

1. Record Nr.	UNINA9910457766103321
Autore	Kubby Joel A.
Titolo	A guide to hands-on MEMS design and prototyping / / Joel Kubby [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2011
ISBN	1-139-12411-0 1-107-21936-1 1-283-29560-1 1-139-12216-9 9786613295606 1-139-11642-8 1-139-11206-6 0-511-98466-9 1-139-12708-X 1-139-11425-5
Descrizione fisica	1 online resource (xi, 166 pages) : digital, PDF file(s)
Disciplina	621.381
Soggetti	Microelectromechanical systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Machine generated contents note: 1. Introduction; 2. Micro-mechanics; 3. Electrostatics; 4. Optical MEMS; 5. Thermal MEMS; 6. Fluidic MEMS; 7. Package and test; 8. From prototype to product: MEMS deformable mirrors for adaptive optics.
Sommario/riassunto	Whether you are a student taking an introductory MEMS course or a practising engineer who needs to get up to speed quickly on MEMS design, this practical guide provides the hands-on experience needed to design, fabricate and test MEMS devices. You will learn how to use foundry multi-project fabrication processes for low-cost MEMS projects, as well as computer-aided design tools (layout, modeling) that can be used for the design of MEMS devices. Numerous design examples are described and analysed, from fields including micro-mechanics, electrostatics, optical MEMS, thermal MEMS and fluidic

MEMS. There's also a final chapter on packaging and testing MEMS devices, as well as exercises and design challenges at the end of every chapter. Solutions to the design challenge problems are provided online.
