SLOVENSKI STANDARD
SIST EN IEC 62148-19:2019

01-oktober-2019

Aktivne komponente in naprave optičnih vlaken - Standardi za ohišja in vmesnike - 19. del: Fotonsko ohišje v velikosti čipa (IEC 62148-19:2019)

Fibre optic active components and devices - Package and interface standards - Part 19: Photonic chip scale package (IEC 62148-19:2019)

Aktive Lichtwellenleiterbauelemente und -geräte - Gehäuse- und Schnittstellennormen - Teil 19: Photonisches Gehäuse in Chipgröße (IEC 62148-19:2019)

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Composants et dispositifs actifs fibroniques - Normes de boîtier et d'interface - Partie 19 : Boîtier à puce photonique (IEC 62148-19:2019)

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33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices

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EN IEC 62148-19

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Composants et dispositifs actifs fibroniques - Normes de boîtier et d'interface - Partie 19 : Boîtier à puce photonique (IEC 62148-19:2019)

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Comité Européen de Normalisation Electrotechnique
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European foreword

The text of document 86C/1574/FDIS, future edition 1 of IEC 62148-19, prepared by SC 86C "Fibre optic systems and active devices" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62148-19:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-03-06
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-06-06

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The text of the International Standard IEC 62148-19:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60191 (series)	NOTE	Harmonized in EN 60191 (series)
IEC 61281-1	NOTE	Harmonized as EN IEC 61281-1
IEC 62148-21	NOTE	Harmonized as EN IEC 62148-21

SIST EN IEC 62148-19:2019

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.
NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 62148-1	-	Fibre optic active components and devices - Package and interface standards - Part 1: General and guidance	EN IEC 62148-1	-

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Composants et dispositifs actifs fibroniques – Normes de boîtier et d'interface – Partie 19: Boîtier à puce photonique

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FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES – PACKAGE AND INTERFACE STANDARDS –

Part 19: Photonic chip scale package

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International Standard IEC 62148-19 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
86C/1574/FDIS	86C/1586/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62148 series, published under the general title *Fibre optic active components and devices – Package and interface standards*, can be found on the IEC website.

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The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

A photonic chip scale package is used to convert electrical signals into optical signals and vice-versa. This document covers the physical interface for photonic chip scale packages. These modules are designed for use with free space optics or multiple channel optical fibre connectors.

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FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES – PACKAGE AND INTERFACE STANDARDS –

Part 19: Photonic chip scale package

1 Scope

This part of IEC 62148 covers the photonic chip scale package.

The purpose of this document is to specify adequately the physical requirements of optical transmitters and receivers that will enable mechanical interchangeability of transmitters and receivers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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IEC 62148-1, *Fibre optic active components and devices – Package and interface standards – Part 1: General and guidance*

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3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
photonic chip scale package
chip O/E and/or E/O convertor, where electrical I/Os and optical I/Os are also included

3.2 Abbreviated terms

CSP chip scale package
O/E optical to electrical
E/O electrical to optical
I/O input/output
SIG signal
TX transmitter
RX receiver
MOD optical modulator
LD laser diode