SVENSK STANDARD SS-EN 61190-1-3

Fastställd	Utgåva	Sida	Ansvarig kommitté
2007-09-24	2	1 (1+35)	SEK TK 91

Material för elektronikmontering – Del 1-3: Fordringar på lodlegeringar och lod med eller utan flussmedel

Attachment materials for electronic assembly – Part 1-3: Requirements for electronic grade solder alloys and fluxed and non-fluxed solid solders for electronic soldering applications

Som svensk standard gäller europastandarden EN 61190-1-3:2007. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61190-1-3:2007.

Nationellt förord

Europastandarden EN 61190-1-3:2007[*)]

består av:

- **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
- **IEC 61190-1-3, Second edition, 2007 - Attachment materials for electronic assembly - Part 1-3: Requirements for electronic grade solder alloys and fluxed and non-fluxed solid solders for electronic soldering applications**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61190-1-3, utgåva 1, 2003, gäller ej fr o m 2010-05-01.

[*)] EN 61190-1-3:2007 ikraftsattes 2007-09-24 som SS-EN 61190-1-3 genom offentliggörande, d v s utan utgivning av något svenskt dokument.

ICS 31.190

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61190-1-3

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ICS 31.190

Supersedes EN 61190-1-3:2002

English version

Attachment materials for electronic assembly - Part 1-3: Requirements for electronic grade solder alloys and fluxed and non-fluxed solid solders for electronic soldering applications

(IEC 61190-1-3:2007)

Matériaux de fixation pour les assemblages électroniques - Partie 1-3: Exigences relatives aux alliages à braser de catégorie électronique et brasures solides fluxées et non-fluxées pour les applications de brasage électronique (CEI 61190-1-3:2007)

Verbindungsmaterialien für Baugruppen der Elektronik - Teil 1-3: Anforderungen an Elektroniklote und an Festformlote mit oder ohne Flussmittel für das Löten von Elektronikprodukten (IEC 61190-1-3:2007)

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

Ref. No. EN 61190-1-3:2007 E

SEK Svensk Elstandard

Foreword

The text of document 91/647/FDIS, future edition 2 of IEC 61190-1-3, prepared by IEC TC 91, Electronics assembly technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61190-1-3 on 2007-05-01.

This European Standard supersedes EN 61190-1-3:2002.

The main changes with regard to EN 61190-1-3:2002 concern a definition of lead-free solder alloy and an amendment to Table B.1 concerning lead-free solder alloys.

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)	2008-02-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2010-05-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61190-1-3:2007 was approved by CENELEC as a European Standard without any modification.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60194	-[1)]	Printed board design, manufacture and assembly - Terms and definitions	EN 60194	2006[2)]
IEC 61189-5	-[1)]	Test methods for electrical materials, interconnection structures and assemblies - Part 5: Test methods for printed board assemblies	EN 61189-5	2006[2)]
IEC 61189-6	-[1)]	Test methods for electrical materials, interconnection structures and assemblies - Part 6: Test methods for materials used in manufacturing electronic assemblies	EN 61189-6	2006[2)]
IEC 61190-1-1	2002	Attachment materials for electronic assembly - Part 1-1: Requirements for soldering fluxes for high-quality interconnections in electronics assembly	EN 61190-1-1	2002
IEC 61190-1-2	-[1)]	Attachment materials for electronic assembly - Part 1-2: Requirements for soldering pastes for high-quality interconnects in electronics assembly	EN 61190-1-2	2007[2)]
ISO 9001	-[1)]	Quality systems - Model for quality assurance in design/ development, production, installation and servicing	EN ISO 9001	2000[2)]
ISO 9453	-[1)]	Soft solder alloys - Chemical compositions and forms	EN ISO 9453	2006[2)]
ISO 9454-1	1990	Soft soldering fluxes - Classification and requirements - Part 1: Classification, labelling and packaging	EN 29454-1	1993
ISO 9454-2	1998	Soft soldering fluxes - Classification and requirements - Part 2: Performance requirements	EN ISO 9454-2	2000

[1)] Undated reference.

[2)] Valid edition at date of issue.

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ATTACHMENT MATERIALS FOR ELECTRONIC ASSEMBLY –

Part 1-3: Requirements for electronic grade solder alloys and fluxed and non-fluxed solid solders for electronic soldering applications

1 Scope

This part of IEC 61190 prescribes the requirements and test methods for electronic grade solder alloys, for fluxed and non-fluxed bar, ribbon, powder solders and solder paste, for electronic soldering applications and for “special” electronic grade solders. For the generic specifications of solder alloys and fluxes, see ISO 9453, ISO 9454-1 and ISO 9454-2. This standard is a quality control document and is not intended to relate directly to the material's performance in the manufacturing process

Special electronic grade solders include all solders which do not fully comply with the requirements of standard solder alloys and solder materials listed herein. Examples of special solders include anodes, ingots, preforms, bars with hook and eye ends, multiple-alloy solder powders, etc.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60194, *Printed board design, manufacture and assembly – Terms and definitions*

IEC 61190-1-1:2002, *Attachment materials for electronic assembly – Part 1-1: Requirements for soldering fluxes for high-quality interconnects in electronics assembly*

IEC 61190-1-2, *Attachment materials for electronic assembly – Part 1-2: Requirements for solder pastes for high-quality interconnections in electronics assembly*

IEC 61189-5, *Test methods for electrical materials, interconnection structures and assemblies – Part 5: Test methods for printed board assemblies*

IEC 61189-6, *Test methods for electrical materials, interconnection structures and assemblies – Part 6: Test methods for materials used in manufacturing electronic assemblies*

ISO 9001, *Quality management systems – Requirements*

ISO 9453, *Soft solder alloys – Chemical compositions and forms*

ISO-9454-1:1990, *Soft soldering fluxes – Classification and requirements – Part 1: Classification, labelling and packing*

ISO-9454-2:1998, *Soft soldering fluxes – Classification and requirements – Part 2: Performance requirements*