

1. Record Nr.	UNINA9910299841503321
Autore	Fischer-Hirchert Ulrich H. P
Titolo	Photonic Packaging Sourcebook : Fiber-Chip Coupling for Optical Components, Basic Calculations, Modules // by Ulrich H. P. Fischer-Hirchert
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-642-25376-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (336 p.)
Disciplina	620 620.5 621.3 621.3815
Soggetti	Microwaves Optical engineering Nanotechnology Electronic circuits Microwaves, RF and Optical Engineering Nanotechnology and Microengineering Circuits and Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction into Photonic Packaging -- Optical waveguides -- Optical Mode Field Adaptation -- Fiber-chip-coupling -- RF Lines -- Soldering, Adhesive Bonding, Bonding -- Optical Coneection Technology -- Active Adjustment Techniques -- Passive Adjustment Techniques -- Optical Motherboard -- Fiber-Optic Modules -- From Chip Design to the Optimum Package -- Reliability Tests -- Abbreviations -- Index.
Sommario/riassunto	This book serves as a guide on photonic assembly techniques. It provides an overview of today's state-of-the-art technologies for photonic packaging experts and professionals in the field. The text guides the readers to the practical use of optical connectors. It also

assists engineers to find a way to an effective and inexpensive set-up for their own needs. In addition, many types of current industrial modules and state-of-the-art applications from single fiber to multi fiber are described in detail. Simulation techniques such as FEM, BPM and ray tracing are explained in depth. Finally, all recent reliability test procedures for datacom and telecom modules are illustrated in combination with related standardization aspects.

---