

M.Tech. Degree Examination, Dec.2013/Jan.2014
Advanced Microcontrollers

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

1.
 - a. What is the need for low power embedded system? Explain briefly. (04 Marks)
 - b. Briefly explain the different power saving techniques to achieve low power. (06 Marks)
 - c. Explain with a neat block diagram, the architecture of MSP430 microcontroller. (10 Marks)
2.
 - a. What is meant by emulated instruction as referred to MSP430. Explain at least three emulated instruction with examples and its emulation. (05 Marks)
 - b. Write a note on the three internal clocks in MSP430. (03 Marks)
 - c. Explain the different addressing modes used in MSP430 microcontroller with suitable examples. (12 Marks)
3.
 - a. With reference to MSP430 microcontroller explain the difference between POR and PUC. (05 Marks)
 - b. What is resolution, precision and accuracy with respect to ADC? With a neat block diagram, explain the operation of successive approximation ADC of MSP430. (10 Marks)
 - c. For the circuit shown in Fig.Q.3(c), write a C program for MSP430 to turn ON an LED if the voltage exceeds $1/2 V_{CC}$. The clock used is internal. (05 Marks)



Fig.Q.3(c)

4.
 - a. What are the features of Real Time Clock (RTC) of MSP430? With a neat block diagram of RTC explain the operation in counter mode and calendar mode for MSP430. (10 Marks)
 - b. With the neat block diagram, explain the non-inverting op amp configuration for MSP430 microcontroller. (10 Marks)
5.
 - a. Explain the architecture of CORTEX-M3 processor with a block diagram. (10 Marks)
 - b. Write a short note on the following with respect to ARM CORTEX-M3:
 i) Link register; ii) Program status register. (06 Marks)
 - c. Explain the memory map of CORTEX-M3 processor. (04 Marks)
6.
 - a. Write a note on different types of faults with respect to CORTEX M3. Describe the different methods of handling these faults. (10 Marks)
 - b. Describe the context switching with penable service call. (10 Marks)

Embedded Systems Vtu Question Papers

M Carnoy



Embedded Systems Vtu Question Papers:

Embedded Systems: Design, Analysis and Verification Gunar Schirner, Marcelo Götz, Achim Rettberg, Mauro C. Zanella, Franz J. Rammig, 2013-06-13 This book constitutes the refereed proceedings of the 4th IFIP TC 10 International Embedded Systems Symposium IESS 2013 held in Paderborn Germany in June 2013 The 22 full revised papers presented together with 8 short papers were carefully reviewed and selected from 42 submissions The papers have been organized in the following topical sections design methodologies non functional aspects of embedded systems verification performance analysis real time systems embedded system applications and real time aspects in distributed systems The book also includes a special chapter dedicated to the BMBF funded ARAMIS project on Automotive Railway and Avionics Multicore Systems

Embedded System Design Lawrence J. Henschen, Julia C. Lee, 2023-09-14 Embedded systems and the Internet of Things are current major efforts in industry and will continue to be mainstream commercial activities for the foreseeable future Embedded Systems Design presents methodologies for designing such systems and discusses major issues both present and future that designers must consider in bringing products with embedded processing to the market It starts from the first step after product proposal behavioral modelling and carries through steps for modelling internal operations The book discusses methods for and issues in designing safe reliable and robust embedded systems It covers the selection of processors and related hardware as well as issues involved in designing the related software Finally the book present issues that will occur in systems designed for the Internet of Things This book is for junior senior MS students in computer science computer engineering and electrical engineering who intend to take jobs in industry designing and implementing embedded systems and Internet of Things applications Focuses on the design of embedded systems starting from product conception through high level modeling and up to the selection of hardware software and network platforms Discusses the trade offs of the various techniques presented so that engineers will be able to make the best choices for designs for future products Contains a section with three chapters on making designs that are reliable robust and safe Includes a discussion of the two main models for the structure of the Internet of Things as well as the issues engineers will need to take into consideration in designing future IoT applications Uses the design of a bridge control system as a continuing example across most of the chapters in order to illustrate the differences and trade offs of the various techniques Embedded System Design Peter Marwedel, 2021-01-25 A unique feature of this open access textbook is to provide a comprehensive introduction to the fundamental knowledge in embedded systems with applications in cyber physical systems and the Internet of things It starts with an introduction to the field and a survey of specification models and languages for embedded and cyber physical systems It provides a brief overview of hardware devices used for such systems and presents the essentials of system software for embedded systems including real time operating systems The author also discusses evaluation and validation techniques for embedded systems and provides an overview of techniques for mapping applications to execution platforms

