



# SLOVENSKI STANDARD

## SIST EN 163101:2016

01-november-2016

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### Okvirna podrobna specifikacija: Tankoplastna in hibridna integrirana vezja

Blank Detail Specification: Film and hybrid integrated circuits

Vordruck für Bauartspezifikation: Integrierte Hybrid- und Schichtschaltungen

Spécification particulière cadre: Circuits intégrés hybride et à couches

Ta slovenski standard je istoveten z: **EN 163101:1991**

[SIST EN 163101:2016](https://standards.iteh.ai/catalog/standards/sist/4034fb1d-b95a-4258-a8ea-d05953ca7853/sist-en-163101-2016)

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#### **ICS:**

31.200	Integrirana vezja, mikroelektronika	Integrated circuits. Microelectronics
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**SIST EN 163101:2016**

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UDC:

Descriptors: Quality, electronic components, integrated circuits

English version

**Blank Detail Specification:  
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**Spécification Particulière Cadre:  
Circuits intégrés hybride et à  
couches**

**Vordruck für Bauartspezifikation:  
Integrierte Hybrid- und  
Schichtschaltungen**

This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 25 November 1991. The text of this standard consists of the text of CECC 63 101 Issue 1 1984 (with A1) of the corresponding CECC Specification. 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**

CENELEC Electronic Components Committee

Comité des Composants Electroniques du CENELEC

CENELEC Komitee für Bauelemente der Elektronik

**General Secretariat: Gartenstr. 179, D- 6000 Frankfurt/Main 70**

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

**CECC**



Systeme Harmonisé d'Assurance de la Qualité  
des Composants Electroniques

SPECIFICATION PARTICULIERE CADRE:

**CIRCUITS INTEGRES  
HYBRIDES  
ET A COUCHES**

Harmonized System of Quality Assessment for  
Electronic Components

BLANK DETAIL SPECIFICATION:

**FILM AND HYBRID  
INTEGRATED CIRCUITS**

Harmonisiertes Gütebestätigungssystem für  
Baelemente der Elektronik

VORDRUCK  
FÜR BAUARTSPEZIFIKATION:

**INTEGRIERTE HYBRID-  
UND  
SCHICHTSCHALTUNGEN**

**1** Edition  
Issue  
Ausgabe

**CECC 63101**

1984

Cette page bleue doit être insérée après la page de garde de la CECC 63 101 Edition 1 (1984)

MODIFICATION 1 DE LA CECC 63 101 (Edition 1):

SPECIFICATION PARTICULIERE CADRE (HOMOLOGATION):

CIRCUITS INTEGRES HYBRIDES ET A COUCHES

Les modifications suivantes doivent être effectuées:

Retirer les pages numérotées 7, 9 et insérer les nouvelles pages numérotées 7, 9 de la **Modification 1**.

Toutes les pages non mentionnées sont maintenues.

**Cette modification consiste en** l'introduction dans le Tableau 2 de la possibilité de choisir pour l'essai de sélection, une des trois séquences préférentielles qui sont décrites actuellement dans le paragraphe 4.6 de la spécification générique CECC 63 000.

Le texte pour cette modification a été soumis au vote du CECC dans les documents indiqués ci-dessous et a été accepté par le Président du CECC pour être publié comme modification à la spécification particulière cadre.

Document	Date de vote	Rapport de vote
CECC(Sec)1834	Septembre 1985	CECC(Sec)2017
CECC(Sec)2110	Juin 1987	CECC(Sec)2181

Enregistrer les modifications sur la feuille jaune "Enregistrement de modifications".

CECC 63 101 Edition 1 Modification 1 (1988)

This blue page should be inserted after the title page of CECC 63 101 Issue 1 (1984)

AMENDMENT 1 TO CECC 63 101 (Issue 1):

BLANK DETAIL SPECIFICATION (QUALIFICATION APPROVAL):

FILM AND HYBRID INTEGRATED CIRCUITS

The following amendment shall be made:

Remove sheets with pages numbered 7, 9 and insert new sheets with pages numbered 7, 9 of **Amendment 1**.

All remaining pages which are not listed are to be retained.

**This amendment consists of the introduction into** Table 2 of the possibility to choose for screening one of the preferred screening sequences which are now described in sub-clause 4.6 of the generic specification CECC 63 000.

The text of this amendment was circulated to the CECC for voting in the documents indicated below and was ratified by the President of the CECC for printing as amendment to the blank detail specification.

Document	Voting Date	Report on the Voting
CECC(Sec)1834	September 1985	CECC(Sec)2017
CECC(Sec)2110	June 1987	CECC(Sec)2181

Enter these amendments on the yellow "Record of Amendments" sheet.

CECC 63 101 Issue 1 Amendment 1 (1988)

Dieses blaue Blatt ist nach dem Titelblatt CECC 63 101 Ausgabe 1 (1984) einzusetzen

ÄNDERUNG 1 ZU CECC 63 101 (Ausgabe 1):

VORDRUCK FÜR BAUARTSPEZIFIKATION (BAUARTZULASSUNG):

INTEGRIERTE HYBRID- UND SCHICHTSCHALTUNGEN

Folgende Änderung ist vorzunehmen:

Die Seiten mit der Seitenzahl 6 und 9 sind herauszunehmen und durch die neuen Seiten mit der Seitenzahl 6, 9 der **Änderung 1** zu ersetzen.

Alle übrigen nicht aufgeführten Seiten bleiben unverändert.

