

# SLOVENSKI STANDARD

## SIST EN IEC 62148-21:2021

01-september-2021

Nadomešča:

SIST EN IEC 62148-21:2019

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**Aktivne optične komponente in naprave - Standardi za ohišja in vmesnike - 21. del:**  
**Smernice za projektiranje električnega vmesnika za PIC-ohišja, ki uporabljajo**  
**silicijev fini raster mreže krogličnih priključkov (S-FBGA) in silicijev fini raster**  
**mreže priključkov v ravnini (S-FLGA) (IEC 62148-21:2021)**

Fibre optic active components and devices - Package and interface standards - Part 21:  
Design guidelines of electrical interface of PIC packages using silicon fine-pitch ball grid  
array (S-FBGA) and silicon fine-pitch land grid array (S-FLGA) (IEC 62148-21:2021)

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Aktive Lichtwellenleiterbauelemente und Geräte - Gehäuse- und Schnittstellennormen -  
Teil 21: Konstruktionsleitfaden für elektrische Schnittstellen von PIC-Gehäusen mit Si-  
Feinraster-Ball-Grid-Array (S-FBGA) und Si-Feinraster-Land-Grid-Array (S-FLGA) (IEC  
62148-21:2021)

Composants et dispositifs actifs fibroniques - Normes de boîtier et d'interface - Partie 21:  
Lignes directrices de conception de l'interface électrique des boîtiers PIC utilisant des  
boîtiers matriciels à billes et à pas fins en silicium (S-FBGA) et des boîtiers matriciels à  
zone de contact plate et à pas fins en silicium (S-FLGA) (IEC 62148-21:2021)

**Ta slovenski standard je istoveten z: EN IEC 62148-21:2021**

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**ICS:**

33.180.20

Povezovalne naprave za  
optična vlakna

Fibre optic interconnecting  
devices

**SIST EN IEC 62148-21:2021**

**en**

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EUROPEAN STANDARD

EN IEC 62148-21

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2021

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Supersedes EN IEC 62148-21:2019 and all of its  
amendments and corrigenda (if any)

English Version

**Fibre optic active components and devices - Package and  
interface standards - Part 21: Design guidelines of electrical  
interface of PIC packages using silicon fine-pitch ball grid array  
(S-FBGA) and silicon fine-pitch land grid array (S-FLGA)  
(IEC 62148-21:2021)**

Composants et dispositifs actifs fibroniques - Normes de  
boîtier et d'interface - Partie 21: Lignes directrices de  
conception de l'interface électrique des boîtiers PIC utilisant  
des boîtiers matriciels à billes et à pas fins en silicium (S-  
FBGA) et des boîtiers matriciels à zone de contact plate et  
à pas fins en silicium (S-FLGA)  
(IEC 62148-21:2021)

Aktive Lichtwellenleiterbauelemente und Geräte - Gehäuse-  
und Schnittstellennormen - Teil 21: Konstruktionsleitfaden  
für elektrische Schnittstellen von PIC-Gehäusen mit Si-  
Feinraster-Ball-Grid-Array (S-FBGA) und Si-Feinraster-  
Land-Grid-Array (S-FLGA)  
(IEC 62148-21:2021)

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN IEC 62148-21:2021 (E)****European foreword**

The text of document 86C/1684/CDV, future edition 2 of IEC 62148-21, 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 62148-21:2021.

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) 2022-02-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-05-27

This document supersedes EN IEC 62148-21:2019 and all of its amendments and corrigenda (if any).

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

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IEC 60191-6-22 NOTE Harmonized as EN 60191-6-22

IEC 62148-1 NOTE Harmonized as EN IEC 62148-1

IEC 62148-19 NOTE Harmonized as EN IEC 62148-19

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-731	-	International Electrotechnical Vocabulary - Chapter 731: Optical fibre communication	-	-
IEC/TR 61931	-	Fibre optic - Terminology	-	-

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IEC 62148-21

Edition 2.0 2021-04

# INTERNATIONAL STANDARD

**Fibre optic active components and devices – Package and interface standards –  
Part 21: Design guidelines of electrical interface of PIC packages using silicon  
fine-pitch ball grid array (S-FBGA) and silicon fine-pitch land grid array  
(S-FLGA)**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES –  
PACKAGE AND INTERFACE STANDARDS –****Part 21: Design guidelines of electrical interface of PIC  
packages using silicon fine-pitch ball grid array (S-FBGA)  
and silicon fine-pitch land grid array (S-FLGA)**

## FOREWORD

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IEC 62148-21 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics. It is an International Standard.

This second edition cancels and replaces the first edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: specification of an electric guard band area around the optical terminal area, so as to allow applications with electric signals at higher symbol rates (e.g. 50 Gbaud and 100 Gbaud).

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

CDV	Report on voting
86C/1684/CDV	86C/1710/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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.

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

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- replaced by a revised edition, or
- amended.

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