including multi core platforms Embedded systems have to operate under tight constraints and hence the book also contains a selected set of optimization techniques including software optimization techniques The book closes with a brief survey on testing This fourth edition has been updated and revised to reflect new trends and technologies such as the importance of cyber physical systems CPS and the Internet of things IoT the evolution of single core processors to multi core processors and the increased importance of energy efficiency and thermal issues

Embedded Systems , Introduction to Embedded Systems: Interfacing to the Freescale 9S12 Jonathan W. Valvano,2009-04-23 This book employs a bottom up educational approach with an overall educational objective of allowing students to discover how the computer interacts with its environment through learning basic computer architecture assembly language programming as well as through an introduction to interfacing Developed around the Freescale 9S12 this book describes both the general processes and the specific details involved in microcomputer simulation In particular detailed case studies are used to illustrate fundamental concepts and laboratory assignments are provided Important Notice Media content referenced within the product description or the product text may not be available in the ebook version

Embedded Systems and Robotics with Open Source Tools Nilanjan Dey,Amartya Mukherjee,2018-09-03 Embedded Systems and Robotics with Open Source Tools provides easy to understand and easy to implement guidance for rapid prototype development Designed for readers unfamiliar with advanced computing technologies this highly accessible book Describes several cutting edge open source software and hardware technologies Examines a number of embedded computer systems and their practical applications Includes detailed projects for applying rapid prototype development skills in real time Embedded Systems and Robotics with Open Source Tools effectively demonstrates that with the help of high performance microprocessors microcontrollers and highly optimized algorithms one can develop smarter embedded devices

Design Principles for Embedded Systems KCS Murti,2021-09-20 The book is designed to serve as a textbook for courses offered to graduate and undergraduate students enrolled in electronics and electrical engineering and computer science This book attempts to bridge the gap between electronics and computer science students providing complementary knowledge that is essential for designing an embedded system The book covers key concepts tailored for embedded system design in one place The topics covered in this book are models and architectures Executable Specific Languages SystemC Unified Modeling Language real time systems real time operating systems networked embedded systems Embedded Processor architectures and platforms that are secured and energy efficient A major segment of embedded systems needs hard real time requirements This textbook includes real time concepts including algorithms and real time operating system standards like POSIX threads Embedded systems are mostly distributed and networked for deterministic responses The book covers how to design networked embedded systems with appropriate protocols for real time requirements Each chapter contains 2 3 solved case studies and 10 real world problems as exercises to provide detailed coverage and essential pedagogical tools that make this an ideal textbook for students enrolled in

electrical and electronics engineering and computer science programs **Embedded Systems Specification and Design Languages** Eugenio Villar, 2008-05-15 This book is the latest contribution to the Chip Design Languages series and it consists of selected papers presented at the Forum on Specifications and Design Languages FDL 07 in September 2007 The book represents the state of the art in research and practice and it identifies new research directions It highlights the role of specification and modelling languages and presents practical experiences with specification and modelling languages

Embedded System Applications Jean-Claude Baron, J.C. Geffroy, G. Motet, 2013-04-17 Embedded systems encompass a variety of hardware and software components which perform specific functions in host systems for example satellites washing machines hand held telephones and automobiles Embedded systems have become increasingly digital with a non digital periphery analog power and therefore both hardware and software codesign are relevant The vast majority of computers manufactured are used in such systems They are called embedded to distinguish them from standard mainframes workstations and PCs Although the design of embedded systems has been used in industrial practice for decades the systematic design of such systems has only recently gained increased attention Advances in microelectronics have made possible applications that would have been impossible without an embedded system design Embedded System Applications describes the latest techniques for embedded system design in a variety of applications This also includes some of the latest software tools for embedded system design Applications of embedded system design in avionics satellites radio astronomy space and control systems are illustrated in separate chapters Finally the book contains chapters related to industrial best practice in embedded system design Embedded System Applications will be of interest to researchers and designers working in the design of embedded systems for industrial applications **Analysis, Architectures and Modelling of Embedded**

