



SLOVENSKI STANDARD

SIST EN 160101:2001

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Blank Detail Specification: Printed board assembly modular electronic units of assessed quality - Capability approval

Blank Detail Specification: Printed board assembly modular electronic units of assessed quality - Capability approval

Vordruck für Bauartspezifikation: Leiterplatten, die mit Moduleinheiten der Elektronik bestückt sind, mit bewerteter Qualität - Befähigungsanerkennung

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ICS:

31.190	Sestavljeni elektronski elementi	Electronic component assemblies
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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 160101

April 1998

Descriptors: Quality, electronic components, printed boards, modular electronic units

English version

**Blank Detail Specification:
Printed board assembly modular
electronic units of assessed quality
Capability approval**

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Leiterplatten, die mit Moduleinheiten
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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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

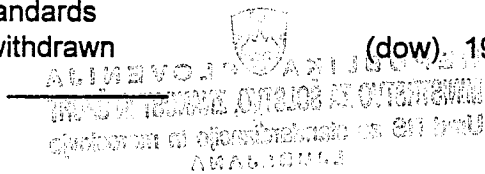
Foreword

This European Standard was prepared by the British ONH under the Single Originator Procedure.

The text of the draft based on document CECC(Secretariat)3553 was submitted to the formal vote; together with the voting report, circulated as document CECC(Secretariat)3678, it was approved as EN 160101 on 1996-03-03.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1998-10-15
- latest date by which the national standards
conflicting with the EN have to be withdrawn (dow) 1999-10-15



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1 INTRODUCTION

- 1.1 This blank detail specification is a supplementary document to sectional specification EN 160100 and contains requirements for style, layout and minimum content of detail specifications.
- 1.2 The use of this document is:-
- [a] A potential customer addresses an enquiry to the manufacturer for a printed board assembly which is within the scope of the manufacturer's capability as published in the Qualified Products List CECC 00 200.
 - [b] The customer either agrees to use a detail specification for a standard catalogue item which is listed in CECC 00 200 in its own right and is produced by the manufacturer, or, a specification is negotiated between the manufacturer and the customer until an agreed customer's detail specification is finalized. Both types of specification shall be based on the requirements of this BDS and EN 160100.
 - [c] The printed board assembly is inspected and released in accordance with the agreed detail specification.
- 1.3 In the preparation of detail specifications, the requirements of 2.4.2 and 2.4.3 of EN 160100 are mandatory and shall be met in full.
- 1.4 For the minimum content of the inspection requirements, see 2.3.1 of EN 160100 and 4 of this BDS.
- 1.5 The BDS is structured in the following manner and sequence:
- identification of the detail specification (DS) and printed board assembly PBA (see 2)
 - supplementary information (see 3)
 - test schedule and inspection requirements (see 4)
 - information on application of the PBA (1.2).

NOTE: For a CDS which will not be published, i.e., is not to be registered with the CECC General Secretariat, the layout requirements of this BDS, while recommended, are optional. The requirements for the content of the CDS are based on the guidelines given in EN 160100, 2.4.2, and are mandatory. It shall be noted that in case of a conflict between a CDS and EN 160100, EN 160100 shall take precedence.

When requested by the customer, the CDS may be marked "Commercial-in-Confidence".

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2 IDENTIFICATION OF THE DETAIL SPECIFICATION AND OF THE PBA

2.1 Front page of the detail specification (DS)

The dimensions of the layout of the front pages illustrated in Annex A and Annex B are not mandatory. The information to be included in the DS is mandatory.

2.1.1 Standard catalogue PBA

The detail specification for a standard catalogue item shall include the following information; the square brackets refer to the position on the first page layout given in Annex A of this BDS.

- [1] The name and address of the National Standards Organization under whose authority the DS is published and, if different, the organization from whom the DS is available
- [2] The CECC symbol and the number allotted to the DS by the CECC General Secretariat
- [3] "EN 160100" followed by the issue number and the national reference if different
- [4] If different from the CECC number, the national number of the DS, the date of issue and any further information required by the national system, together with any amendment numbers
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- [5] The manufacturer's type number and a brief description of the PBA or range of PBAs
- [6] Details of the typical construction of the PBA and any necessary cautions, e.g., 'Warning - Static Sensitive Devices' (see 3.1.2) or 'Warning - Devices containing Beryllium Oxide' or other Health and Safety Requirements

For [5] and [6] the text given in the detail specification should be suitable for use as an entry in CECC 00 200 (QPL) and in CECC 00 300 (Library List).

