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)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62148-21:2021 sisaldab Euroopa standardi EN IEC 62148-21:2021 ingliskeelset teksti.

This Estonian standard EVS-EN IEC 62148-21:2021 consists of the English text of the European standard EN IEC 62148-21:2021.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 04.06.2021.

Date of Availability of the European standard is 04.06.2021.

Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 33.180.20

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EN IEC 62148-21

June 2021

ICS 33.180.20

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 - Gehäuseund 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)

This European Standard was approved by CENELEC on 2021-05-27. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

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 (dop) 2022-02-27 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-05-27

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

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.

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

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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. The main document types developed by IEC are described in greater detail at 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 in the data related to the specific document. At this date, the document will be

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