Systems Achim Rettberg, Mauro C. Zanella, Michael Amann, Michael Keckeisen, Franz J. Rammig, 2009-09-04 This book presents the technical program of the International Embedded Systems Symposium IESS 2009 Timely topics techniques and trends in embedded system design are covered by the chapters in this volume including modelling simulation verification test scheduling platforms and processors Particular emphasis is paid to automotive systems and wireless sensor networks Sets of actual case studies in the area of embedded system design are also included Over recent years embedded systems have gained an enormous amount of processing power and functionality and now enter numerous application areas due to the fact that many of the formerly external components can now be integrated into a single System on Chip This tendency has resulted in a dramatic reduction in the size and cost of embedded systems As a unique technology the design of embedded systems is an essential element of many innovations Embedded systems meet their performance goals including real time constraints through a combination of special purpose hardware and software components tailored to the system requirements Both the development of new features and the reuse of existing intellectual property components are essential to keeping up with ever more demanding customer requirements Furthermore design complexities are steadily growing with

an increasing number of components that have to cooperate properly Embedded system designers have to cope with multiple goals and constraints simultaneously including timing power reliability dependability maintenance packaging and last but not least price

Unveiling the Magic of Words: A Review of "**Embedded Systems Vtu Question Papers**"

In a global defined by information and interconnectivity, the enchanting power of words has acquired unparalleled significance. Their ability to kindle emotions, provoke contemplation, and ignite transformative change is really awe-inspiring. Enter the realm of "**Embedded Systems Vtu Question Papers**," a mesmerizing literary masterpiece penned by way of a distinguished author, guiding readers on a profound journey to unravel the secrets and potential hidden within every word. In this critique, we shall delve in to the book is central themes, examine its distinctive writing style, and assess its profound impact on the souls of its readers.

https://staging.conocer.cide.edu/book/uploaded-files/Documents/fsdoe_june_2014_physicsal_science_p1_memo.pdf

Table of Contents Embedded Systems Vtu Question Papers

1. Understanding the eBook Embedded Systems Vtu Question Papers
 - The Rise of Digital Reading Embedded Systems Vtu Question Papers
 - Advantages of eBooks Over Traditional Books
2. Identifying Embedded Systems Vtu Question Papers
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Embedded Systems Vtu Question Papers
 - User-Friendly Interface
4. Exploring eBook Recommendations from Embedded Systems Vtu Question Papers
 - Personalized Recommendations
 - Embedded Systems Vtu Question Papers User Reviews and Ratings
 - Embedded Systems Vtu Question Papers and Bestseller Lists

5. Accessing Embedded Systems Vtu Question Papers Free and Paid eBooks
 - Embedded Systems Vtu Question Papers Public Domain eBooks
 - Embedded Systems Vtu Question Papers eBook Subscription Services
 - Embedded Systems Vtu Question Papers Budget-Friendly Options
6. Navigating Embedded Systems Vtu Question Papers eBook Formats
 - ePub, PDF, MOBI, and More
 - Embedded Systems Vtu Question Papers Compatibility with Devices
 - Embedded Systems Vtu Question Papers Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Embedded Systems Vtu Question Papers
 - Highlighting and Note-Taking Embedded Systems Vtu Question Papers
 - Interactive Elements Embedded Systems Vtu Question Papers
8. Staying Engaged with Embedded Systems Vtu Question Papers
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Embedded Systems Vtu Question Papers
9. Balancing eBooks and Physical Books Embedded Systems Vtu Question Papers
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Embedded Systems Vtu Question Papers
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Embedded Systems Vtu Question Papers
 - Setting Reading Goals Embedded Systems Vtu Question Papers
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Embedded Systems Vtu Question Papers
 - Fact-Checking eBook Content of Embedded Systems Vtu Question Papers
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
- Exploring Educational eBooks

