIEN-SPEZIFIKATION:  
**DIGITALE INTEGRIERTE  
TTL LOW POWER  
SCHOTTKY-  
SCHALTUNGEN**  
Serien 54 LS, 64 LS, 74 LS, 84 LS



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**CECC 90103**

1988

## Foreword

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The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby accepted by all member countries without further testing.

This specification has been formally approved by the CECC, and has been prepared for those countries taking part in the System who wish to issue national harmonized specifications for TTL LOW POWER SCHOTTKY DIGITAL INTEGRATED CIRCUITS. It should be read in conjunction with the current regulations for the CECC System.

## Preface

This Family Specification was prepared by CECC WG9 "INTEGRATED CIRCUITS".

It is based, wherever possible, on the Publications of the International Electrotechnical Commission and in particular on IEC 747: *Semiconductor devices: Discrete devices and integrated circuits*, IEC 748: *Semiconductor devices: Integrated circuits*, IEC 749: *Semiconductor devices: Mechanical and climatic test methods*.

It contains general information on TTL Low Power Schottky digital integrated circuits and defines the common characteristics for this family of integrated circuits.

Together with the device type detail specification (DS) of a component usually prepared nationally, this family specification forms a complete detail specification.

The text of this third Issue consists of the text of CECC 90103 Issue 2 (1982) amended in accordance with the ratified new material introduced by the following document.


Document	Date of Voting	Report on the Voting
CECC(Secretariat)2094	July 1987	CECC(Secretariat)2162

In accordance with the decision of the CECC Management Committee this specification is published initially in French and English. The German text will follow as soon as it has been prepared.

## Effective date

This third Issue of CECC 90103 shall become effective for all new qualification approvals on 15 June 1988. Issue 2 will continue to remain effective to cover all past approvals.



	<p>CECC 90103 ISSUE 3:1988</p> 
	<p>Page 1   Total number of pages: 10</p>
<p>ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH: CECC 90000: Generic specification for Monolithic integrated circuits (GS) CECC 90100: Sectional specification for Digital monolithic integrated circuits (SS)</p>	
<p>OUTLINE AND DIMENSIONS: (See DS for the specific type)</p> <p>TERMINAL CONNECTIONS (See DS for the specific type)</p>	<p>FAMILY SPECIFICATION FOR TTL LOW POWER SCHOTTKY DIGITAL INTEGRATED CIRCUITS Category 1: Usual series 54 Ls, 64 Ls, 74 Ls, 84 Ls Category 2: Harmonized series 54 LS, 74 LS <i>NOTE This family specification shall be completed by a DS in accordance with this specification covering one or more specific type of circuits. The marking shall differentiate the Category 1 components from Category 2 components.</i></p> <p>TYPICAL CONSTRUCTION: Silicon monolithic bipolar integrated circuits, cavity/non-cavity packages.</p> <p>CAUTION: These are electrostatic sensitive devices.</p> <p>ASSESSMENT LEVELS: P, Y, L</p>

#### Contents

Category 1 – (Usual 54 LS, 64 LS, 74 LS, 84 LS)

- 1 Limiting conditions of use for the family
- 2 Recommended operating conditions and associated characteristics for the family

Category 2 – (Harmonized 54 LS, 74 LS)

- 3 Limiting conditions of use for the family
- 4 Recommended operating conditions and associated characteristics for the family

Categories 1 and 2

- 5 Test methods and procedures
- 6 Inspection requirements

Information about manufacturers who have components qualified to a detail specification written in accordance with this family specification is available in the current CECC 00200: *Qualified Products List*.