- [7] An illustration of the general outer appearance of the PBA giving main dimensions important for interchangeability or reference to the appropriate national or international documents for outlines.

If the critical dimensions cannot be included in this drawing, the illustration may be marked "For inspection drawing(s), see Annex *", a suitable Annex * being added to the detail specification.

Whether dimensioned or not [7] shall always contain an illustration of the general outer appearance of the PBA. This can be used to show terminations and their polarity when applicable.

- [8] Reference data giving information on the most important properties of the PBA to allow comparison between the various alternatives intended for the same or similar applications.
- [9] Prime electrical performance characteristics and the climatic category of the PBA (not for inspection purposes).

Where prime characteristics of electrical performance and climatic category are specified in the detail specification to be tested by the manufacturer, that manufacturer shall include such testing in the demonstration and verification of his declared capability.

Additional reference data, e.g., the range of options or the recommended conditions of use, see 2.2, shall be inserted in subsequent pages of the detail specification. iTeh STANDARD PREVIEW

2.1.2 Custom-built PBA (standards.iteh.ai)

The DS for a custom-built PBA not intended for registration in CECC 00 200 is a customer detail specification, a CDS. It shall include the following information; the references which follow are to the position on the recommended first page layout shown in Annex B.

The identity of the customer and that of the manufacturer (assembler) of the PBA shall be entered in the box identified at the top left.

The specification reference on the top right of the page shall be a unique number which identifies the detail specification. The number given may be one of a series reserved for detail specifications or it may be the customer's order number or the manufacturer's works order number, provided it is prefixed so that it can be readily identified as a detail specification to EN 160100.

- [1] "EN 160100" followed by the issue number and the national reference if different
- [2] The customer's drawing number or identification of the printed board assembly and a brief description of the PBA or range of PBAs

- [3] Details of typical construction of the PBA and any necessary cautions, e.g., 'Warning - Static Sensitive Devices' (see 3.1.2) or 'Warning - Devices containing Beryllium Oxide' or other Health and Safety Requirements
- [4] Illustration of the general outer appearance of the PBA. It may be used to show terminations and their polarity when applicable.

The illustration shall give main dimensions essential for dimensioning and gauging the printed board assembly, including those important for interchangeability or shall make reference to the relevant national or international documents for outlines.

If it is not possible to show the critical dimensions here, the illustration may be marked "For inspection drawing(s), see Annex **", a suitable Annex * being added to the DS.

- [5] Reference data giving information on the most important properties of the PBA to allow comparison between various types intended for the same or similar applications.
- [6] Prime characteristics (not for inspection purposes). Prime electrical performance characteristics and the climatic category of the PBA.

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When the ability to demonstrate and verify these is not included in the manufacturer's capability, boxes [5] and [6] may be left blank.

Where prime characteristics of electrical performance and climatic category are specified in the detail specification to be tested by the PBA manufacturer, that manufacturer shall include such testing in the demonstration and verification of his declared capability.

2.2 Additional reference data

2.2.1 General

These data shall be inserted immediately following the front page of the detail specification.

In order to define fully the build of the printed board assembly, the detail specification must specify or reference:

- the design authority for the PBA and the procedure for negotiating and making amendments or changes to the agreed DS

- the components to be incorporated (including the substrate), type, quantity and any restraints on their specification and use additional to those given in EN 160100, 2.1.5'
- clear and precise material and component specifications that comply with EN 160100, 2.1.5 and state the policy for component substitution or replacement whether or not a specific vendor is indicated
- all other materials and ancillary items required to manufacture the PBA, for example, solder resists, solders, adhesives
- any specific vendor(s) that shall be used for particular items'
- circuit diagrams, assembly and detail drawings showing dimensions (stated in mm) referenced to an international drawing standard, see EN 160100, 1.3, datums, machining data, finishes, component positions, polarities, style of mounting, e.g., for axial lead components, horizontal or vertical, type of fixing and, as relevant, the interconnection method to be used
- ancillary processes required such as the application and curing of conformal coatings
- test points for continuity testing when agreed
- all other information relevant to the build of the printed board assembly, such as alternative methods of test (providing these do not conflict with the requirements of the sectional specification), graphs, and notes necessary to clarify any part of the detail specification.

Any data supplied in electronic format, e.g., machining data, pick-and-place control data, shall be identified in the DS.

2.2.2 Recommended methods of handling and mounting

When relevant, the DS shall give advice on storage, handling, use of test equipment and installation of the PBA.

2.2.3 Functional description and range of options

A brief description of the PBA shall be given. When relevant, this shall include options covered by the detail specification, a functional block diagram, truth table and pin/port assignments.