14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

Embedded Systems Vtu Question Papers Introduction

In today's digital age, the availability of Embedded Systems Vtu Question Papers books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Embedded Systems Vtu Question Papers books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Embedded Systems Vtu Question Papers books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Embedded Systems Vtu Question Papers versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Embedded Systems Vtu Question Papers books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Embedded Systems Vtu Question Papers books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Embedded Systems Vtu Question Papers books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions

of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Embedded Systems Vtu Question Papers books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Embedded Systems Vtu Question Papers books and manuals for download and embark on your journey of knowledge?

FAQs About Embedded Systems Vtu Question Papers Books

1. Where can I buy Embedded Systems Vtu Question Papers books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a Embedded Systems Vtu Question Papers book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of Embedded Systems Vtu Question Papers books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing.

- Book Swaps: Community book exchanges or online platforms where people exchange books.
6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
 7. What are Embedded Systems Vtu Question Papers audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
 8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.
 9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
 10. Can I read Embedded Systems Vtu Question Papers books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find Embedded Systems Vtu Question Papers :

[fsdoe june 2014 physics science p1 memo](#)

[fuel measuring stick manual](#)

[fujifilm finepix s3300 owners manual](#)

[fuji g7s manual](#)

[fuji q4 manual](#)

[fujifilm finepix a330 service repair manual](#)

[fuji pxr3 manual](#)

[fujifilm 3800 manual](#)

[ftce k study guide](#)

[fuji finepix f100fd manual](#)

[ftce spanish study guide](#)

[fujifilm finepix xp30 user manual](#)

[*ftl 1011 service manual*](#)

[fssa pressure relief vent guide](#)

[full version alpha kappa alpha membership intake manual](#)

Embedded Systems Vtu Question Papers :

CRISC Review Manual 2014 by Isaca The CRISC Review Manual 2014 is a comprehensive reference guide designed to help individuals prepare for the CRISC exam and understand IT-related business ... CRISC Review Manual 2014 by Isaca (2014, Spiral) Diagnostic and Statistical Manual of Mental Disorders DSM-5-TR by American Psychiatric Association (2022, Trade Paperback) · \$38.00 New · \$34.99 Used ... CRISC Review Manual 2014 book by ISACA Security, Audit and Control Features SAP R/3: A Technical and Risk Management Reference Guide, 2nd Edition. ISACA. Out of Stock. CRISC Question, Answer and Explanation Manual 2014 ... Nov 15, 2013 — The CRISC Review Questions, Answers & Explanations Manual 2014 Supplement features of 100 new sample questions, answers and explanations to ... CRISC Question, Answer and Explanation Manual 2014 ... The CRISC Review Questions, Answers & Explanations Manual 2014 Supplement features of 100 new sample questions, answers and explanations to help candidates ... Crisc 2014 Manual Pdf Pdf Page 1. Crisc 2014 Manual Pdf Pdf. INTRODUCTION Crisc 2014 Manual Pdf Pdf (2023) CRISC REVIEW MANUAL 2014 By Isaca CRISC REVIEW MANUAL 2014 By Isaca ; Quantity. 1 available ; ISBN-10. 1604204273 ; Book Title. CRISC Review Manual 2014 ; Est. delivery. Mon, Nov 6 - Thu, Nov 9. Pre-Owned CRISC Review Manual 2014 (Paperback) ... Product details. CRISC Review Manual 2014 by Isaca. Title: CRISC Review Manual 2014; ISBN10: 1604204273; EAN: 9781604204278; Genre: TECHNOLOGY & ENGINEERING ... crisc CRISC REVIEW MANUAL 2014: Isaca. Stock Image. CRISC REVIEW MANUAL 2014. Isaca. ISBN 13: 9781604204278. Seller: marvin granlund. Emeryville, CA, U.S.A.. Seller ... CRISC Question, Answer and Explanation... book by ISACA Cover for "CRISC Question, Answer and Explanation Manual 2014 Supplement" ... CRISC Review Manual 2014. ISACA. from: \$31.69. Veterinary Microbiology and Microbial Disease, 2nd Edition Veterinary Microbiology and Microbial Disease, 2nd Edition · + E-Book Starting at just \$102.00 · - Print Starting at just \$126.95. Veterinary Microbiology and Microbial Disease Veterinary Microbiology and Microbial Disease remains indispensable for all those studying and teaching this essential component of the veterinary curriculum. Veterinary Microbiology and Microbial Disease This is a core textbook covering every aspect of veterinary microbiology for students in both paraclinical and clinical years. The clinical applications to farm ... Veterinary Microbiology and Microbial Disease - PMC by JF Prescott · 2003 · Cited by 7 — This book is an introductory text in veterinary microbiology and microbial disease for veterinary undergraduates, written by faculty members at University ... Veterinary Microbiology and Microbial Disease Microbiology is one of the core subjects for veterinary students, and since its first publication in 2002, Veterinary Microbiology and Microbial Disease has ... Veterinary

