

Harmonized system of quality
assessment for electronic components

Capability detail specification: Flex-rigid double-sided printed boards with through connections

ICS 31.180

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National foreword

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This standard should be read in conjunction with the most recent editions of BS EN 123000 and BS EN 123700.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the CECC title page, pages 2 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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English version

**Capability Detail Specification:
Flex-rigid double-sided printed boards with through
connections**

Spécification particulière
d'Agrément:
Cartes imprimées double
face flexorigides avec connexions
transversales

Bauartspezifikation zur Anerkennung
der Befähigung:
Starr-flexible doppelseitige Leiterplatten mit
Durchverbindungen



This Capability Detail Specification was approved on 1997-08-06.

Up-to-date lists and bibliographical references of other detail specifications relating to EN 123000:1991 and EN 123700:1996 may be obtained on application to the Central Secretariat or to any CENELEC member.

This CECC Detail Specification 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.

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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 Capability Detail Specification has been prepared by CENELEC/TC CECC/SC 52, Printed Boards (formerly designated CECC Working Group 23).
It was approved as CECC 23 700-801 on 1997-08-06.
It should be read in conjunction with EN 123000:1991 and EN 123700:1996 and with the current regulations for the CECC System.

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1 General

1.1 Scope

This Capability Detail Specification (CapDS) is based upon EN 123700. It relates to flex-rigid double-sided printed boards with through connections, made with materials and surface finishes as specified in clause 2.

1.2 Object

To specify the Capability Qualifying Component (CQC), its characteristics to be tested, the test methods and conditions to be applied and the requirements to be fulfilled for testing basic and extended capability.

2 Capability Qualifying Component (CQC)

Test boards to be used as CQCs for basic capability shall

- be made from a combination of the materials specified in 2.1 of this CapDS. The construction shall be as given in 8.3 of EN 123700.
- bear the composite test pattern (CTP) specified in 8.3 of EN 123700 (or equivalent CTP), for basic and other metallic finishes. CTPs as specified in 8.2 of EN 123200 (or equivalent CTP) shall be used to demonstrate organic surface finishes and externally bonded heat sinks.
- have one of the surface finishes specified by groups 11, 12, 13, 14, 15, 16, or 17 in 2.2 of this CapDS.
- be fabricated using a copper thickness determined by the needs of the process and parameters to be demonstrated (e.g. conductor width and separation). The CQC copper thickness shall be detailed in the capability manual.

Requirements for test boards to be used as modified CQCs for the demonstration of additional capability are detailed in clause 5 of this CapDS.

2.1 Materials

Material group designation	Specification	Base Material		Base material Thickness range
		Type	Grade	
A	EN 60249-2-11 EN 60249-2-12	Epoxide woven glass Epoxide woven glass	General purpose Defined flammability	0,05.....0,8 mm ≥ 0,05 mm
	EN 60249-3-1G EN 60249-3-1GF	Prepreg Prepreg	General purpose Defined flammability	≥ 0,05 mm
B	EN 60249-2-13 EN 60249-3-15	Polyimide film Polyimide film	General purpose Defined flammability	12,5..... 125 µm 12,5..... 125 µm
C	EN 60249-2-8	Polyester Film	General purpose	12,5..... 125 µm