**Diese Änderung enthält** die Einführung der Möglichkeit, für das Screening in Tabelle 2 eine der bevorzugten Screening-Folgen auszuwählen, die nun im Abschnitt 4.6 der Fachgrundspezifikation CECC 63 000 beschrieben sind.

Der Text dieser Änderung wurde dem CECC mit den unten aufgeführten Schriftstücken zur Abstimmung vorgelegt und vom Präsidenten des CECC zur Herausgabe als Änderung des Vordrucks zur Bauartspezifikation freigegeben.

Schriftstück	Abstimmungsdatum	Abstimmbericht
CECC(Sek)1834	September 1985	CECC(Sek)2017
CECC(Sek)2110	Juni 1987	CECC(Sek)2181

Diese Änderung ist auf dem gelben Blatt "Verzeichnis der Änderung" einzutragen.

CECC 63 101 Ausgabe 1 Änderung 1 (1988)

## 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 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 FILM and HYBRID INTEGRATED CIRCUITS (F&HICs). It should be read in conjunction with the current regulations for the CECC System.

At the date of printing of this specification, the member countries of the CECC are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom, and copies of it can be obtained from the addresses shown on the blue flysheet.

## PREFACE

This blank detail specification was prepared by CECC Working Group 21 : "HYBRID MICRO-CIRCUITS".

It is based, wherever possible, on the Publications of the International Electrotechnical Commission and in particular on IEC Publication 147 : Essential ratings and characteristics of semiconductor devices and general principles of measuring methods.

The text of this blank detail specification was circulated to the CECC for voting in the documents listed below and was ratified by the President of the CECC for printing as a CECC Specification.

<u>Documents</u>	<u>Voting date</u>	<u>Report on the voting</u>
CECC(Secretariat)1182	August 1982	CECC(Secretariat)1279
CECC(Secretariat)1368	July 1983	CECC(Secretariat)1415

At present this specification covers F&HICs using thick film techniques only but amendments are under preparation to cover F&HICs manufactured using thin film techniques as well.

## BLANK DETAIL SPECIFICATION


A blank detail specification is a supplementary document to the sectional specification and contains requirements for style and layout and minimum content of detail specifications.

In the preparation of detail specifications the content of 2.3 of CECC 63 100 shall be taken into account.

The numbers between square brackets on page 3 correspond to the following indications which should be given :

### Identification of the detail specification and of the F&HICs

- [1] The name of the National Standards Organization under whose authority the detail specification is published and, if applicable, the organization from whom the detail specification is available.
  - [2] The CECC Symbol and the number allotted to the detail specification by the CECC General Secretariat.
  - [3] The number and issue number of the CECC generic or sectional specification as relevant; also national reference if different.
  - [4] If different from the CECC number, the national number of the detail specification, date of issue and any further information required by the national system, together with any amendment numbers.
  - [5] A brief description of the technique and the type or function of the hybrid circuit.
  - [6] Information on typical construction (where applicable).
- For [5] and [6] the text to be given in the detail specification should be suitable for an entry in CECC 00 200 (QPL) and CECC 00 300 (Library List).
- [7] An outline drawing with main dimensions which are of importance for interchangeability and/or reference to the appropriate national or international document for outlines. Alternatively, this drawing may be given in an appendix to the detail specification.
  - [8] The levels of quality assessment covered by the detail specification.
  - [9] Reference data giving information on the most important properties of the F&HIC which allow comparison between the various F&HIC types intended for the same, or for similar, applications.

Specification available from :	[1]	CECC 63 101 xxx	[2]
		Page 1 of ...	
ELECTRONIC COMPONENTS OF ASSESSED QUALITY BY QUALIFICATION APPROVAL IN ACCORDANCE WITH :	[3]		[4]
Outline and dimensions - (see Table 1) (first angle projection) :	[7]	THICK FILM HYBRID INTEGRATED CIRCUIT	[5]
		ENCAPSULATION (see note 2)	[6]
		ASSESSMENT LEVEL	[8]
Dimensions in mm (see note 1)			

NOTE 1 : The non-dimensioned details do not affect the performance of the devices.

NOTE 2 : State whether the terminations are (not) suitable for soldering.

State whether the terminations are (not) suitable for printed wiring applications.

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200 : Qualified Products List.



SECTION ONE - GENERAL DATA

1.1 RECOMMENDED METHODS OF MOUNTING

In accordance with CECC 63 100

1.2 DIMENSIONS, CHARACTERISTICS AND CONDITIONS OF USE

TABLE 1 [9]

Where a range of products have the same basic function and are made in the same technology and envelope, this table will be used to detail the differences in characteristics.

The detail specification shall contain all information needed to describe adequately :

1.2.1 Performance and design of the circuit

- (1) Schematic circuit diagram
- (2) Resistance and capacitance values, tolerances, matching, tracking, power dissipation, temperature coefficients of resistors/temperature coefficients of capacitors where applicable
- (3) Limitations on resistance of conductors where applicable
- (4) Test circuit or method and performance limits
- (5) Added components (see 3.6.2 of CECC 63 000).

1.2.2 Limiting conditions of use

Examples : Operating temperature range  
Storage temperature range  
Vibration, shock, bump severities  
Climatic category  
Maximum voltage.

Note : Any interrelationship between the details specified in 1.2.1 and 1.2.2 shall be stated.

1.2.3 Derating

See "Rated dissipation" of 2.2.2 (2) of CECC 63 100.  
(Where applicable, derating curve to be included in the detail specification).