Microbiology and Microbial Disease (Hardcover) Sep 26, 2023 — Veterinary microbiology refers to a field of study that is primarily focused on the microbes that cause diseases in animals. It studies the ... Veterinary Microbiology and Microbial Disease, 2nd Edition Veterinary Microbiology and Microbial Disease, 2nd Edition by P. J. Quinn, B. K. Markey, F. C. Leonard, P. Hartigan, S. Veterinary Microbiology and Microbial Disease - Quinn, P. J. Microbiology is one of the core subjects for veterinary students, and since its first publication in 2002, Veterinary Microbiology and Microbial Disease has ... Veterinary Microbiology and Microbial Disease - 2nd ... "Veterinary Microbiology is one of the core subjects for veterinary students. Fully revised and expanded, this new edition covers every aspect of veterinary ... Veterinary Microbiology - Elsevier Health Veterinary Microbiology is concerned with bacterial and viral diseases of domesticated vertebrate animals (livestock, companion animals, fur-bearing animals ... HBR's 10 Must Reads on Leadership (with featured article ... HBR's 10 Must Reads series focuses on the core topics that every ambitious manager needs to know: leadership, strategy, change, managing people, and managing ... HBR's 10 Must Reads... by Review, Harvard Business Recent bestselling titles include HBR's 10 Must Reads on Managing Yourself, Playing to Win, A Sense of Urgency, Leading the Life You Want, Conscious Capitalism, ... HBR's 10 Must Reads on Leadership, Vol. 2 (with bonus ... Stay on top of your leadership game. Leadership isn't something you're born with or gifted as a reward for an abundance of charisma; true leadership stems ... HBR's 10 Must Reads on Leadership HBR's 10 Must Reads on Leadership · Motivate others to excel · Build your team's self-confidence in others · Provoke positive change · Set direction · Encourage ... Hbr's 10 Must Reads on Leadership 2-Volume Collection ... Apr 7, 2020 — HBR's 10 Must Reads series focuses on the core topics that every ambitious manager needs to know: leadership, strategy, change, managing people, ... HBR's 10 Must Reads on Leadership A worthy read as a compendium of good leadership articles. It provides tips and tricks, general stats and studies about the leadership and is not a guide to ... Hbr's 10 Must Reads On Leadership (with Featured Article ... Description · Motivate others to excel · Build your team's self-confidence in others · Provoke positive change · Set direction · Encourage smart risk-taking ... HBR's 10 Must Reads on Leadership Go from being a good manager to an extraordinary leader. If you read nothing else on leadership, read these 10 articles (featuring "What Makes an Effective ... HBR's 10 must reads on leadership Summary: "Go from being a good manager to being an extraordinary leader. If you read nothing else on leadership, read these 10 articles. HBR'S 10 MUST READS ON LEADERSHIP (with featured ... HBR'S 10 MUST READS ON LEADERSHIP (with featured article "What Makes an Effective Executive,") [VITALSOURCE EBOOK] (Dwnld: perpetual / Online: 1825 days).